THE
ETHICS OF THE DUST
TEN LECTURES
TO
LITTLE HOUSEWIVES
ON
THE ELEMENTS OF CRYSTALLISATION
St. Mark's Edition

THE

ETHICS OF THE DUST

FICTION, FAIR AND FOUL

THE ELEMENTS OF DRAWING

BY

JOHN RUSKIN

With Illustrations

BOSTON

DANA ESTES & COMPANY

Successors to Estes & Lauriat

PUBLISHERS
St. Mark's Edition.

Limited to One Thousand Copies, of which this is No. 344

SEP 5 1955
## CONTENTS.

### ETHICS OF THE DUST.

<table>
<thead>
<tr>
<th>LECTURE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. THE VALLEY OF DIAMONDS</td>
<td>11</td>
</tr>
<tr>
<td>II. THE PYRAMID BUILDERS</td>
<td>21</td>
</tr>
<tr>
<td>III. THE CRYSTAL LIFE</td>
<td>31</td>
</tr>
<tr>
<td>IV. THE CRYSTAL ORDERS</td>
<td>43</td>
</tr>
<tr>
<td>V. CRYSTAL VIRTUES</td>
<td>56</td>
</tr>
<tr>
<td>VI. CRYSTAL QUARRELS</td>
<td>70</td>
</tr>
<tr>
<td>VII. HOME VIRTUES</td>
<td>82</td>
</tr>
</tbody>
</table>
LECTURE VIII.
Crystal Caprice . . . . . . 98

LECTURE IX.
Crystal Sorrows . . . . . 111

LECTURE X.
The Crystal Rest . . . . . 125

Notes . . . . . . . . . . 143

Fiction—Fair and Foul . . . . . 153

ELEMENTS OF DRAWING.

LETTER I.
On First Practice . . . . . . 233

LETTER II.
Sketching from Nature . . . . . 293

LETTER III.
On Colour and Composition . . . . . 331

Appendix: Things to be Studied . . . . . 403
LIST OF ILLUSTRATIONS.

ELEMENTS OF DRAWING.

<table>
<thead>
<tr>
<th>FIGURE</th>
<th>DESCRIPTION</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Squares</td>
<td>237</td>
</tr>
<tr>
<td>2.</td>
<td>Gradated Spaces</td>
<td>241</td>
</tr>
<tr>
<td>3.</td>
<td>Outline of Letter</td>
<td>245</td>
</tr>
<tr>
<td>4.</td>
<td>Outline of Bough of Tree</td>
<td>248</td>
</tr>
<tr>
<td>5.</td>
<td>Charred Log</td>
<td>257</td>
</tr>
<tr>
<td>6.</td>
<td>Shoot of Lilac</td>
<td>272</td>
</tr>
<tr>
<td>7.</td>
<td>Leaf</td>
<td>274</td>
</tr>
<tr>
<td>8.</td>
<td>Bough of Phillyrea</td>
<td>275</td>
</tr>
<tr>
<td>9.</td>
<td>Spray of Phillyrea</td>
<td>276</td>
</tr>
<tr>
<td>10.</td>
<td>Trunk of Tree, by Titian</td>
<td>284</td>
</tr>
<tr>
<td>11.</td>
<td>Sketch from Raphael</td>
<td>285</td>
</tr>
<tr>
<td>12.</td>
<td>Outlines of a Ball</td>
<td>287</td>
</tr>
<tr>
<td>13.</td>
<td>Woodcut of Durer's</td>
<td>289</td>
</tr>
<tr>
<td>14, 15, 16.</td>
<td>Masses of Leaves</td>
<td>290, 291</td>
</tr>
<tr>
<td>17, 18, 19.</td>
<td>Curvatures in Leaves</td>
<td>295, 296</td>
</tr>
<tr>
<td>20.</td>
<td>From an Etching, by Turner</td>
<td>297</td>
</tr>
<tr>
<td>21.</td>
<td>Alpine Bridge</td>
<td>307</td>
</tr>
<tr>
<td>22.</td>
<td>Alpine Bridge as it Appears at Various Distances</td>
<td>308</td>
</tr>
<tr>
<td>FIGURE</td>
<td>PAGE</td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>23. Outlines Expressive of Foliage</td>
<td>314</td>
<td></td>
</tr>
<tr>
<td>24. Shoot of Spanish Chestnut</td>
<td>315</td>
<td></td>
</tr>
<tr>
<td>25. Young Shoot of Oak</td>
<td>316</td>
<td></td>
</tr>
<tr>
<td>26, 27, 28. Woodcuts after Titian</td>
<td>321, 322</td>
<td></td>
</tr>
<tr>
<td>29. Diagram of Window</td>
<td>339</td>
<td></td>
</tr>
<tr>
<td>30. Swiss Cottage</td>
<td>355</td>
<td></td>
</tr>
<tr>
<td>31. Groups of Leaves</td>
<td>359</td>
<td></td>
</tr>
<tr>
<td>32. Painting, by Turner</td>
<td>361</td>
<td></td>
</tr>
<tr>
<td>33. Sketch on Calais Sands, by Turner</td>
<td>365</td>
<td></td>
</tr>
<tr>
<td>34. Drawing of an Ideal Bridge, by Turner</td>
<td>369</td>
<td></td>
</tr>
<tr>
<td>35. Profile of the Towers of Ehrenbreitstein</td>
<td>370</td>
<td></td>
</tr>
<tr>
<td>36. Curves</td>
<td>371</td>
<td></td>
</tr>
<tr>
<td>37, 38, 39. Curves Found in Leaves</td>
<td>372</td>
<td></td>
</tr>
<tr>
<td>40. Outlines of a Tree Trunk</td>
<td>373</td>
<td></td>
</tr>
<tr>
<td>41-44. Tree Radiation</td>
<td>374, 375</td>
<td></td>
</tr>
<tr>
<td>45, 46. Woodcuts of Leaf</td>
<td>376</td>
<td></td>
</tr>
<tr>
<td>47. Leaf of Columbine</td>
<td>378</td>
<td></td>
</tr>
<tr>
<td>48. Top of an Old Tower</td>
<td>385</td>
<td></td>
</tr>
</tbody>
</table>
PERSONÆ.

OLD LECTURER (of incalculable age)

Florrie, on astronomical evidence presumed to be aged 9.

Isabel 11.

May 11.

Lily 12.

Kathleen 14.

Lucilla 15.

Violet 16.

Dora (who has the keys and is housekeeper) 17.

Egypt (so called from her dark eyes) 17.

Jessie (who somehow always makes the room look brighter when she is in it) 18.

Mary (of whom everybody, including the Old Lecturer, is in great awe) 20.
I have seldom been more disappointed by the result of my best pains given to any of my books, than by the earnest request of my publisher, after the opinion of the public had been taken on the 'Ethics of the Dust,' that I would "write no more in dialogue!" However, I bowed to public judgment in this matter at once, (knowing also my inventive powers to be of the feeblest,); but in reprinting the book, (at the prevailing request of my kind friend, Mr. Henry Willett,) I would pray the readers whom it may at first offend by its disconnected method, to examine, nevertheless, with care, the passages in which the principal speaker sums the conclusions of any dialogue: for these summaries were written as introductions, for young people, to all that I have said on the same matters in my larger books; and, on re-reading them, they satisfy me better, and seem to me calculated to be more generally useful, than anything else I have done of the kind.

The summary of the contents of the whole book, beginning, "You may at least earnestly believe," at p. 130, is thus the clearest exposition I have ever yet given of the general conditions under which the Personal Creative Power manifests itself in the forms of matter; and the analysis of heathen conceptions of Deity, beginning at p. 131, and closing at p. 138, not only prefaces, but very nearly supersedes, all that in more lengthy terms I have since asserted, or pleaded for, in 'Ara-tra Pentelici,' and the 'Queen of the Air.'
And thus, however the book may fail in its intention of suggesting new occupations or interests to its younger readers, I think it worth reprinting, in the way I have also reprinted 'Unto this Last,'—page for page; that the students of my more advanced works may be able to refer to these as the original documents of them; of which the most essential in this book are these following.

I. The explanation of the baseness of the avaricious functions of the Lower Pthah, p. 39, with his beetle-gospel, p. 41, "that a nation can stand on its vices better than on its virtues," explains the main motive of all my books on Political Economy.

II. The examination of the connexion between stupidity and crime, pp. 57-62, anticipated all that I have had to urge in Fors Clavigera against the commonly alleged excuse for public wickedness,—"They don't mean it—they don't know any better."

III. The examination of the roots of Moral Power, pp. 90-92, is a summary of what is afterwards developed with utmost care in my inaugural lecture at Oxford on the relation of Art to Morals; compare in that lecture, §§ 83–85, with the sentence in p. 91 of this book, "Nothing is ever done so as really to please our Father, unless we would also have done it, though we had had no Father to know of it."

This sentence, however, it must be observed, regards only the general conditions of action in the children of God, in consequence of which it is foretold of them by Christ that they will say at the Judgment, "When saw we thee?" It does not refer to the distinct cases in which virtue consists in faith given to command, appearing to foolish human judgment inconsistent with the Moral Law, as in the sacrifice of Isaac; nor to those in which any directly-given command requires nothing more of virtue than obedience.
IV. The subsequent pages, 92–97, were written especially to check the dangerous impulses natural to the minds of many amiable young women, in the direction of narrow and selfish religious sentiment: and they contain, therefore, nearly everything which I believe it necessary that young people should be made to observe, respecting the errors of monastic life. But they in no wise enter on the reverse, or favourable side: of which indeed I did not, and as yet do not, feel myself able to speak with any decisiveness; the evidence on that side, as stated in the text, having "never yet been dispassionately examined."

V. The dialogue with Lucilla, beginning at p. 63, is, to my own fancy, the best bit of conversation in the book, and the issue of it, at p. 67, the most practically and immediately useful. For on the idea of the inevitable weakness and corruption of human nature, has logically followed, in our daily life, the horrible creed of modern "Social-science," that all social action must be scientifically founded on vicious impulses. But on the habit of measuring and reverencing our powers and talents that we may kindly use them, will be founded a true Social science, developing, by the employment of them, all the real powers and honourable feelings of the race.

VI. Finally, the account given in the second and third lectures, of the real nature and marvellousness of the laws of crystallization, is necessary to the understanding of what farther teaching of the beauty of inorganic form I may be able to give, either in 'Deucalion,' or in my 'Elements of Drawing.' I wish however that the second lecture had been made the beginning of the book; and would fain now cancel the first altogether, which I perceive to be both obscure and dull. It was meant for a metaphorical description of the pleasures and dangers in the kingdom of Mammon, or of
worldly wealth; its waters mixed with blood, its fruits entangled in thickets of trouble, and poisonous when gathered; and the final captivity of its inhabitants within frozen walls of cruelty and disdain. But the imagery is stupid and ineffective throughout; and I retain this chapter only because I am resolved to leave no room for any one to say that I have withdrawn, as erroneous in principle, so much as a single sentence of any of my books written since 1860.

One license taken in this book, however, though often permitted to essay-writers for the relief of their dulness, I never mean to take more,—the relation of composed metaphor as of actual dream, pp. 23 and 104. I assumed, it is true, that in these places the supposed dream would be easily seen to be an invention; but must not any more, even under so transparent disguise, pretend to any share in the real powers of Vision possessed by great poets and true painters.

BRANTWOOD:

10th October, 1877.
PREFACE.

The following lectures were really given, in substance, at a girls' school (far in the country); which in the course of various experiments on the possibility of introducing some better practice of drawing into the modern scheme of female education, I visited frequently enough to enable the children to regard me as a friend. The lectures always fell more or less into the form of fragmentary answers to questions; and they are allowed to retain that form, as, on the whole, likely to be more interesting than the symmetries of a continuous treatise. Many children (for the school was large) took part, at different times, in the conversations; but I have endeavoured, without confusedly multiplying the number of imaginary * speakers, to represent, as far as I could, the general tone of comment and enquiry among young people.

It will be at once seen that these Lectures were not intended for an introduction to mineralogy. Their purpose was merely to awaken in the minds of young girls, who were ready to work earnestly and systematically, a vital interest in the subject of their study. No science can be learned in play; but it is often possible, in play, to bring good fruit out of past labour, or show sufficient reasons for the labour of the future.

* I do not mean, in saying 'imaginary,' that I have not permitted to myself, in several instances, the affectionate discourtesy of some reminiscence of personal character; for which I must hope to be forgiven by my old pupils and their friends, as I could not otherwise have written the book at all. But only two sentences in all the dialogues, and the anecdote of 'Dotty,' are literally 'historical.'
The narrowness of this aim does not, indeed, justify the absence of all reference to many important principles of structure, and many of the most interesting orders of minerals; but I felt it impossible to go far into detail without illustrations; and if readers find this book useful, I may, perhaps, endeavour to supplement it by illustrated notes of the more interesting phenomena in separate groups of familiar minerals;—flints of the chalk;—agates of the basalts;—and the fantastic and exquisitely beautiful varieties of the vein-ores of the two commonest metals, lead and iron. But I have always found that the less we speak of our intentions, the more chance there is of our realizing them; and this poor little book will sufficiently have done its work, for the present, if it engages any of its young readers in study which may enable them to despise it for its shortcomings.

Denmark Hill:

Christmas, 1865.
THE ETHICS OF THE DUST.

LECTURE I.

THE VALLEY OF DIAMONDS.

A very idle talk, by the dining-room fire, after raisin-and-almond time.

OLD LECTURER; FLORRIE, ISABEL, MAY, LILY, and SIBYL.

OLD LECTURER (L.). Come here, Isabel, and tell me what the make-believe was, this afternoon.

ISABEL (arranging herself very primly on the foot-stool). Such a dreadful one! Florrie and I were lost in the Valley of Diamonds.

L. What! Sindbad’s, which nobody could get out of?

ISABEL. Yes; but Florrie and I got out of it.

L. So I see. At least, I see you did; but are you sure Florrie did?

ISABEL. Quite sure.

FLORRIE (putting her head round from behind L.’s sofa-cushion). Quite sure. (Disappears again.)

L. I think I could be made to feel surer about it.

(FLORRIE reappears, gives L. a kiss, and again exit.)

L. I suppose it’s all right; but how did you manage it?

ISABEL. Well, you know, the eagle that took up Sindbad was very large—very, very large—the largest of all the eagles.

L. How large were the others?

ISABEL. I don’t quite know—they were so far off. But this one was, oh, so big! and it had great wings, as wide as—twice over the ceiling. So, when it was picking up Sindbad, Florrie and I thought it wouldn’t know if we got on its back too: so I got up first, and then I pulled up Florrie, and we put our arms round its neck, and away it flew.
THE ETHICS OF THE DUST.

L. But why did you want to get out of the valley? and why haven't you brought me some diamonds?
ISABEL. It was because of the serpents. I couldn't pick up even the least little bit of a diamond, I was so frightened.
L. You should not have minded the serpents.
ISABEL. Oh, but suppose that they had minded me?
L. We all of us mind you a little too much, Isabel, I'm afraid.
ISABEL. No—no—no, indeed.
L. I tell you what, Isabel—I don't believe either Sindbad, or Florrie, or you, ever were in the Valley of Diamonds.
ISABEL. You naughty! when I tell you we were!
L. Because you say you were frightened at the serpents.
ISABEL. And wouldn't you have been?
L. Not at those serpents. Nobody who really goes into the valley is ever frightened at them—they are so beautiful.
ISABEL (suddenly serious). But there's no real Valley of Diamonds, is there?
L. Yes, Isabel; very real indeed.
FLORRIE (reappearing). Oh, where? Tell me about it.
L. I cannot tell you a great deal about it; only I know it is very different from Sindbad's. In his valley, there was only a diamond lying here and there; but, in the real valley, there are diamonds covering the grass in showers every morning, instead of dew: and there are clusters of trees, which look like lilac trees; but, in spring, all their blossoms are of amethyst.
FLORRIE. But there can't be any serpents there, then?
L. Why not?
FLORRIE. Because they don't come into such beautiful places.
L. I never said it was a beautiful place.
FLORRIE. What! not with diamonds strewed about it like dew?
L. That's according to your fancy, Florrie. For myself, I like dew better.
ISABEL. Oh, but the dew won't stay; it all dries!
L. Yes; and it would be much nicer if the diamonds dried
too, for the people in the valley have to sweep them off the
grass, in heaps, whenever they want to walk on it; and then
the heaps glitter so, they hurt one's eyes.

FLORRIE. Now you're just playing, you know.
L. So are you, you know.
FLORRIE. Yes, but you mustn't play.
L. That's very hard, Florrie; why mustn't I, if you may?
FLORRIE. Oh, I may, because I'm little, but you mustn't, be-
cause you're—(hesitates for a delicate expression of magnitude).
L. (rudely taking the first that comes). Because I'm big?
No; that's not the way of it at all, Florrie. Because you're
little, you should have very little play; and because I'm big
I should have a great deal.

ISABEL and FLORRIE (both). No—no—no—no. That isn't it
at all. (ISABEL sola, quoting Miss Ingelow.) 'The lambs play
always—they know no better.' (Putting her head very much
on one side.) Ah, now—please—please—tell us true; we
want to know.
L. But why do you want me to tell you true, any more
than the man who wrote the 'Arabian Nights?'
ISABEL. Because—because we like to know about real
things; and you can tell us, and we can't ask the man who
wrote the stories.
L. What do you call real things?
ISABEL. Now, you know! Things that really are.
L. Whether you can see them or not?
ISABEL. Yes, if somebody else saw them.
L. But if nobody has ever seen them?
ISABEL (evading the point). Well, but, you know, if there
were a real Valley of Diamonds, somebody must have seen it.
L. You cannot be so sure of that, Isabel. Many people go
to real places, and never see them; and many people pass
through this valley, and never see it.

FLORRIE. What stupid people they must be!
L. No, Florrie. They are much wiser than the people
who do see it.
MAY. I think I know where it is.
ISABEL. Tell us more about it, and then we'll guess.
L. Well. There's a great broad road, by a river-side, leading up into it.

May (gravely cunning, with emphasis on the last word). Does the road really go up?

L. You think it should go down into a valley? No, it goes up; this is a valley among the hills, and it is as high as the clouds, and is often full of them; so that even the people who most want to see it, cannot, always.

Isabel. And what is the river beside the road like?

L. It ought to be very beautiful, because it flows over diamond sand—only the water is thick and red.

Isabel. Red water?

L. It isn't all water.

May. Oh, please never mind that, Isabel, just now; I want to hear about the valley.

L. So the entrance to it is very wide, under a steep rock; only such numbers of people are always trying to get in, that they keep jostling each other, and manage it but slowly. Some weak ones are pushed back, and never get in at all; and make great moaning as they go away: but perhaps they are none the worse in the end.

May. And when one gets in, what is it like?

L. It is up and down, broken kind of ground: the road stops directly; and there are great dark rocks, covered all over with wild gourds and wild vines; the gourds, if you cut them, are red, with black seeds, like water-melons, and look ever so nice; and the people of the place make a red pottage of them: but you must take care not to eat any if you ever want to leave the valley (though I believe putting plenty of meal in it makes it wholesome). Then the wild vines have clusters of the colour of amber; and the people of the country say they are the grape of Eshcol; and sweeter than honey: but, indeed, if anybody else tastes them, they are like gall. Then there are thickets of bramble, so thorny that they would be cut away directly, anywhere else; but here they are covered with little cinque-foiled blossoms of pure silver; and, for berries, they have clusters of rubies. Dark rubies, which you only see are red after gathering them. But you may
fancy what blackberry parties the children have! Only they get their frocks and hands sadly torn.

LILY. But rubies can't spot one's frocks as blackberries do?

L. No; but I'll tell you what spots them—the mulberries. There are great forests of them, all up the hills, covered with silkworms, some munching the leaves so loud that it is like mills at work; and some spinning. But the berries are the blackest you ever saw; and, wherever they fall, they stain a deep red; and nothing ever washes it out again. And it is their juice, soaking through the grass, which makes the river so red, because all its springs are in this wood. And the boughs of the trees are twisted, as if in pain, like old olive branches; and their leaves are dark. And it is in these forests that the serpents are; but nobody is afraid of them. They have fine crimson crests, and they are wreathed about the wild branches, one in every tree, nearly; and they are singing serpents, for the serpents are, in this forest, what birds are in ours.

FLORRIE. Oh, I don't want to go there at all, now.

L. You would like it very much indeed, Florrie, if you were there. The serpents would not bite you; the only fear would be of your turning into one!

FLORRIE. Oh, dear, but that's worse.

L. You wouldn't think so if you really were turned into one, Florrie; you would be very proud of your crest. And as long as you were yourself (not that you could get there if you remained quite the little Florrie you are now), you would like to hear the serpents sing. They hiss a little through it, like the cicadas in Italy; but they keep good time, and sing delightful melodies; and most of them have seven heads, with throats which each take a note of the octave; so that they can sing chords—it is very fine indeed. And the fireflies fly round the edge of the forests all the night long; you wade in fireflies, they make the fields look like a lake trembling with reflection of stars; but you must take care not to touch them, for they are not like Italian fireflies, but burn, like real sparks.
I don't like it at all; I'll never go there.

Florrie. I hope not, Florrie; or at least that you will get out again if you do. And it is very difficult to get out, for beyond these serpent forests there are great cliffs of dead gold, which form a labyrinth, winding always higher and higher, till the gold is all split asunder by wedges of ice; and glaciers, welded, half of ice seven times frozen, and half of gold seven times frozen, hang down from them, and fall in thunder, cleaving into deadly splinters, like the Cretan arrowheads; and into a mixed dust of snow and gold, ponderous, yet which the mountain whirlwinds are able to lift and drive in wreaths and pillars, hiding the paths with a burial cloud, fatal at once with wintry chill, and weight of golden ashes. So the wanderers in the labyrinth fall, one by one, and are buried there:—yet, over the drifted graves, those who are spared climb to the last, through coil on coil of the path;—for at the end of it they see the king of the valley, sitting on his throne: and beside him (but it is only a false vision), spectra of creatures like themselves, set on thrones, from which they seem to look down on all the kingdoms of the world, and the glory of them. And on the canopy of his throne there is an inscription in fiery letters, which they strive to read, but cannot; for it is written in words which are like the words of all languages, and yet are of none. Men say it is more like their own tongue to the English than it is to any other nation; but the only record of it is by an Italian, who heard the King himself cry it as a war cry, 'Pape Satan, Pape Satan Aleppe.' *

Sibyl. But do they all perish there? You said there was a way through the valley, and out of it.

L. Yes; but few find it. If any of them keep to the grass paths, where the diamonds are swept aside; and hold their hands over their eyes so as not to be dazzled, the grass paths lead forward gradually to a place where one sees a little opening in the golden rocks. You were at Chamouni last year, Sibyl; did your guide chance to show you the pierced rock of the Aiguille du Midi?

Sibyl. No, indeed, we only got up from Geneva on Monday

* Dante, Inf. 7. 1.
night; and it rained all Tuesday; and we had to be back at Geneva again, early on Wednesday morning.

L. Of course. That is the way to see a country in a Sibyl-line manner, by inner consciousness: but you might have seen the pierced rock in your drive up, or down, if the clouds broke: not that there is much to see in it; one of the crags of the aiguille-edge, on the southern slope of it, is struck sharply through, as by an awl, into a little eyelet hole; which you may see, seven thousand feet above the valley (as the clouds flit past behind it, or leave the sky), first white, and then dark blue. Well, there's just such an eyelet hole in one of the upper crags of the Diamond Valley; and, from a distance, you think that it is no bigger than the eye of a needle. But if you get up to it, they say you may drive a loaded camel through it, and that there are fine things on the other side, but I have never spoken with anybody who had been through.

SIBYL. I think we understand it now. We will try to write it down, and think of it.

L. Meantime, Florrie, though all that I have been telling you is very true, yet you must not think the sort of diamonds that people wear in rings and necklaces are found lying about on the grass. Would you like to see how they really are found?

FLORRIE. Oh, yes — yes.

L. Isabel—or Lily—run up to my room and fetch me the little box with a glass lid, out of the top drawer of the chest of drawers. (Race between Lily and Isabel.)

(Re-enter Isabel with the box, very much out of breath. Lily behind.)

L. Why, you never can beat Lily in a race on the stairs, can you, Isabel?

ISABEL (panting). Lily—beat me—ever so far— but she gave me—the box—to carry in.

L. Take off the lid, then; gently.

FLORRIE (after peeping in, disappointed). There's only a great ugly brown stone!

L. Not much more than that, certainly, Florrie, if people were wise. But look, it is not a single stone; but a knot of
pebbles fastened together by gravel; and in the gravel, or
compressed sand, if you look close, you will see grains of gold
glittering everywhere, all through; and then, do you see these
two white beads, which shine, as if they had been covered
with grease?

Florrie. May I touch them?

L. Yes; you will find they are not greasy, only very smooth.
Well, those are the fatal jewels; native here in their dust with
gold, so that you may see, cradled here together, the two great
enemies of mankind,—the strongest of all malignant physical
powers that have tormented our race.

Sibyl. Is that really so? I know they do great harm; but
do they not also do great good?

L. My dear child, what good? Was any woman, do you
suppose, ever the better for possessing diamonds? but how
many have been made base, frivolous, and miserable by desir-
ing them? Was ever man the better for having coffers full of
gold? But who shall measure the guilt that is incurred to fill
them? Look into the history of any civilised nations; ana-
lyse, with reference to this one cause of crime and misery,
the lives and thoughts of their nobles, priests, merchants, and
men of luxurious life. Every other temptation is at last con-
centrated into this; pride, and lust, and envy, and anger all
give up their strength to avarice. The sin of the whole world
is essentially the sin of Judas. Men do not disbelieve their
Christ; but they sell Him.

Sibyl. But surely that is the fault of human nature? it is
not caused by the accident, as it were, of there being a pretty
metal, like gold, to be found by digging. If people could not
find that, would they not find something else, and quarrel for
it instead?

L. No. Wherever legislators have succeeded in excluding,
for a time, jewels and precious metals from among national
possessions, the national spirit has remained healthy. Covet-
tousness is not natural to man—generosity is; but covetous-
ness must be excited by a special cause, as a given disease by
a given miasma; and the essential nature of a material for the
excitement of covetousness is, that it shall be a beautiful thing
which can be retained without a use. The moment we can use our possessions to any good purpose ourselves, the instinct of communicating that use to others rises side by side with out power. If you can read a book rightly, you will want others to hear it; if you can enjoy a picture rightly, you will want others to see it: learn how to manage a horse, a plough, or a ship, and you will desire to make your subordinates good horsemen, ploughmen, or sailors; you will never be able to see the fine instrument you are master of, abused; but, once fix your desire on anything useless, and all the purest pride and folly in your heart will mix with the desire, and make you at last wholly inhuman, a mere ugly lump of stomach and suckers, like a cuttle-fish.

SIBYL. But surely, these two beautiful things, gold and diamonds, must have been appointed to some good purpose?

L. Quite conceivably so, my dear: as also earthquakes and pestilences; but of such ultimate purposes we can have no sight. The practical, immediate office of the earthquake and pestilence is to slay us, like moths; and, as moths, we shall be wise to live out of their way. So, the practical, immediate office of gold and diamonds is the multiplied destruction of souls (in whatever sense you have been taught to understand that phrase); and the paralysis of wholesome human effort and thought on the face of God's earth: and a wise nation will live out of the way of them. The money which the English habitually spend in cutting diamonds would, in ten years, if it were applied to cutting rocks instead, leave no dangerous reef nor difficult harbour round the whole island coast. Great Britain would be a diamond worth cutting, indeed, a true piece of regalia. (Leaves this to their thoughts for a little while.) Then, also, we poor mineralogists might sometimes have the chance of seeing a fine crystal of diamond unhacked by the jeweller.

SIBYL. Would it be more beautiful uncut?

L. No; but of infinite interest. We might even come to know something about the making of diamonds.

SIBYL. I thought the chemists could make them already?

L. In very small black crystals, yes; but no one knows how
they are formed where they are found; or if indeed they are formed there at all. These, in my hand, look as if they had been swept down with the gravel and gold; only we can trace the gravel and gold to their native rocks, but not the diamonds. Read the account given of the diamond in any good work on mineralogy;—you will find nothing but lists of localities of gravel, or conglomerate rock (which is only an old indurated gravel). Some say it was once a vegetable gum; but it may have been charred wood; but what one would like to know is, mainly, why charcoal should make itself into diamonds in India, and only into black lead in Borrowdale.

Sibyl. Are they wholly the same, then?

L. There is a little iron mixed with our black lead but nothing to hinder its crystallisation. Your pencils in fact are all pointed with formless diamond, though they would be unusable pencils to purpose, if it crystallised.

Sibyl. But what is crystallisation?

L. A pleasant question, when one's half asleep, and it has been tea time these two hours. What thoughtless things girls are!

Sibyl. Yes, we are; but we want to know, for all that.

L. My dear, it would take a week to tell you.

Sibyl. Well, take it, and tell us.

L. But nobody knows anything about it.

Sibyl. Then tell us something that nobody knows.

L. Get along with you, and tell Dora to make tea.

(The house rises; but of course the Lecturer wanted to be forced to lecture again, and was.)
LECTURE II.

THE PYRAMID BUILDERS.

In the large Schoolroom, to which everybody has been summoned by ringing of the great bell.

L. So you have all actually come to hear about crystallisation! I cannot conceive why, unless the little ones think that the discussion may involve some reference to sugar-candy.

(Symptoms of high displeasure among the younger members of council. Isabel frowns severely at L., and shakes her head violently.)

My dear children, if you knew it, you are yourselves, at this moment, as you sit in your ranks, nothing, in the eye of a mineralogist, but a lovely group of rosy sugar-candy, arranged by atomic forces. And even admitting you to be something more, you have certainly been crystallising without knowing it. Did I not hear a great hurrying and whispering, ten minutes ago, when you were late in from the playground; and thought you would not all be quietly seated by the time I was ready:—besides some discussion about places—something about 'it's not being fair that the little ones should always be nearest?' Well, you were then all being crystallised. When you ran in from the garden, and against one another in the passages, you were in what mineralogists would call a state of solution, and gradual confluence; when you got seated in those orderly rows, each in her proper place, you became crystalline. That is just what the atoms of a mineral do, if they can, whenever they get disordered: they get into order again as soon as may be.

I hope you feel inclined to interrupt me, and say, 'But we know our places; how do the atoms know theirs? And some-
times we dispute about our places; do the atoms—(and, be-
sides, we don't like being compared to atoms at all)—never
dispute about theirs?’ Two wise questions these, if you had
a mind to put them! it was long before I asked them myself,
of myself. And I will not call you atoms any more. May I
call you—let me see—‘primary molecules?’ (General dissent
indicated in subdued but decisive murmurs.) No! not even, in
familiar Saxon, ‘dust?’

(Pause, with expression on faces of sorrowful doubt; LILY
gives voice to the general sentiment in a timid ‘Please
don't.’)

No, children, I won't call you that; and mind, as you grow
up, that you do not get into an idle and wicked habit of call-
ing yourselves that. You are something better than dust,
and have other duties to do than ever dust can do; and the
bonds of affection you will enter into are better than merely
‘getting into order.’ But see to it, on the other hand, that
you always behave at least as well as ‘dust;’ remember, it is
only on compulsion, and while it has no free permission to do
as it likes, that it ever gets out of order; but sometimes, with
some of us, the compulsion has to be the other way—hasn't
it? (Remonstratory whispers, expressive of opinion that the
Lecturer is becoming too personal.) I'm not looking at any-
body in particular—indeed I am not. Nay, if you blush so,
Kathleen, how can one help looking? We'll go back to the
atoms.

‘How do they know their places?’ you asked, or should
have asked. Yes, and they have to do much more than know
them: they have to find their way to them, and that quietly
and at once, without running against each other.

We may, indeed, state it briefly thus:—Suppose you have
to build a castle, with towers and roofs and buttresses, out
of bricks of a given shape, and that these bricks are all lying
in a huge heap at the bottom, in utter confusion, upset out
of carts at random. You would have to draw a great many
plans, and count all your bricks, and be sure you had enough
for this and that tower, before you began, and then you
would have to lay your foundation, and add layer by layer, in order, slowly.

But how would you be astonished, in these melancholy days, when children don’t read children’s books, nor believe any more in fairies, if suddenly a real benevolent fairy, in a bright brick-red gown, were to rise in the midst of the red bricks, and to tap the heap of them with her wand, and say: ‘Bricks, bricks, to your places!’ and then you saw in an instant the whole heap rise in the air, like a swarm of red bees, and—you have been used to see bees make a honeycomb, and to think that strange enough, but now you would see the honeycomb make itself!—You want to ask something, Florrie, by the look of your eyes.

**FLORRIE.** Are they turned into real bees, with stings?

**L.** No, Florrie; you are only to fancy flying bricks, as you saw the slates flying from the roof the other day in the storm; only those slates didn’t seem to know where they were going, and, besides, were going where they had no business: but my spell-bound bricks, though they have no wings, and what is worse, no heads and no eyes, yet find their way in the air just where they should settle, into towers and roofs, each flying to his place and fastening there at the right moment, so that every other one shall fit to him in his turn.

**LILY.** But who are the fairies, then, who build the crystals?

**L.** There is one great fairy, Lily, who builds much more than crystals; but she builds these also. I dreamed that I saw her building a pyramid, the other day, as she used to do, for the Pharaohs.

**ISABEL.** But that was only a dream?

**L.** Some dreams are truer than some wakings, Isabel; but I won’t tell it you unless you like.

**ISABEL.** Oh, please, please.

**L.** You are all such wise children, there’s no talking to you; you won’t believe anything.

**LILY.** No, we are not wise, and we will believe anything, when you say we ought.

**L.** Well, it came about this way. Sibyl, do you recollect
that evening when we had been looking at your old cave by Cumæ, and wondering why you didn't live there still; and then we wondered how old you were; and Egypt said you wouldn't tell, and nobody else could tell but she; and you laughed—I thought very gaily for a Sibyl—and said you would harness a flock of cranes for us, and we might fly over to Egypt if we liked, and see.

Sibyl. Yes, and you went, and couldn't find out after all!

L. Why, you know, Egypt had been just doubling that third pyramid of hers;* and making a new entrance into it; and a fine entrance it was! First, we had to go through an ante-room, which had both its doors blocked up with stones; and then we had three granite portcullises to pull up, one after another; and the moment we had got under them, Egypt signed to somebody above; and down they came again behind us, with a roar like thunder, only louder; then we got into a passage fit for nobody but rats, and Egypt wouldn't go any further herself, but said we might go on if we liked; and so we came to a hole in the pavement, and then to a granite trap-door—and then we thought we had gone quite far enough, and came back, and Egypt laughed at us.

Egypt. You would not have had me take my crown off, and stoop all the way down a passage fit only for rats?

L. It was not the crown, Egypt—you know that very well. It was the flounces that would not let you go any farther. I suppose, however, you wear them as typical of the inundation of the Nile, so it is all right.

Isabel. Why didn't you take me with you? Where rats can go, mice can. I wouldn't have come back.

L. No, mousie; you would have gone on by yourself, and you might have waked one of Pasht's cats,† and it would have eaten you. I was very glad you were not there. But after all this, I suppose the imagination of the heavy granite blocks and the underground ways had troubled me, and dreams are often shaped in a strange opposition to the impressions that have caused them; and from all that we had

* Note i.
† Note iii.
been reading in Bunsen about stones that couldn't be lifted with levers, I began to dream about stones that lifted themselves with wings.

Sibyl. Now you must just tell us all about it.

L. I dreamed that I was standing beside the lake, out of whose clay the bricks were made for the great pyramid of Asyulus.* They had just been all finished, and were lying by the lake margin, in long ridges, like waves. It was near evening; and as I looked towards the sunset, I saw a thing like a dark pillar standing where the rock of the desert stoops to the Nile valley. I did not know there was a pillar there, and wondered at it; and it grew larger, and glided nearer, becoming like the form of a man, but vast, and it did not move its feet, but glided like a pillar of sand. And as it drew nearer, I looked by chance past it, towards the sun; and saw a silver cloud, which was of all the clouds closest to the sun (and in one place crossed it), draw itself back from the sun, suddenly. And it turned, and shot towards the dark pillar; leaping in an arch, like an arrow out of a bow. And I thought it was lightning; but when it came near the shadowy pillar, it sank slowly down beside it, and changed into the shape of a woman, very beautiful, and with a strength of deep calm in her blue eyes. She was robed to the feet with a white robe; and above that, to her knees, by the cloud which I had seen across the sun; but all the golden ripples of it had become plumes, so that it had changed into two bright wings like those of a vulture, which wrapped round her to her knees. She had a weaver's shuttle hanging over her shoulder, by the thread of it, and in her left hand, arrows, tipped with fire.

Isabel (clapping her hands). Oh! it was Neith, it was Neith! I know now.

L. Yes; it was Neith herself; and as the two great spirits came nearer to me, I saw they were the Brother and Sister—the pillared shadow was the Greater Pthah.† And I heard them speak, and the sound of their words was like a distant singing. I could not understand the words one by one; yet

* Note ii. † Note iii.
their sense came to me; and so I knew that Neith had come down to see her brother's work, and the work that he had put into the mind of the king to make his servants do. And she was displeased at it; because she saw only pieces of dark clay; and no porphyry, nor marble, nor any fair stone that men might engrave the figures of the gods upon. And she blamed her brother, and said, 'Oh, Lord of truth! is this then thy will, that men should mould only four-square pieces of clay: and the forms of the gods no more?' Then the Lord of truth sighed, and said, 'Oh! sister, in truth they do not love us; why should they set up our images? Let them do what they may, and not lie—let them make their clay four-square; and labour; and perish.'

Then Neith's dark blue eyes grew darker, and she said, 'Oh, Lord of truth! why should they love us? their love is vain; or fear us? for their fear is base. Yet let them testify of us, that they knew we lived for ever.'

But the Lord of truth answered, 'They know, and yet they know not. Let them keep silence; for their silence only is truth.'

But Neith answered, 'Brother, wilt thou also make league with Death, because Death is true? Oh! thou potter, who hast cast these human things from thy wheel, many to dishonour, and few to honour; wilt thou not let them so much as see my face; but slay them in slavery?'

But Pthah only answered, 'Let them build, sister, let them build.'

And Neith answered, 'What shall they build, if I build not with them?'

And Pthah drew with his measuring rod upon the sand. And I saw suddenly, drawn on the sand, the outlines of great cities, and of vaults, and domes, and aqueducts, and bastions, and towers, greater than obelisks, covered with black clouds. And the wind blew ripples of sand amidst the lines that Pthah drew, and the moving sand was like the marching of men. But I saw that wherever Neith looked at the lines, they faded, and were effaced.

'Oh, Brother!' she said at last, 'what is this vanity? If I
who am Lady of wisdom, do not mock the children of men, why shouldst thou mock them, who art Lord of truth? But Pthah answered, 'They thought to bind me; and they shall be bound. They shall labour in the fire for vanity.'

And Neith said, looking at the sand, 'Brother, there is no true labour here—there is only weary life and wasteful death.'

And Pthah answered, 'Is it not truer labour, sister, than thy sculpture of dreams?'

Then Neith smiled; and stopped suddenly.

She looked to the sun; its edge touched the horizon-edge of the desert. Then she looked to the long heaps of pieces of clay, that lay, each with its blue shadow, by the lake shore.

'Brother,' she said, 'how long will this pyramid of thine be in building?'

'Thoth will have sealed the scroll of the years ten times, before the summit is laid.'

'Brother, thou knowest not how to teach thy children to labour,' answered Neith. 'Look! I must follow Phre beyond Atlas; shall I build your pyramid for you before he goes down?' And Pthah answered, 'Yea, sister, if thou canst put thy winged shoulders to such work.' And Neith drew herself to her height; and I heard a clashing pass through the plumes of her wings, and the asp stood up on her helmet, and fire gathered in her eyes. And she took one of the flaming arrows out of the sheaf in her left hand, and stretched it out over the heaps of clay, and they rose up like flights of locusts, and spread themselves in the air, so that it grew dark in a moment. Then Neith designed them places with her arrow point; and they drew into ranks, like dark clouds laid level at morning. Then Neith pointed with her arrow to the north, and to the south, and to the east, and to the west, and the flying motes of earth drew asunder into four great ranked crowds; and stood, one in the north, and one in the south, and one in the east, and one in the west—one against another. Then Neith spread her wings wide for an instant, and closed them with a sound like the sound of
THE ETHICS OF THE DUST.

a rushing sea; and waved her hand towards the foundation of the pyramid, where it was laid on the brow of the desert. And the four flocks drew together and sank down, like seabirds settling to a level rock; and when they met, there was a sudden flame, as broad as the pyramid, and as high as the clouds; and it dazzled me; and I closed my eyes for an instant; and when I looked again, the pyramid stood on its rock, perfect; and purple with the light from the edge of the sinking sun.

THE YOUNGER CHILDREN (variously pleased). I'm so glad! How nice! But what did Pthah say?

L. Neith did not wait to hear what he would say. When I turned back to look at her, she was gone; and I only saw the level white cloud form itself again, close to the arch of the sun as it sank. And as the last edge of the sun disappeared, the form of Pthah faded into a mighty shadow, and so passed away.

EGYPT. And was Neith's pyramid left?

L. Yes; but you could not think, Egypt, what a strange feeling of utter loneliness came over me when the presence of the two gods passed away. It seemed as if I had never known what it was to be alone before; and the unbroken line of the desert was terrible.

EGYPT. I used to feel that, when I was queen: sometimes I had to carve gods, for company, all over my palace. I would fain have seen real ones, if I could.

L. But listen a moment yet, for that was not quite all my dream. The twilight drew swiftly to the dark, and I could hardly see the great pyramid; when there came a heavy murmuring sound in the air; and a horned beetle, with terrible claws, fell on the sand at my feet, with a blow like the beat of a hammer. Then it stood up on its hind claws, and waved its pincers at me: and its fore claws became strong arms, and hands; one grasping real iron pincers, and the other a huge hammer; and it had a helmet on its head, without any eyelet holes, that I could see. And its two hind claws became strong crooked legs, with feet bent inwards. And so there stood by me a dwarf, in glossy black armour,
ribbed and embossed like a beetle's back, leaning on his hammer. And I could not speak for wonder; but he spoke with a murmur like the dying away of a beat upon a bell. He said, 'I will make Neith's great pyramid small. I am the lower Pthah; and have power over fire. I can wither the strong things, and strengthen the weak; and everything that is great I can make small, and everything that is little I can make great.' Then he turned to the angle of the pyramid and limped towards it. And the pyramid grew deep purple; and then red like blood, and then pale rose-colour, like fire. And I saw that it glowed with fire from within. And the lower Pthah touched it with the hand that held the pincers; and it sank down like the sand in an hour-glass,—then drew itself together, and sank, still, and became nothing, it seemed to me; but the armed dwarf stooped down, and took it into his hand, and brought it to me, saying, 'Everything that is great I can make like this pyramid; and give into men's hands to destroy.' And I saw that he had a little pyramid in his hand, with as many courses in it as the large one; and built like that, only so small. And because it glowed still, I was afraid to touch it; but Pthah said, 'Touch it—for I have bound the fire within it, so that it cannot burn.' So I touched it, and took it into my own hand; and it was cold; only red, like a ruby. And Pthah laughed, and became like a beetle again, and buried himself in the sand, fiercely; throwing it back over his shoulders. And it seemed to me as if he would draw me down with him into the sand; and I started back, and woke, holding the little pyramid so fast in my hand that it hurt me.

EGYPT. Holding what in your hand?

L. The little pyramid.

EGYPT. Neith's pyramid?

L. Neith's, I believe; though not built for Asychis. I know only that it is a little rosy transparent pyramid, built of more courses of bricks than I can count, it being made so small. You don't believe me, of course, Egyptian infidel; but there it is. (Giving crystal of rose Fluor.)
(Confused examination by crowded audience, over each other's shoulders and under each other's arms. Disappointment begins to manifest itself.)

Sibyl (not quite knowing why she and others are disappointed).

But you showed us this the other day!

L. Yes; but you would not look at it the other day.

Sibyl. But was all that fine dream only about this?

L. What finer thing could a dream be about than this?

It is small, if you will; but when you begin to think of things rightly, the ideas of smallness and largeness pass away. The making of this pyramid was in reality just as wonderful as the dream I have been telling you, and just as incomprehensible. It was not, I suppose, as swift, but quite as grand things are done as swiftly. When Neith makes crystals of snow, it needs a great deal more marshalling of the atoms, by her flaming arrows, than it does to make crystals like this one; and that is done in a moment.

Egypt. But how you do puzzle us! Why do you say Neith does it? You don't mean that she is a real spirit, do you?

L. What I mean, is of little consequence. What the Egyptians meant, who called her 'Neith,'—or Homer, who called her 'Athena,'—or Solomon, who called her by a word which the Greeks render as 'Sophia,' you must judge for yourselves. But her testimony is always the same, and all nations have received it: 'I was by Him as one brought up with Him, and I was daily His delight; rejoicing in the habitable parts of the earth, and my delights were with the sons of men.'

Mary. But is not that only a personification?

L. If it be, what will you gain by unpersonifying it, or what right have you to do so? Cannot you accept the image given you, in its life; and listen, like children, to the words which chiefly belong to you as children: 'I love them that love me, and those that seek me early shall find me?'

(They are all quiet for a minute or two; questions begin to appear in their eyes.)

I cannot talk to you any more to-day. Take that rose-crystal away with you, and think.
LECTURE III.

THE CRYSTAL LIFE.

A very dull Lecture, wilfully brought upon themselves by the elder children. Some of the young ones have, however, managed to get in by mistake. Scene, the Schoolroom.

L. So I am to stand up here merely to be asked questions, to-day, Miss Mary, am I?

MARY. Yes; and you must answer them plainly; without telling us any more stories. You are quite spoiling the children: the poor little things' heads are turning round like kaleidoscopes; and they don't know in the least what you mean. Nor do we old ones, either, for that matter: to-day you must really tell us nothing but facts.

L. I am sworn; but you won't like it, a bit.

MARY. Now, first of all, what do you mean by 'bricks'—Are the smallest particles of minerals all of some accurate shape, like bricks?

L. I do not know, Miss Mary; I do not even know if anybody knows. The smallest atoms which are visibly and practically put together to make large crystals, may better be described as 'limited in fixed directions' than as 'of fixed forms.' But I can tell you nothing clear about ultimate atoms: you will find the idea of little bricks, or, perhaps, of little spheres, available for all the uses you will have to put it to.

MARY. Well, it's very provoking; one seems always to be stopped just when one is coming to the very thing one wants to know.

L. No, Mary, for we should not wish to know anything but what is easily and assuredly knowable. There's no end to it. If I could show you, or myself, a group of ultimate atoms,
quite clearly, in this magnifying glass, we should both be presently vexed because we could not break them in two pieces, and see their insides.

MARY. Well then, next, what do you mean by the flying of the bricks? What is it the atoms do, that is like flying?

L. When they are dissolved, or uncrystallised, they are really separated from each other, like a swarm of gnats in the air, or like a shoal of fish in the sea;—generally at about equal distances. In currents of solutions, or at different depths of them, one part may be more full of the dissolved atoms than another; but on the whole, you may think of them as equidistant, like the spots in the print of your gown. If they are separated by force of heat only, the substance is said to be melted; if they are separated by any other substance, as particles of sugar by water, they are said to be 'dissolved.' Note this distinction carefully, all of you.

DORA. I will be very particular. When next you tell me there isn't sugar enough in your tea, I will say, 'It is not yet dissolved, sir.'

L. I tell you what shall be dissolved, Miss Dora; and that's the present parliament, if the members get too saucy.

(Dora folds her hands and casts down her eyes.)

L. (proceeds in state). Now, Miss Mary, you know already, I believe, that nearly everything will melt, under a sufficient heat, like wax. Limestone melts (under pressure); sand melts; granite melts; the lava of a volcano is a mixed mass of many kinds of rocks, melted: and any melted substance nearly always, if not always, crystallises as it cools; the more slowly the more perfectly. Water melts at what we call the freezing, but might just as wisely, though not as conveniently, call the melting, point; and radiates as it cools into the most beautiful of all known crystals. Glass melts at a greater heat, and will crystallise, if you let it cool slowly enough, in stars, much like snow. Gold needs more heat to melt it, but crystallises also exquisitely, as I will presently show you. Arsenic and sulphur crystallise from their vapours. Now in any of these cases, either of melted, dissolved, or vaporous bodies,
the particles are usually separated from each other, either by heat, or by an intermediate substance; and in crystallizing they are both brought nearer to each other, and packed, so as to fit as closely as possible: the essential part of the business being not the bringing together, but the packing.

Who packed your trunk for you, last holidays, Isabel?

ISABEL. Lily does, always.

L. And how much can you allow for Lily's good packing, in guessing what will go into the trunk?

ISABEL. Oh! I bring twice as much as the trunk holds. Lily always gets everything in.

LILY. Ah! but, Isey, if you only knew what a time it takes! and since you've had those great hard buttons on your frocks, I can't do anything with them. Buttons won't go anywhere, you know.

L. Yes, Lily, it would be well if she only knew what a time it takes; and I wish any of us knew what a time crystallisation takes, for that is consummately fine packing. The particles of the rock are thrown down, just as Isabel brings her things—in a heap; and innumerable Lilies, not of the valley, but of the rock, come to pack them. But it takes such a time!

However, the best—out and out the best—way of understanding the thing, is to crystallise yourselves.

THE AUDIENCE. Ourselves!

L. Yes; not merely as you did the other day, carelessly, on the schoolroom forms; but carefully and finely, out in the playground. You can play at crystallisation there as much as you please.

KATHLEEN and JESSIE. Oh! how?—how?

L. First, you must put yourselves together, as close as you can, in the middle of the grass, and form, for first practice, any figure you like.

JESSIE. Any dancing figure, do you mean?

L. No; I mean a square, or a cross, or a diamond. Any figure you like, standing close together. You had better outline it first on the turf, with sticks, or pebbles, so as to see that it is rightly drawn; then get into it and enlarge or dimin-
ish it at one side, till you are all quite in it, and no empty space left.

Dora. Crinoline and all?
L. The crinoline may stand eventually for rough crystalline surface, unless you pin it in; and then you may make a polished crystal of yourselves.

Lily. Oh, we'll pin it in—we'll pin it in!
L. Then, when you are all in the figure, let every one note her place, and who is next her on each side; and let the outsiders count how many places they stand from the corners.

Kathleen. Yes, yes,—and then?
L. Then you must scatter all over the playground—right over it from side to side, and end to end; and put yourselves all at equal distances from each other, everywhere. You needn't mind doing it very accurately, but so as to be nearly equidistant; not less than about three yards apart from each other, on every side.

Jessie. We can easily cut pieces of string of equal length, to hold. And then?
L. Then, at a given signal, let everybody walk, at the same rate, towards the outlined figure in the middle. You had better sing as you walk; that will keep you in good time. And as you close in towards it, let each take her place, and the next comers fit themselves in beside the first ones, till you are all in the figure again.

Kathleen. Oh! how we shall run against each other! What fun it will be!
L. No, no, Miss Katie; I can't allow any running against each other. The atoms never do that, whatever human creatures do. You must all know your places, and find your way to them without jostling.

Lily. But how ever shall we do that?
Isabel. Mustn't the ones in the middle be the nearest, and the outside ones farther off—when we go away to scatter, I mean?
L. Yes; you must be very careful to keep your order; you will soon find out how to do it; it is only like soldiers forming square, except that each must stand still in her place.
as she reaches it, and the others come round her; and you will have much more complicated figures, afterwards, to form, than squares.

Isabel. I'll put a stone at my place: then I shall know it.

L. You might each nail a bit of paper to the turf, at your place, with your name upon it: but it would be of no use, for if you don't know your places, you will make a fine piece of business of it, while you are looking for your names. And, Isabel, if with a little head, and eyes, and a brain (all of them very good and serviceable of their kind, as such things go), you think you cannot know your place without a stone at it, after examining it well,—how do you think each atom knows its place, when it never was there before, and there's no stone at it?

Isabel. But does every atom know its place?

L. How else could it get there?

Mary. Are they not attracted to their places?

L. Cover a piece of paper with spots, at equal intervals; and then imagine any kind of attraction you choose, or any law of attraction, to exist between the spots, and try how, on that permitted supposition, you can attract them into the figure of a Maltese cross, in the middle of the paper.

Mary (having tried it). Yes; I see that I cannot:—one would need all kinds of attractions, in different ways, at different places. But you do not mean that the atoms are alive?

L. What is it to be alive?

Dora. There now; you're going to be provoking, I know.

L. I do not see why it should be provoking to be asked what it is to be alive. Do you think you don't know whether you are alive or not?

(Isabel skips to the end of the room and back.)

L. Yes, Isabel, that's all very fine; and you and I may call that being alive: but a modern philosopher calls it being in a 'mode of motion.' It requires a certain quantity of heat to take you to the sideboard; and exactly the same quantity to bring you back again. That's all.

Isabel. No, it isn't. And besides, I'm not hot.
I am, sometimes, at the way they talk. However, you know, Isabel, you might have been a particle of a mineral, and yet have been carried round the room, or anywhere else, by chemical forces, in the liveliest way.

Isabel. Yes; but I wasn’t carried: I carried myself.

L. The fact is, mousie, the difficulty is not so much to say what makes a thing alive, as what makes it a Self. As soon as you are shut off from the rest of the universe into a Self, you begin to be alive.

Violet (indignant). Oh, surely—surely that cannot be so. Is not all the life of the soul in communion, not separation?

L. There can be no communion where there is no distinction. But we shall be in an abyss of metaphysics presently, if we don’t look out; and besides, we must not be too grand, to-day, for the younger children. We’ll be grand, some day, by ourselves, if we must. (The younger children are not pleased, and prepare to remonstrate; but, knowing by experience, that all conversations in which the word ‘communion’ occurs, are unintelligible, think better of it.) Meantime, for broad answer about the atoms. I do not think we should use the word ‘life,’ of any energy which does not belong to a given form. A seed, or an egg, or a young animal are properly called ‘alive’ with respect to the force belonging to those forms, which consistently develops that form, and no other. But the force which crystallises a mineral appears to be chiefly external, and it does not produce an entirely determinate and individual form, limited in size, but only an aggregation, in which some limiting laws must be observed.

Mary. But I do not see much difference, that way, between a crystal and a tree.

L. Add, then, that the mode of the energy in a living thing implies a continual change in its elements; and a period for its end. So you may define life by its attached negative, death; and still more by its attached positive, birth. But I won’t be plagued any more about this, just now; if you choose to think the crystals alive, do, and welcome. Rocks have always been called ‘living’ in their native place.
MARY. These's one question more; then I've done.
L. Only one?
MARY. Only one.
L. But if it is answered, won't it turn into two?
MARY. No; I think it will remain single, and be comfortable.
L. Let me hear it.
MARY. You know, we are to crystallise ourselves out of the whole playground. Now, what playground have the minerals? Where are they scattered before they are crystallised; and where are the crystals generally made?
L. That sounds to me more like three questions than one, Mary. If it is only one, it is a wide one.
MARY. I did not say anything about the width of it.
L. Well, I must keep it within the best compass I can. When rocks either dry from a moist state, or cool from a heated state, they necessarily alter in bulk; and cracks, or open spaces, form in them in all directions. These cracks must be filled up with solid matter, or the rock would eventually become a ruinous heap. So, sometimes by water, sometimes by vapour, sometimes nobody knows how, crystallisable matter is brought from somewhere, and fastens itself in these open spaces, so as to bind the rock together again, with crystal cement. A vast quantity of hollows are formed in lavas by bubbles of gas, just as the holes are left in bread well baked. In process of time these cavities are generally filled with various crystals.
MARY. But where does the crystallising substance come from?
L. Sometimes out of the rock itself; sometimes from below or above, through the veins. The entire substance of the contracting rock may be filled with liquid, pressed into it so as to fill every pore;—or with mineral vapour;—or it may be so charged at one place, and empty at another. There's no end to the 'may be's.' But all that you need fancy, for our present purpose, is that hollows in the rocks, like the caves in Derbyshire, are traversed by liquids or vapour containing certain elements in a more or less free or separate state, which crystallise on the cave walls.
SIBYL. There now;—Mary has had all her questions answered: it's my turn to have mine.

L. Ah, there's a conspiracy among you, I see. I might have guessed as much.

DORA. I'm sure you ask us questions enough! How can you have the heart, when you dislike so to be asked them yourself?

L. My dear child, if people do not answer questions, it does not matter how many they are asked, because they've no trouble with them. Now, when I ask you questions, I never expect to be answered; but when you ask me, you always do; and it's not fair.

DORA. Very well, we shall understand, next time.

SIBYL. No, but seriously, we all want to ask one thing more, quite dreadfully.

L. And I don't want to be asked it, quite dreadfully; but you'll have your own way, of course.

SIBYL. We none of us understand about the lower Pthah. It was not merely yesterday; but in all we have read about him in Wilkinson, or in any book, we cannot understand what the Egyptians put their god into that ugly little deformed shape for.

L. Well, I'm glad it's that sort of question; because I can answer anything I like, to that.

EGYPT. Anything you like will do quite well for us; we shall be pleased with the answer, if you are.

L. I am not so sure of that, most gracious queen; for I must begin by the statement that queens seem to have disliked all sorts of work, in those days, as much as some queens dislike sewing to-day.

EGYPT. Now, it's too bad! and just when I was trying to say the civillest thing I could!

L. But, Egypt, why did you tell me you disliked sewing so?

EGYPT. Did not I show you how the thread cuts my fingers? and I always get cramp, somehow, in my neck, if I sew long.

L. Well, I suppose the Egyptian queens thought every
body got cramp in their neck, if they sewed long; and that thread always cut people's fingers. At all events, every kind of manual labour was despised both by them, and the Greeks; and, while they owned the real good and fruit of it, they yet held it a degradation to all who practised it. Also, knowing the laws of life thoroughly, they perceived that the special practice necessary to bring any manual art to perfection strengthened the body distortedly; one energy or member gaining at the expense of the rest. They especially dreaded and despised any kind of work that had to be done near fire: yet, feeling what they owed to it in metal-work, as the basis of all other work, they expressed this mixed reverence and scorn in the varied types of the lame Hephaestus, and the lower Pthah.

SIBYL. But what did you mean by making him say 'everything great I can make small, and everything small great?'

L. I had my own separate meaning in that. We have seen in modern times the power of the lower Pthah developed in a separate way, which no Greek nor Egyptian could have conceived. It is the character of pure and eyeless manual labour to conceive everything as subjected to it: and, in reality, to disgrace and diminish all that is so subjected; aggrandising itself, and the thought of itself, at the expense of all noble things. I heard an orator, and a good one too, at the Working Men's College, the other day, make a great point in a description of our railroads; saying, with grandly conducted emphasis, 'They have made man greater, and the world less.' His working audience were mightily pleased; they thought it so very fine a thing to be made bigger themselves; and all the rest of the world less. I should have enjoyed asking them (but it would have been a pity—they were so pleased), how much less they would like to have the world made;—and whether, at present, those of them really felt the biggest men, who lived in the least houses.

SIBYL. But then, why did you make Pthah say that he could make weak things strong, and small things great?

L. My dear, he is a boaster and self-assertor, by nature; but it is so far true. For instance, we used to have a fair
in our neighbourhood—a very fine fair we thought it. You never saw such an one; but if you look at the engraving of Turner's 'St. Catherine's Hill,' you will see what it was like. There were curious booths, carried on poles; and peep-shows; and music, with plenty of drums and cymbals; and much barley-sugar and gingerbread, and the like: and in the alleys of this fair the London populace would enjoy themselves, after their fashion, very thoroughly. Well, the little Pthah set to work upon it one day; he made the wooden poles into iron ones, and put them across, like his own crooked legs, so that you always fall over them if you don't look where you are going; and he turned all the canvas into panes of glass, and put it up on his iron cross-poles; and made all the little booths into one great booth; and people said it was very fine, and a new style of architecture; and Mr. Dickens said nothing was ever like it in Fairy-land, which was very true. And then the little Pthah set to work to put fine fairings in it; and he painted the Nineveh bulls afresh, with the blackest eyes he could paint (because he had none himself), and he got the angels down from Lincoln choir, and gilded their wings like his gingerbread of old times; and he sent for everything else he could think of, and put it in his booth. There are the casts of Niobe and her children; and the Chimpanzee; and the wooden Caffres and New-Zealanders; and the Shakespeare House; and Le Grand Blondin, and Le Petit Blondin; and Handel; and Mozart; and no end of shops, and buns, and beer; and all the little Pthah-worshippers say, never was anything so sublime!

Sibyl. Now, do you mean to say you never go to these Crystal Palace concerts? They're as good as good can be.

L. I don't go to the thundering things with a million of bad voices in them. When I want a song, I get Julia Manning and Lucy Bertram and Counsellor Pleydell to sing 'We be three poor Mariners' to me; then I've no headache next morning. But I do go to the smaller concerts, when I can; for they are very good, as you say, Sibyl: and I always get a reserved seat somewhere near the orchestra, where I am sure I can see the kettle-drummer drum.
SIBYL. Now do be serious, for one minute.

L. I am serious—never was more so. You know one can't see the modulation of violinists' fingers, but one can see the vibration of the drummer's hand; and it's lovely.

SIBYL. But fancy going to a concert, not to hear, but to see!

L. Yes, it is very absurd. The quite right thing, I believe, is to go there to talk. I confess, however, that in most music, when very well done, the doing of it is to me the chiefly interesting part of the business. I'm always thinking how good it would be for the fat, supercilious people, who care so little for their half-crown's worth, to be set to try and do a half-crown's worth of anything like it.

MARY. But surely that Crystal Palace is a great good and help to the people of London?

L. The fresh air of the Norwood hills is, or was, my dear; but they are spoiling that with smoke as fast as they can. And the palace (as they call it) is a better place for them, by much, than the old fair; and it is always there, instead of for three days only; and it shuts up at proper hours of night. And good use may be made of the things in it, if you know how: but as for its teaching the people, it will teach them nothing but the lowest of the lower Pthah's work—nothing but hammer and tongs. I saw a wonderful piece, of his doing, in the place, only the other day. Some unhappy metal-worker—I am not sure if it was not a metal-working firm—had taken three years to make a Golden eagle.

SIBYL. Of real gold?

L. No; of bronze, or copper, or some of their foul patent metal—it is no matter what. I meant a model of our chief British eagle. Every feather was made separately; and every filament of every feather separately, and so joined on; and all the quills modelled of the right length and right section, and at last the whole cluster of them fastened together. You know, children, I don't think much of my own drawing; but take my proud word for once, that when I go to the Zoological Gardens, and happen to have a bit of chalk in my pocket, and the Gray Harpy will sit, without screwing his
head round, for thirty seconds,—I can do a better thing of him in that time than the three years' work of this industrious firm. For, during the thirty seconds, the eagle is my object,—not myself; and during the three years, the firm's object, in every fibre of bronze it made, was itself, and not the eagle. That is the true meaning of the little Pthah's having no eyes—he can see only himself. The Egyptian beetle was not quite the full type of him; our northern ground beetle is a truer one. It is beautiful to see it at work, gathering its treasures (such as they are) into little round balls; and pushing them home with the strong wrong end of it,—head downmost all the way,—like a modern political economist with his ball of capital, declaring that a nation can stand on its vices better than on its virtues. But away with you, children, now, for I'm getting cross.

Dora. I'm going down-stairs; I shall take care, at any rate, that there are no little Pthahs in the kitchen cupboards.
LECTURE IV.

THE CRYSTAL ORDERS.

A working Lecture, in the large School-room; with experimental Interludes.
The great bell has rung unexpectedly.

Kathleen (entering disconsolate, though first at the summons). Oh dear, oh dear, what a day! Was ever anything so provoking! just when we wanted to crystallise ourselves;—and I'm sure it's going to rain all day long.

L. So am I, Kate. The sky has quite an Irish way with it. But I don't see why Irish girls should also look so dismal. Fancy that you don't want to crystallise yourselves: you didn't, the day before yesterday, and you were not unhappy when it rained then.

Florrie. Ah! but we do want to-day; and the rain's so tiresome.

L. That is to say, children, that because you are all the richer by the expectation of playing at a new game, you choose to make yourselves unhappier than when you had nothing to look forward to, but the old ones.

Isabel. But then, to have to wait—wait—wait; and before we've tried it;—and perhaps it will rain to-morrow, too!

L. It may also rain the day after to-morrow. We can make ourselves uncomfortable to any extent with perhapses, Isabel. You may stick perhapses into your little minds, like pins, till you are as uncomfortable as the Lilliputians made Gulliver with their arrows, when he would not lie quiet.

Isabel. But what are we to do to-day?

L. To be quiet, for one thing, like Gulliver when he saw there was nothing better to be done. And to practise patience. I can tell you children, that requires nearly as much practising as music; and we are continually losing our lessons when the master comes. Now, to-day, here's a nice little adagio lesson for us, if we play it properly.
THE ETHICS OF THE DUST.

ISABEL. But I don't like that sort of lesson. I can't play it properly.

L. Can you play a Mozart sonata yet, Isabel? The more need to practise. All one's life is a music, if one touches the notes rightly, and in time. But there must be no hurry.

KATHLEEN. I'm sure there's no music in stopping in on a rainy day.

L. There's no music in a 'rest,' Katie, that I know of; but there's the making of music in it. And people are always missing that part of the life-melody; and scrambling on without counting—not that it's easy to count; but nothing on which so much depends ever is easy. People are always talking of perseverance, and courage, and fortitude; but patience is the finest and worthiest part of fortitude—and the rarest, too. I know twenty persevering girls for one patient one: but it is only that twenty-first who can do her work, out and out, or enjoy it. For patience lies at the root of all pleasures, as well as of all powers. Hope herself ceases to be happiness, when Impatience companions her.

(ISABEL and LILY sit down on the floor, and fold their hands. The others follow their example.)

Good children! but that's not quite the way of it, neither. Folded hands are not necessarily resigned ones. The Patience who really smiles at grief usually stands, or walks, or even runs: she seldom sits; though she may sometimes have to do it, for many a day, poor thing, by monuments; or like Chaucer's, 'with facē pale, upon a hill of sand.' But we are not reduced to that to-day. Suppose we use this calamitous forenoon to choose the shapes we are to crystallise into? we know nothing about them yet.

(The pictures of resignation rise from the floor, not in the patientest manner. General applause.)

MARY (with one or two others). The very thing we wanted to ask you about!

LILY. We looked at the books about crystals, but they are so dreadful.
L. Well, Lily, we must go through a little dreadfulness, that's a fact: no road to any good knowledge is wholly among the lilies and the grass; there is rough climbing to be done always. But the crystal-books are a little too dreadful, most of them, I admit; and we shall have to be content with very little of their help. You know, as you cannot stand on each other's heads, you can only make yourselves into the sections of crystals,—the figures they show when they are cut through; and we will choose some that will be quite easy. You shall make diamonds of yourselves—

ISABEL. Oh, no, no! we won't be diamonds, please.

L. Yes, you shall, Isabel; they are very pretty things, if the jewellers, and the kings and queens, would only let them alone. You shall make diamonds of yourselves, and rubies of yourselves, and emeralds; and Irish diamonds; two of those—with Lily in the middle of one, which will be very orderly, of course; and Kathleen in the middle of the other, for which we will hope the best;—and you shall make Derbyshire spar of yourselves, and Iceland spar, and gold, and silver, and—Quicksilver there's enough of in you, without any making.

MARY. Now, you know, the children will be getting quite wild: we must really get pencils and paper, and begin properly.

L. Wait a minute, Miss Mary; I think as we've the school room clear to-day, I'll try to give you some notion of the three great orders or ranks of crystals, into which all the others seem more or less to fall. We shall only want one figure a day, in the playground; and that can be drawn in a minute: but the general ideas had better be fastened first. I must show you a great many minerals; so let me have three tables wheeled into the three windows, that we may keep our specimens separate;—we will keep the three orders of crystals on separate tables.

(First Interlude, of pushing and pulling, and spreading of baize covers. VIOLET, not particularly minding what she is about, gets herself jammed into a corner, and bids to stand out of the way; on which she devotes herself to meditation.)
VIOLET (after interval of meditation). How strange it is that everything seems to divide into threes!

L. Everything doesn't divide into threes. Ivy won't, though shamrock will; and daisies won't, though lilies will.

VIOLET. But all the nicest things seem to divide into threes.

L. Violets won't.

VIOLET. No; I should think not, indeed! But I mean the great things.

L. I've always heard the globe had four quarters.

ISABEL. Well; but you know you said it hadn't any quarters at all. So mayn't it really be divided into three?

L. If it were divided into no more than three, on the outside of it, Isabel, it would be a fine world to live in; and if it were divided into three in the inside of it, it would soon be no world to live in at all.

DORA. We shall never get to the crystals, at this rate. (Aside to MARY.) He will get off into political economy before we know where we are. (Aloud.) But the crystals are divided into three, then?

L. No; but there are three general notions by which we may best get hold of them. Then between these notions there are other notions.

LILY (alarmed). A great many? And shall we have to learn them all?

L. More than a great many—a quite infinite many. So you cannot learn them all.

LILY (greatly relieved). Then may we only learn the three?

L. Certainly; unless, when you have got those three notions, you want to have some more notions;—which would not surprise me. But we'll try for the three, first. Katie, you broke your coral necklace this morning?

KATHLEEN. Oh! who told you? It was in jumping. I'm so sorry!

L. I'm very glad. Can you fetch me the beads of it?

KATHLEEN. I've lost some; here are the rest in my pocket, if I can only get them out.

L. You mean to get them out some day, I suppose; so try now. I want them.
THE CRYSTAL ORDERS

(Kathleen empties her pocket on the floor. The beads disperse. The School disperses also. Second Interlude—hunting piece.)

L. (after waiting patiently for a quarter of an hour, to Isabel. who comes up from under the table with her hair all about her ears, and the last findable beads in her hand). Mice are useful little things sometimes. Now, mousie, I want all those beads crystallised. How many ways are there of putting them in order?

Isabel. Well, first one would string them, I suppose?

L. Yes, that's the first way. You cannot string ultimate atoms; but you can put them in a row, and then they fasten themselves together, somehow, into a long rod or needle. We will call these 'Needle-crystals.' What would be the next way?

Isabel. I suppose, as we are to get together in the playground, when it stops raining, in different shapes?

L. Yes; put the beads together, then, in the simplest form you can, to begin with. Put them into a square, and pack them close.

Isabel (after careful endeavour). I can't get them closer.

L. That will do. Now you may see, beforehand, that if you try to throw yourselves into square in this confused way, you will never know your places; so you had better consider every square as made of rods, put side by side. Take four beads of equal size, first, Isabel; put them into a little square. That, you may consider as made up of two rods of two beads each. Then you can make a square a size larger, out of three rods of three. Then the next square may be a size larger. How many rods, Lily?

Lily. Four rods of four beads each, I suppose.

L. Yes, and then five rods of five, and so on. But now, look here; make another square of four beads again. You see they leave a little opening in the centre.

Isabel (pushing two opposite ones closer together). Now they don't.

L. No; but now it isn't a square; and by pushing the two together you have pushed the two others farther apart.
THE ETHICS OF THE DUST.

ISABEL. And yet, somehow, they all seem closer than they
were!

L. Yes; for before, each of them only touched two of the
others, but now each of the two in the middle touches the
other three. Take away one of the outsiders, Isabel; now you
have three in a triangle—the smallest triangle you can make
out of the beads. Now put a rod of three beads on at one
side. So, you have a triangle of six beads; but just the shape
of the first one. Next a rod of four on the side of that; and
you have a triangle of ten beads: then a rod of five on the
side of that; and you have a triangle of fifteen. Thus you
have a square with five beads on the side, and a triangle with
five beads on the side; equal-sided, therefore, like the square.
So, however few or many you may be, you may soon learn
how to crystallise quickly into these two figures, which are
the foundation of form in the commonest, and therefore act-
ually the most important, as well as in the rarest, and there-
fore, by our esteem, the most important, minerals of the
world. Look at this in my hand.

VIOLET. Why, it is leaf-gold!

L. Yes; but beaten by no man's hammer; or rather, not
beaten at all, but woven. Besides, feel the weight of it.
There is gold enough there to gild the walls and ceiling, if it
were beaten thin.

VIOLET. How beautiful! And it glitters like a leaf covered
with frost.

L. You only think it so beautiful because you know it is
gold. It is not prettier, in reality, than a bit of brass: for it
is Transylvanian gold; and they say there is a foolish gnome
in the mines there, who is always wanting to live in the moon,
and so alloys all the gold with a little silver. I don't know
how that may be: but the silver always is in the gold; and if
he does it, it's very provoking of him, for no gold is woven so
fine anywhere else.

MARY (who has been looking through her magnifying glass).
But this is not woven. This is all made of little triangles.

L. Say 'patched,' then, if you must be so particular. But
if you fancy all those triangles, small as they are (and many
of them are infinitely small), made up again of rods, and those of grains, as we built our great triangle of the beads, what word will you take for the manufacture?

May. There's no word—it is beyond words.

L. Yes; and that would matter little, were it not beyond thoughts too. But, at all events, this yellow leaf of dead gold, shed, not from the ruined woodlands, but the ruined rocks, will help you to remember the second kind of crystals, Leaf-crystals, or Foliated crystals; though I show you the form in gold first only to make a strong impression on you, for gold is not generally, or characteristically, crystallised in leaves; the real type of foliated crystals is this thing, Mica; which if you once feel well, and break well, you will always know again; and you will often have occasion to know it, for you will find it everywhere, nearly, in hill countries.

Kathleen. If we break it well! May we break it?

L. To powder, if you like.

(Surrenders plate of brown mica to public investigation.

Third Interlude. It sustains severely philosophical treatment at all hands.)

Florrie. (to whom the last fragments have descended) Always leaves, and leaves, and nothing but leaves, or white dust!

L. That dust itself is nothing but finer leaves.

(Shows them to Florrie through magnifying glass.)

Isabel. (peeping over Florrie's shoulder). But then this bit under the glass looks like that bit out of the glass! If we could break this bit under the glass, what would it be like?

L. It would be all leaves still.

Isabel. And then if we broke those again?

L. All less leaves still.

Isabel. (impatient). And if we broke them again, and again, and again, and again, and again?

L. Well, I suppose you would come to a limit, if you could only see it. Notice that the little flakes already differ somewhat from the large ones: because I can bend them up and down, and they stay bent; while the large flake, though it bent easily a little way, sprang back when you let it go, and
broke, when you tried to bend it far. And a large mass would not bend at all.

Mary. Would that leaf gold separate into finer leaves, in the same way?

L. No; and therefore, as I told you, it is not a characteristic specimen of a foliated crystallisation. The little triangles are portions of solid crystals, and so they are in this, which looks like a black mica; but you see it is made up of triangles like the gold, and stands, almost accurately, as an intermediate link, in crystals, between mica and gold. Yet this is the commonest, as gold the rarest, of metals.

Mary. Is it iron? I never saw iron so bright.

L. It is rust of iron, finely crystallised: from its resemblance to mica, it is often called micaceous iron.

Kathleen. May we break this, too?

L. No, for I could not easily get such another crystal; besides, it would not break like the mica; it is much harder. But take the glass again, and look at the fineness of the jagged edges of the triangles where they lap over each other. The gold has the same: but you see them better here, terrace above terrace, countless, and in successive angles, like superb fortified bastions.

May. But all foliated crystals are not made of triangles?

L. Far from it; mica is occasionally so, but usually of hexagons; and here is a foliated crystal made of squares, which will show you that the leaves of the rock-land have their summer green, as well as their autumnal gold.

Florrie. Oh! oh! oh! (jumps for joy).

L. Did you never see a bit of green leaf before, Florrie?

Florrie. Yes, but never so bright as that, and not in a stone.

L. If you will look at the leaves of the trees in sunshine after a shower, you will find they are much brighter than that; and surely they are none the worse for being on stalks instead of in stones?

Florrie. Yes, but then there are so many of them, one never looks, I suppose.

L. Now you have it, Florrie.
Violett (sighing). There are so many beautiful things we never see!

L. You need not sigh for that, Violet; but I will tell you what we should all sigh for,—that there are so many ugly things we never see.

Violett. But we don’t want to see ugly things!

L. You had better say, ‘We don’t want to suffer them.’ You ought to be glad in thinking how much more beauty God has made, than human eyes can ever see; but not glad in thinking how much more evil man has made, than his own soul can ever conceive, much more than his hands can ever heal.

Violett. I don’t understand;—how is that like the leaves?

L. The same law holds in our neglect of multiplied pain, as in our neglect of multiplied beauty. Florrie jumps for joy at sight of half an inch of a green leaf in a brown stone; and takes more notice of it than of all the green in the wood: and you, or I, or any of us, would be unhappy if any single human creature beside us were in sharp pain; but we can read, at breakfast, day after day, of men being killed, and of women and children dying of hunger, faster than the leaves strew the brooks in Vallombrosa;—and then go out to play croquet, as if nothing had happened.

May. But we do not see the people being killed or dying.

L. You did not see your brother, when you got the tele-gram the other day, saying he was ill, May; but you cried for him; and played no croquet. But we cannot talk of these things now; and what is more, you must let me talk straight on, for a little while; and ask no questions till I’ve done: for we branch (‘exfoliate,’ I should say, mineralogically) always into something else,—though that’s my fault more than yours; but I must go straight on now. You have got a distinct notion, I hope, of leaf-crystals; and you see the sort of look they have: you can easily remember that ‘folium’ is Latin for a leaf, and that the separate flakes of mica, or any other such stones, are called ‘folia;’ but, because mica is the most characteristic of these stones, other things that are like it in structure are called ‘micas;’ thus we have Uran-mica, which
is the green leaf I showed you; and Copper-mica, which is another like it, made chiefly of copper; and this foliated iron is called 'micaceous iron.' You have then these two great orders, Needle-crystals, made (probably) of grains in rows; and Leaf-crystals, made (probably) of needles interwoven; now, lastly, there are crystals of a third order, in heaps, or knots, or masses, which may be made, either of leaves laid one upon another, or of needles bound like Roman fasces; and mica itself, when it is well crystallised, puts itself into such masses, as if to show us how others are made. Here is a brown six-sided crystal, quite as beautifully chiselled at the sides as any castle tower; but you see it is entirely built of folia of mica, one laid above another, which break away the moment I touch the edge with my knife. Now, here is another hexagonal tower, of just the same size and colour, which I want you to compare with the mica carefully; but as I cannot wait for you to do it just now, I must tell you quickly what main differences to look for. First, you will feel it is far heavier than the mica. Then, though its surface looks quite micaceous in the folia of it, when you try them with the knife, you will find you cannot break them away——

Kathleen. May I try?

L. Yes, you mistrusting Katie. Here's my strong knife for you. (Experimental pause. Kathleen doing her best.) You'll have that knife shutting on your finger presently, Kate; and I don't know a girl who would like less to have her hand tied up for a week.

Kathleen (who also does not like to be beaten—giving up the knife despondently). What can the nasty hard thing be?

L. It is nothing but indurated clay, Kate: very hard set certainly, yet not so hard as it might be. If it were thoroughly well crystallised, you would see none of those micaceous fractures; and the stone would be quite red and clear, all through.

Kathleen. Oh, cannot you show us one?

L. Egypt can, if you ask her; she has a beautiful one in the clasp of her favourite bracelet.

Kathleen. Why, that's a ruby!
L. Well, so is that thing you've been scratching at.

KATHLEEN. My goodness!

(Takes up the stone again, very delicately; and drops it. General consternation.)

L. Never mind, Katie; you might drop it from the top of the house, and do it no harm. But though you really are a very good girl, and as good-natured as anybody can possibly be, remember, you have your faults, like other people; and, if I were you, the next time I wanted to assert anything energetically, I would assert it by 'my badness,' not 'my goodness.'

KATHLEEN. Ah, now, it's too bad of you!

L. Well, then, I'll invoke, on occasion, my 'too-badness.' But you may as well pick up the ruby, now you have dropped it; and look carefully at the beautiful hexagonal lines which gleam on its surface; and here is a pretty white sapphire (essentially the same stone as the ruby), in which you will see the same lovely structure, like the threads of the finest white cobweb. I do not know what is the exact method of a ruby's construction; but you see by these lines, what fine construction there is, even in this hardest of stones (after the diamond), which usually appears as a massive lump or knot. There is therefore no real mineralogical distinction between needle crystals and knotted crystals, but, practically, crystallised masses throw themselves into one of the three groups we have been examining to-day; and appear either as Needles, as Folia, or as Knots; when they are in needles (or fibres), they make the stones or rocks formed out of them 'fibrous;' when they are in folia, they make them 'foliated;' when they are in knots (or grains), 'granular.' Fibrous rocks are comparatively rare, in mass; but fibrous minerals are innumerable; and it is often a question which really no one but a young lady could possibly settle, whether one should call the fibres composing them 'threads' or 'needles.' Here is amianthus, for instance, which is quite as fine and soft as any cotton thread you ever sewed with; and here is sulphide of bismuth, with sharper points and brighter lustre than your finest
needles have; and fastened in white webs of quartz more
delicate than your finest lace; and here is sulphide of anti-
mony, which looks like mere purple wool, but it is all of
purple needle crystals; and here is red oxide of copper (you
must not breathe on it as you look, or you may blow some of
the films of it off the stone), which is simply a woven tissue
of scarlet silk. However, these finer thread forms are compar-
atively rare, while the bolder and needle-like crystals occur
constantly; so that, I believe, 'Needle-crystal' is the best
word (the grand one is 'Acicular crystal,' but Sibyl will tell
you it is all the same, only less easily understood; and there-
fore more scientific). Then the Leaf-crystals, as I said,
form an immense mass of foliated rocks; and the Granular
crystals, which are of many kinds, form essentially granular,
or granitic and porphyritic rocks; and it is always a point of
more interest to me (and I think will ultimately be to you),
to consider the causes which force a given mineral to take
any one of these three general forms, than what the peculiar
geometrical limitations are, belonging to its own crystals.*
It is more interesting to me, for instance, to try and find out
why the red oxide of copper, usually crystallising in cubes or
octahedrons, makes itself exquisitely, out of its cubes, into
this red silk in one particular Cornish mine, than what are
the absolutely necessary angles of the octahedron, which is
its common form. At all events, that mathematical part of
crystallography is quite beyond girls' strength; but these
questions of the various tempers and manners of crystals are
not only comprehensible by you, but full of the most curious
teaching for you. For in the fulfilment, to the best of their
power, of their adopted form under given circumstances,
there are conditions entirely resembling those of human vir-
tue; and indeed expressible under no term so proper as that
of the Virtue, or Courage of crystals:—which, if you are not
afraid of the crystals making you ashamed of yourselves, we
will try to get some notion of, to-morrow. But it will be a
bye-lecture, and more about yourselves than the minerals.
Don't come unless you like.

* Note iv.
MARY. I'm sure the crystals will make us ashamed of ourselves; but we'll come, for all that.

L. Meantime, look well and quietly over these needle, or thread crystals, and those on the other two tables, with magnifying glasses, and see what thoughts will come into your little heads about them. For the best thoughts are generally those which come without being forced, one does not know how. And so I hope you will get through your wet day patiently.
LECTURE V.

CRYSTAL VIRTUES.

* A quiet talk, in the afternoon, by the sunniest window of the Drawing-room. Present, Florrie, Isabel, May, Lucilla, Kathleen, Dora, Mary, and some others, who have saved time for the bye-Lecture.

L. So you have really come, like good girls, to be made ashamed of yourselves?

Dora (very meekly). No, we needn't be made so; we always are.

L. Well, I believe that's truer than most pretty speeches: but you know, you saucy girl, some people have more reason to be so than others. Are you sure everybody is, as well as you?

The General Voice. Yes, yes; everybody.

L. What! Florrie ashamed of herself?

(Florrie hides behind the curtain.)

L. And Isabel?

(Isabel hides under the table.)

L. And May?

(May runs into the corner behind the piano.)

L. And Lucilla?

(Lucilla hides her face in her hands.)

L. Dear, dear; but this will never do. I shall have to tell you of the faults of the crystals, instead of virtues, to put you in heart again.

May (coming out of her corner). Oh! have the crystals faults, like us?

L. Certainly, May. Their best virtues are shown in fighting their faults. And some have a great many faults; and some are very naughty crystals indeed.

Florrie (from behind her curtain). As naughty as me?

Isabel (peeping from under the table cloth). Or me?
L. Well, I don't know. They never forget their syntax, children, when once they've been taught it. But I think some of them are, on the whole, worse than any of you. Not that it's amiable of you to look so radiant, all in a minute, on that account.

Dora. Oh! but it's so much more comfortable.

(Everybody seems to recover their spirits. Eclipse of Florrie and Isabel terminates.)

L. What kindly creatures girls are, after all, to their neighbours' failings! I think you may be ashamed of yourselves indeed, now, children! I can tell you, you shall hear of the highest crystalline merits that I can think of, to-day: and I wish there were more of them; but crystals have a limited, though a stern, code of morals; and their essential virtues are but two;—the first is to be pure, and the second to be well shaped.

Mary. Pure! Does that mean clear—transparent?

L. No; unless in the case of a transparent substance. You cannot have a transparent crystal of gold; but you may have a perfectly pure one.

Isabel. But you said it was the shape that made things be crystals; therefore, oughtn't their shape to be their first virtue, not their second?

L. Right, you troublesome mousie. But I call their shape only their second virtue, because it depends on time and accident, and things which the crystal cannot help. If it is cooled too quickly, or shaken, it must take what shape it can; but it seems as if, even then, it had in itself the power of rejecting impurity, if it has crystalline life enough. Here is a crystal of quartz, well enough shaped in its way; but it seems to have been languid and sick at heart; and some white milky substance has got into it, and mixed itself up with it, all through. It makes the quartz quite yellow, if you hold it up to the light, and milky blue on the surface. Here is another, broken into a thousand separate facets, and out of all traceable shape; but as pure as a mountain spring. I like this one best.
THE AUDIENCE. So do I—and I—and I.
MARY. Would a crystallographer?
L. I think so. He would find many more laws curiously exemplified in the irregularly grouped but pure crystal. But it is a futile question, this of first or second. Purity is in most cases a prior, if not a nobler, virtue; at all events it is most convenient to think about it first.
MARY. But what ought we to think about it? Is there much to be thought—I mean, much to puzzle one?
L. I don't know what you call 'much.' It is a long time since I met with anything in which there was little. There's not much in this, perhaps. The crystal must be either dirty or clean—and there's an end. So it is with one's hands, and with one's heart—only you can wash your hands without changing them, but not hearts, nor crystals. On the whole, while you are young, it will be as well to take care that your hearts don't want much washing; for they may perhaps need wringing also, when they do.

(Audience doubtful and uncomfortable. Lucilla at last takes courage.)

LUCILLA. Oh! but surely, sir, we cannot make our hearts clean?
L. Not easily, Lucilla; so you had better keep them so when they are.
LUCILLA. When they are! But, sir—
L. Well?
LUCILLA. Sir—surely—are we not told that they are all evil?
L. Wait a little, Lucilla; that is difficult ground you are getting upon; and we must keep to our crystals, till at least we understand what their good and evil consist in; they may help us afterwards to some useful hints about our own. I said that their goodness consisted chiefly in purity of substance, and perfectness of form: but those are rather the effects of their goodness, than the goodness itself. The inherent virtues of the crystals, resulting in these outer conditions, might really seem to be best described in the words we should
use respecting living creatures—'force of heart' and 'steadiness of purpose.' There seem to be in some crystals, from the beginning, an unconquerable purity of vital power, and strength of crystal spirit. Whatever dead substance, unacceptable of this energy, comes in their way, is either rejected, or forced to take some beautiful subordinate form; the purity of the crystal remains unsullied, and every atom of it bright with coherent energy. Then the second condition is, that from the beginning of its whole structure, a fine crystal seems to have determined that it will be of a certain size and of a certain shape; it persists in this plan, and completes it. Here is a perfect crystal of quartz for you. It is of an unusual form, and one which it might seem very difficult to build—a pyramid with convex sides, composed of other minor pyramids. But there is not a flaw in its contour throughout; not one of its myriads of component sides but is as bright as a jeweller's facetted work (and far finer, if you saw it close). The crystal points are as sharp as javelins; their edges will cut glass with a touch. Anything more resolute, consummate, determinate in form, cannot be conceived. Here, on the other hand, is a crystal of the same substance, in a perfectly simple type of form—a plain six-sided prism; but from its base to its point,—and it is nine inches long,—it has never for one instant made up its mind what thickness it will have. It seems to have begun by making itself as thick as it thought possible with the quantity of material at command. Still not being as thick as it would like to be, it has clumsily glued on more substance at one of its sides. Then it has thinned itself, in a panic of economy; then puffed itself out again; then starved one side to enlarge another; then warped itself quite out of its first line. Opaque, rough-surfaced, jagged on the edge, distorted in the spine, it exhibits a quite human image of decrepitude and dishonour; but the worst of all the signs of its decay and helplessness, is that half-way up, a parasite crystal, smaller, but just as sickly, has rooted itself in the side of the larger one, eating out a cavity round its root, and then growing backwards, or downwards, contrary to the direction of the main crystal. Yet I cannot trace the least difference in
purity of substance between the first most noble stone, and this ignoble and dissolute one. The impurity of the last is in its will, or want of will.

MARY. Oh, if we could but understand the meaning of it all!

L. We can understand all that is good for us. It is just as true for us, as for the crystal, that the nobleness of life depends on its consistency,—clearness of purpose,—quiet and ceaseless energy. All doubt, and repenting, and botching, and retouching, and wondering what it will be best to do next, are vice, as well as misery.

MARY (much wondering). But must not one repent when one does wrong, and hesitate when one can't see one's way?

L. You have no business at all to do wrong; nor to get into any way that you cannot see. Your intelligence should always be far in advance of your act. Whenever you do not know what you are about, you are sure to be doing wrong.

KATHLEEN. Oh, dear, but I never know what I am about!

L. Very true, Katie, but it is a great deal to know, if you know that. And you find that you have done wrong afterwards; and perhaps some day you may begin to know, or at least, think, what you are about.

ISABEL. But surely people can't do very wrong if they don't know, can they? I mean, they can't be very naughty. They can be wrong, like Kathleen or me, when we make mistakes; but not wrong in the dreadful way. I can't express what I mean; but there are two sorts of wrong are there not?

L. Yes, Isabel; but you will find that the great difference is between kind and unkind wrongs, not between meant and unmeant wrong. Very few people really mean to do wrong,—in a deep sense, none. They only don't know what they are about. Cain did not mean to do wrong when he killed Abel.

(ISABEL draws a deep breath, and opens her eyes very wide.)

L. No, Isabel; and there are countless Cains among us now, who kill their brothers by the score a day, not only for less provocation than Cain had, but for no provocation,—and
CRystal Virtues.

merely for what they can make of their bones,—yet do not think they are doing wrong in the least. Then sometimes you have the business reversed, as over in America these last years, where you have seen Abel resolutely killing Cain, and not thinking he is doing wrong. The great difficulty is always to open people's eyes: to touch their feelings, and break their hearts, is easy; the difficult thing is to break their heads. What does it matter, as long as they remain stupid, whether you change their feelings or not? You cannot be always at their elbow to tell them what is right: and they may just do as wrong as before, or worse; and their best intentions merely make the road smooth for them,—you know where, children. For it is not the place itself that is paved with them, as people say so often. You can't pave the bottomless pit; but you may the road to it.

May. Well, but if people do as well as they can see how, surely that is the right for them, isn't it?

L. No, May, not a bit of it; right is right, and wrong is wrong. It is only the fool who does wrong, and says he 'did it for the best.' And if there's one sort of person in the world that the Bible speaks harder of than another, it is fools. Their particular and chief way of saying 'There is no God' is this, of declaring that whatever their 'public opinion' may be, is right: and that God's opinion is of no consequence.

May. But surely nobody can always know what is right?

L. Yes, you always can, for to-day; and if you do what you see of it to-day, you will see more of it, and more clearly, to-morrow. Here, for instance, you children are at school, and have to learn French, and arithmetic, and music, and several other such things. That is your 'right' for the present; the 'right' for us, your teachers, is to see that you learn as much as you can, without spoiling your dinner, your sleep, or your play; and that what you do learn, you learn well. You all know when you learn with a will, and when you dawdle. There's no doubt of conscience about that, I suppose?

Violet. No; but if one wants to read an amusing book, instead of learning one's lesson?

L. You don't call that a 'question,' seriously, Violet? You
are then merely deciding whether you will resolutely do wrong or not.

Mary. But, in after life, how many fearful difficulties may arise, however one tries to know or to do what is right!

L. You are much too sensible a girl, Mary, to have felt that, whatever you may have seen. A great many of young ladies' difficulties arise from their falling in love with a wrong person: but they have no business to let themselves fall in love, till they know he is the right one.

Dora. How many thousands ought he to have a year?

L. (disdaining reply). There are, of course, certain crises of fortune when one has to take care of oneself, and mind shrewdly what one is about. There is never any real doubt about the path, but you may have to walk very slowly.

Mary. And if one is forced to do a wrong thing by some one who has authority over you?

L. My dear, no one can be forced to do a wrong thing, for the guilt is in the will: but you may any day be forced to do a fatal thing, as you might be forced to take poison; the remarkable law of nature in such cases being, that it is always unfortunate you who are poisoned, and not the person who gives you the dose. It is a very strange law, but it is a law. Nature merely sees to the carrying out of the normal operation of arsenic. She never troubles herself to ask who gave it you. So also you may be starved to death, morally as well as physically, by other people's faults. You are, on the whole, very good children sitting here to-day;—do you think that your goodness comes all by your own contriving? or that you are gentle and kind because your dispositions are naturally more angelic than those of the poor girls who are playing, with wild eyes, on the dustheaps in the alleys of our great towns; and who will one day fill their prisons,—or, better, their graves? Heaven only knows where they, and we who have cast them there, shall stand at last. But the main judgment question will be, I suppose, for all of us, 'Did you keep a good heart through it?' What you were, others may answer for;—what you tried to be, you must answer for, yourself. Was the heart pure and true—tell us that?
And so we come back to your sorrowful question, Lucilla, which I put aside a little ago. You would be afraid to answer that your heart was pure and true, would not you?

Lucilla. Yes, indeed, sir.

L. Because you have been taught that it is all evil—'only evil continually.' Somehow, often as people say that, they never seem, to me, to believe it? Do you really believe it?

Lucilla. Yes, sir; I hope so.

L. That you have an entirely bad heart?

Lucilla (a little uncomfortable at the substitution of the monosyllable for the dissyllable, nevertheless persisting in her orthodoxy). Yes, sir.

L. Florrie, I am sure you are tired; I never like you to stay when you are tired; but, you know, you must not play with the kitten while we're talking.

Florrie. Oh! but I'm not tired; and I'm only nursing her. She'll be asleep in my lap directly.

L. Stop! that puts me in mind of something I had to show you, about minerals that are like hair. I want a hair out of Tittie's tail.

Florrie (quite rude, in her surprise, even to the point of repeating expressions). Out of Tittie's tail!

L. Yes; a brown one: Lucilla, you can get at the tip of it nicely, under Florrie's arm; just pull one out for me.

Lucilla. Oh! but, sir, it will hurt her so!

L. Never mind; she can't scratch you while Florrie is holding her. Now that I think of it, you had better pull out two.

Lucilla. But then she may scratch Florrie! and it will hurt her so, sir! if you only want brown hairs, wouldn't two of mine do?

L. Would you really rather pull out your own than Tittie's?

Lucilla. Oh, of course, if mine will do.

L. But that's very wicked, Lucilla!

Lucilla. Wicked, sir?

L. Yes; if your heart was not so bad, you would much rather pull all the cat's hairs out, than one of your own.

Lucilla. Oh! but sir, I didn't mean bad, like that.
L. I believe, if the truth were told, Lucilla, you would like to tie a kettle to Tittie's tail, and hunt her round the playground.

Lucilla. Indeed, I should not, sir.

L. That's not true, Lucilla; you know it cannot be.

Lucilla. Sir?

L. Certainly it is not;—how can you possibly speak any truth out of such a heart as you have? It is wholly deceitful.

Lucilla. Oh! no, no; I don't mean that way; I don't mean that it makes me tell lies, quite out.

L. Only that it tells lies within you?

Lucilla. Yes.

L. Then, outside of it, you know what is true, and say so; and I may trust the outside of your heart; but within, it is all foul and false. Is that the way?

Lucilla. I suppose so: I don't understand it, quite.

L. There is no occasion for understanding it; but do you feel it? Are you sure that your heart is deceitful above all things, and desperately wicked?

Lucilla (much relieved by finding herself among phrases with which she is acquainted). Yes, sir. I'm sure of that.

L. (pensively). I'm sorry for it, Lucilla.

Lucilla. So am I, indeed.

L. What are you sorry with, Lucilla?

Lucilla. Sorry with, sir?

L. Yes; I mean, where do you feel sorry? in your feet?

Lucilla (laughing a little). No, sir, of course.

L. In your shoulders, then?

Lucilla. No, sir.

L. You are sure of that? Because, I fear, sorrow in the shoulders would not be worth much.

Lucilla. I suppose I feel it in my heart, if I really am sorry.

L. If you really are! Do you mean to say that you are sure you are utterly wicked, and yet do not care?

Lucilla. No, indeed; I have cried about it often.

L. Well, then, you are sorry in your heart?

Lucilla. Yes, when the sorrow is worth anything.
L. Even if it be not, it cannot be anywhere else but there. It is not the crystalline lens of your eyes which is sorry, when you cry?

LUCILLA. No, sir, of course.

L. Then, have you two hearts; one of which is wicked, and the other grieved? or is one side of it sorry for the other side?

LUCILLA (weary of cross-examination, and a little vexed). Indeed, sir, you know I can't understand it; but you know how it is written—'another law in my members, warring against the law of my mind.'

L. Yes, Lucilla, I know how it is written; but I do not see that it will help us to know that, if we neither understand what is written, nor feel it. And you will not get nearer to the meaning of one verse, if, as soon as you are puzzled by it, you escape to another, introducing three new words—'law,' 'members,' and 'mind'; not one of which you at present know the meaning of; and respecting which, you probably never will be much wiser; since men like Montesquieu and Locke have spent great part of their lives in endeavouring to explain two of them.

LUCILLA. Oh! please, sir, ask somebody else.

L. If I thought anyone else could answer better than you, Lucilla, I would; but suppose I try, instead, myself, to explain your feelings to you?

LUCILLA. Oh, yes; please do.

L. Mind, I say your 'feelings,' not your 'belief.' For I cannot undertake to explain anybody's beliefs. Still I must try a little, first, to explain the belief also, because I want to draw it to some issue. As far as I understand what you say, or any one else, taught as you have been taught, says, on this matter,—you think that there is an external goodness, a whitened-sepulchre kind of goodness, which appears beautiful outwardly, but is within full of uncleanness: a deep secret guilt, of which we ourselves are not sensible; and which can only be seen by the Maker of us all. (Approving murmur from audience.)

L. Is it not so with the body as well as the soul?

(Looked notes of interrogation.)
L. A skull, for instance, is not a beautiful thing?

(Grave faces, signifying 'Certainly not,' and 'What next?')

L. And if you all could see in each other, with clear eyes, whatever God sees beneath those fair faces of yours, you would not like it?

(Murmured 'No's.')

L. Nor would it be good for you?

(Silence.)

L. The probability being that what God does not allow you to see, He does not wish you to see; nor even to think of?

(Silence prolonged.)

L. It would not at all be good for you, for instance, whenever you were washing your faces, and braiding your hair, to be thinking of the shapes of the jawbones, and of the cartilage of the nose, and of the jagged sutures of the scalp?

(Resolutely whispered No's.)

L. Still less, to see through a clear glass the daily processes of nourishment and decay?

(No.)

L. Still less if instead of merely inferior and preparatory conditions of structure, as in the skeleton,—or inferior offices of structure, as in operations of life and death,—there were actual disease in the body; ghastly and dreadful. You would try to cure it; but having taken such measures as were necessary, you would not think the cure likely to be promoted by perpetually watching the wounds, or thinking of them. On the contrary, you would be thankful for every moment of forgetfulness: as, in daily health, you must be thankful that your Maker has veiled whatever is fearful in your frame under a sweet and manifest beauty; and has made it your duty, and your only safety, to rejoice in that, both in yourself and in others:—not indeed concealing, or refusing to believe in sickness, if it come; but never dwelling on it.

Now, your wisdom and duty touching soul-sickness are just the same. Ascertain clearly what is wrong with you; and so
far as you know any means of mending it, take those means, and have done: when you are examining yourself, never call yourself merely a 'sinner,' that is very cheap abuse; and utterly useless. You may even get to like it, and be proud of it. But call yourself a liar, a coward, a sluggard, a glutton, or an evil-eyed jealous wretch, if you indeed find yourself to be in any wise any of these. Take steady means to check yourself in whatever fault you have ascertained, and justly accused yourself of. And as soon as you are in active way of mending, you will be no more inclined to moan over an undefined corruption. For the rest, you will find it less easy to uproot faults, than to choke them by gaining virtues. Do not think of your faults; still less of others' faults: in every person who comes near you, look for what is good and strong: honour that; rejoice in it; and, as you can, try to imitate it: and your faults will drop off, like dead leaves, when their time comes. If, on looking back, your whole life should seem rugged as a palm tree stem; still, never mind, so long as it has been growing; and has its grand green shade of leaves, and weight of honied fruit, at top. And even if you cannot find much good in yourself at last, think that it does not much matter to the universe either what you were, or are; think how many people are noble, if you cannot be; and rejoice in their nobleness. An immense quantity of modern confession of sin, even when honest, is merely a sickly egoism; which will rather gloat over its own evil, than lose the centralisation of its interest in itself.

MARY. But then, if we ought to forget ourselves so much, how did the old Greek proverb 'Know thyself' come to be so highly esteemed?

L. My dear, it is the proverb of proverbs; Apollo's proverb, and the sun's;—but do you think you can know yourself by looking into yourself? Never. You can know what you are, only by looking out of yourself. Measure your own powers with those of others; compare your own interests with those of others; try to understand what you appear to them, as well as what they appear to you; and judge of yourselves, in all things, relatively and subordinately; not posi-
tively: starting always with a wholesome conviction of the probability that there is nothing particular about you. For instance, some of you perhaps think you can write poetry. Dwell on your own feelings and doings:—and you will soon think yourselves Tenth Muses; but forget your own feelings; and try, instead, to understand a line or two of Chaucer or Dante: and you will soon begin to feel yourselves very foolish girls—which is much like the fact.

So, something which befalls you may seem a great misfortune;—you meditate over its effects on you personally; and begin to think that it is a chastisement, or a warning, or a this or that or the other of profound significance; and that all the angels in heaven have left their business for a little while, that they may watch its effects on your mind. But give up this egotistic indulgence of your fancy; examine a little what misfortunes, greater a thousandfold, are happening, every second, to twenty times worthier persons: and your self-consciousness will change into pity and humility; and you will know yourself, so far as to understand that 'there hath nothing taken thee but what is common to man.'

Now, Lucilla, these are the practical conclusions which any person of sense would arrive at, supposing the texts which relate to the inner evil of the heart were as many, and as prominent, as they are often supposed to be by careless readers. But the way in which common people read their Bibles is just like the way that the old monks thought hedgehogs ate grapes. They rolled themselves (it was said), over and over, where the grapes lay on the ground. What fruit stuck to their spines, they carried off, and ate. So your hedgehoggy readers roll themselves over and over their Bibles, and declare that whatever sticks to their own spines is Scripture; and that nothing else is. But you can only get the skins of the texts that way. If you want their juice, you must press them in cluster. Now, the clustered texts about the human heart, insist, as a body, not on any inherent corruption in all hearts, but on the terrific distinction between the bad and the good ones. 'A good man, out of the good treasure of his heart, bringeth forth that which is good; and an evil man, out of
the evil treasure, bringeth forth that which is evil.' 'They on
the rock are they which, in an honest and good heart, having
heard the word, keep it.' 'Delight thyself in the Lord, and
He shall give thee the desires of thine heart.' 'The wicked
have bent their bow, that they may privily shoot at him that
is upright in heart.' And so on; they are countless, to the
same effect. And, for all of us, the question is not at all to
ascertain how much or how little corruption there is in human
nature; but to ascertain whether, out of all the mass of that
nature, we are of the sheep or the goat breed; whether we
are people of upright heart, being shot at, or people of
crooked heart, shooting. And, of all the texts bearing on the
subject, this, which is a quite simple and practical order, is
the one you have chiefly to hold in mind. 'Keep thy heart
with all diligence, for out of it are the issues of life.'

Lucilla. And yet, how inconsistent the texts seem!

L. Nonsense, Lucilla! do you think the universe is bound
to look consistent to a girl of fifteen? Look up at your own
room window;—you can just see it from where you sit. I'm
glad that it is left open, as it ought to be, in so fine a day.
But do you see what a black spot it looks, in the sun-lighted
wall?

Lucilla. Yes, it looks as black as ink.

L. Yet you know it is a very bright room when you are
inside of it; quite as bright as there is any occasion for it to
be, that its little lady may see to keep it tidy. Well, it is very
probable, also, that if you could look into your heart from the
sun's point of view, it might appear a very black hole indeed:
nay, the sun may sometimes think good to tell you that it
looks so to Him; but He will come into it, and make it very
cheerful for you, for all that, if you don't put the shutters up.
And the one question for you, remember, is not 'dark or
light?' but 'tidy or untidy?' Look well to your sweeping
and garnishing; and be sure it is only the banished spirit, or
some of the seven wickeder ones at his back, who will still
whisper to you that it is all black.
LECTURE VI.

CRYSTAL QUARRELS.

Full aoriclave, in Schoolroom. There has been a game at crystallisation in the morning, of which various account has to be rendered. In particular, everybody has to explain why they were always where they were not intended to be.

L. (having received and considered the report). You have got on pretty well, children: but you know these were easy figures you have been trying. Wait till I have drawn you out the plans of some crystals of snow!

Mary. I don’t think those will be the most difficult:—they are so beautiful that we shall remember our places better; and then they are all regular, and in stars: it is those twisty oblique ones we are afraid of.

L. Read Carlyle’s account of the battle of Leuthen, and learn Freidrich’s ‘oblique order.’ You will ‘get it done for once, I think, provided you can march as a pair of compasses would.’ But remember, when you can construct the most difficult single figures, you have only learned half the game—nothing so much as the half, indeed, as the crystals themselves play it.

Mary. Indeed; what else is there?

L. It is seldom that any mineral crystallises alone. Usually two or three, under quite different crystalline laws, form together. They do this absolutely without flaw or fault, when they are in fine temper: and observe what this signifies. It signifies that the two, or more, minerals of different natures agree, somehow, between themselves, how much space each will want;—agree which of them shall give away to the other at their junction; or in what measure each will accommodate itself to the other’s shape! And then each takes its permitted shape, and allotted share of space; yielding, or being
CRYSTAL QUARRELS.

yielded to, as it builds, till each crystal has fitted itself perfectly and gracefully to its differently-natured neighbour. So that, in order to practise this, in even the simplest terms, you must divide into two parties, wearing different colours; each much choose a different figure to construct; and you must form one of these figures through the other, both going on at the same time.

MARY. I think we may, perhaps, manage it; but I cannot at all understand how the crystals do. It seems to imply so much preconcerting of plan, and so much giving way to each other, as if they really were living.

L. Yes, it implies both concurrence and compromise, regulating all wilfulness of design: and, more curious still, the crystals do not always give way to each other. They show exactly the same varieties of temper that human creatures might. Sometimes they yield the required place with perfect grace and courtesy; forming fantastic, but exquisitely finished groups: and sometimes they will not yield at all; but fight furiously for their places, losing all shape and honour, and even their own likeness, in the contest.

MARY. But is not that wholly wonderful? How is it that one never sees it spoken of in books?

L. The scientific men are all busy in determining the constant laws under which the struggle takes place; these indefinite humours of the elements are of no interest to them. And unscientific people rarely give themselves the trouble of thinking at all when they look at stones. Not that it is of much use to think; the more one thinks, the more one is puzzled.

MARY. Surely it is more wonderful than anything in botany?

L. Everything has its own wonders; but, given the nature of the plant, it is easier to understand what a flower will do, and why it does it, than, given anything we as yet know of stone-nature, to understand what a crystal will do, and why it does it. You at once admit a kind of volition and choice, in the flower; but we are not accustomed to attribute anything of the kind to the crystal. Yet there is, in reality, more like-
ness to some conditions of human feeling among stones than among plants. There is a far greater difference between kindly-tempered and ill-tempered crystals of the same mineral, than between any two specimens of the same flower: and the friendships and wars of crystals depend more definitely and curiously on their varieties of disposition, than any associations of flowers. Here, for instance, is a good garnet, living with good mica; one rich red, and the other silver white: the mica leaves exactly room enough for the garnet to crystal-lise comfortably in; and the garnet lives happily in its little white house; fitted to it, like a pholas in its cell. But here are wicked garnets living with wicked mica. See what ruin they make of each other! You cannot tell which is which; the garnets look like dull red stains on the crumbling stone. By the way, I never could understand, if St. Gothard is a real saint, why he can't keep his garnets in better order. These are all under his care; but I suppose there are too many of them for him to look after. The streets of Airolo are paved with them.

Max. Paved with garnets?

L. With mica-slate and garnets; I broke this bit out of a paving stone. Now garnets and mica are natural friends, and generally fond of each other; but you see how they quarrel when they are ill brought up. So it is always. Good crystals are friendly with almost all other good crystals, however little they chance to see of each other, or however opposite their habits may be; while wicked crystals quarrel with one another, though they may be exactly alike in habits, and see each other continually. And of course the wicked crystals quarrel with the good ones.

Isabel. Then do the good ones get angry?

L. No, never: they attend to their own work and life; and live it as well as they can, though they are always the sufferers. Here, for instance, is a rock-crystal of the purest race and finest temper, who was born, unhappily for him, in a bad neighbourhood, near Beaufort in Savoy; and he has had to fight with vile calcareous mud all his life. See here, when he was but a child, it came down on him, and nearly buried him; a
CRYSTAL QUARRELS.

weaker crystal would have died in despair; but he only gathered himself together, like Hercules against the serpents, and threw a layer of crystal over the clay; conquered it,—imprisoned it,—and lived on. Then, when he was a little older, came more clay; and poured itself upon him here, at the side; and he has laid crystal over that, and lived on, in his purity. Then the clay came on at his angles, and tried to cover them, and round them away; but upon that he threw out buttress-crystals at his angles, all as true to his own central line as chapels round a cathedral apse; and clustered them round the clay; and conquered it again. At last the clay came on at his summit, and tried to blunt his summit; but he could not endure that for an instant; and left his flanks all rough, but pure; and fought the clay at his crest, and built crest over crest, and peak over peak, till the clay surrendered at last; and here is his summit, smooth and pure, terminating a pyramid of alternate clay and crystal, half a foot high!

LILY. Oh, how nice of him! What a dear, brave crystal! But I can't bear to see his flanks all broken, and the clay within them.

L. Yes; it was an evil chance for him, the being born to such contention; there are some enemies so base that even to hold them captive is a kind of dishonour. But look, here has been quite a different kind of struggle: the adverse power has been more orderly, and has fought the pure crystal in ranks as firm as its own. This is not mere rage and impediment of crowded evil: here is a disciplined hostility; army against army.

LILY. Oh, but this is much more beautiful!

L. Yes, for both the elements have true virtue in them; it is a pity they are at war, but they war grandly.

MARY. But is this the same clay as in the other crystal?

L. I used the word clay for shortness. In both, the enemy is really limestone; but in the first, disordered, and mixed with true clay; while, here, it is nearly pure, and crystallises into its own primitive form, the oblique six-sided one, which you know: and out of these it makes regiments; and then
squares of the regiments, and so charges the rock crystal literally in square against column.

**ISABEL.** Please, please, let me see. And what does the rock crystal do?

**L.** The rock crystal seems able to do nothing. The calcite cuts it through at every charge. Look here,—and here! The loveliest crystal in the whole group is hewn fairly into two pieces.

**ISABEL.** Oh, dear; but is the calcite harder than the crystal then?

**L.** No, softer. Very much softer.

**MARY.** But then, how can it possibly cut the crystal?

**L.** It did not really cut it, though it passes through it. The two were formed together, as I told you; but no one knows how. Still, it is strange that this hard quartz has in all cases a good-natured way with it, of yielding to everything else. All sorts of soft things make nests for themselves in it; and it never makes a nest for itself in anything. It has all the rough outside work; and every sort of cowardly and weak mineral can shelter itself within it. Look; these are hexagonal plates of mica; if they were outside of this crystal they would break, like burnt paper; but they are inside of it,—nothing can hurt them,—the crystal has taken them into its very heart, keeping all their delicate edges as sharp as if they were under water, instead of bathed in rock. Here is a piece of branched silver: you can bend it with a touch of your finger, but the stamp of its every fibre is on the rock in which it lay, as if the quartz had been as soft as wool.

**LILY.** Oh, the good, good quartz! But does it never get inside of anything?

**L.** As it is a little Irish girl who asks, I may perhaps answer, without being laughed at, that it gets inside of itself sometimes. But I don't remember seeing quartz make a nest for itself in anything else.

**ISABEL.** Please, there was something I heard you talking about, last term, with Miss Mary. I was at my lessons, but I heard something about nests; and I thought it was birds'
nests; and I couldn't help listening; and then, I remember, it was about 'nests of quartz in granite.' I remember, because I was so disappointed!

L. Yes, mousie, you remember quite rightly; but I can't tell you about those nests to-day, nor perhaps to-morrow: but there's no contradiction between my saying then, and now; I will show you that there is not, some day. Will you trust me meanwhile?

ISABEL. Won't I!

L. Well, then, look, lastly, at this piece of courtesy in quartz; it is on a small scale, but wonderfully pretty. Here is nobly born quartz living with a green mineral, called epidote; and they are immense friends. Now, you see, a comparatively large and strong quartz-crystal, and a very weak and slender little one of epidote, have begun to grow, close by each other, and sloping unluckily towards each other, so that they at last meet. They cannot go on growing together; the quartz crystal is five times as thick, and more than twenty times as strong,* as the epidote; but he stops at once, just in the very crowning moment of his life, when he is building his own summit! He lets the pale little film of epidote grow right past him; stopping his own summit for it; and he never himself grows any more.

LILY (after some silence of wonder). But is the quartz never wicked then?

L. Yes, but the wickedest quartz seems good-natured, compared to other things. Here are two very characteristic examples; one is good quartz, living with good pearlspar, and the other, wicked quartz, living with wicked pearlspar. In both, the quartz yields to the soft carbonate of iron: but, in the first place, the iron takes only what it needs of room; and is inserted into the planes of the rock crystal with such precision, that you must break it away before you can tell whether it really penetrates the quartz or not; while the crystals of iron are perfectly formed, and have a lovely bloom on their surface besides. But here, when the two minerals

* Quartz is not much harder than epidote; the strength is only supposed to be in some proportion to the squares of the diameters.
quarrel, the unhappy quartz has all its surfaces jagged and torn to pieces; and there is not a single iron crystal whose shape you can completely trace. But the quartz has the worst of it, in both instances.

VIOLET. Might we look at that piece of broken quartz again, with the weak little film across it? It seems such a strange lovely thing, like the self-sacrifice of a human being.

L. The self-sacrifice of a human being is not a lovely thing, Violet. It is often a necessary and noble thing; but no form nor degree of suicide can be ever lovely.

VIOLET. But self-sacrifice is not suicide!

L. What is it then?

VIOLET. Giving up one's self for another.

L. Well; and what do you mean by 'giving up one's self'?

VIOLET. Giving up one's tastes, one's feelings, one's time, one's happiness, and so on, to make others happy.

L. I hope you will never marry anybody, Violet, who expects you to make him happy in that way.

VIOLET (hesitating). In what way?

L. By giving up your tastes, and sacrificing your feelings, and happiness.

VIOLET. No, no, I don't mean that; but you know, for other people, one must.

L. For people who don't love you, and whom you know nothing about? Be it so; but how does this 'giving up' differ from suicide then?

VIOLET. Why, giving up one's pleasures is not killing one's self?

L. Giving up wrong pleasure is not; neither is it self-sacrifice, but self-culture. But giving up right pleasure is. If you surrender the pleasure of walking, your foot will wither; you may as well cut it off: if you surrender the pleasure of seeing, your eyes will soon be unable to bear the light; you may as well pluck them out. And to maim yourself is partly to kill yourself. Do but go on maiming, and you will soon slay.

VIOLET. But why do you make me think of that verse there, about the foot and the eye?
L. You are indeed commanded to cut off and to pluck out, if foot or eye offend you; but why should they offend you?

Violet. I don't know; I never quite understood that.

L. Yet it is a sharp order; one needing to be well understood if it is to be well obeyed! When Helen sprained her ankle the other day, you saw how strongly it had to be bandaged: that is to say, prevented from all work, to recover it. But the bandage was not 'lovely.'

Violet. No, indeed.

L. And if her foot had been crushed, or diseased, or snake-bitten, instead of sprained, it might have been needful to cut it off. But the amputation would not have been 'lovely.'

Violet. No.

L. Well, if eye and foot are dead already, and betray you—if the light that is in you be darkness, and your feet run into mischief, or are taken in the snare,—it is indeed time to pluck out, and cut off, I think: but, so crippled, you can never be what you might have been otherwise. You enter into life, at best, halt or maimed; and the sacrifice is not beautiful, though necessary.

Violet (after a pause). But when one sacrifices one's self for others?

L. Why not rather others for you?

Violet. Oh! but I couldn't bear that.

L. Then why should they bear it?

Dora (bursting in, indignant). And Thermopylæ, and Protésilaus, and Marcus Curtius, and Arnold de Winkelried, and Iphigenia, and Jephtha's daughter?

L. (sustaining the indignation unmoved). And the Samaritan woman's son?

Dora. Which Samaritan woman's?

L. Read 2 Kings vi. 29.

Dora (obeys). How horrid! As if we meant anything like that!

L. You don't seem to me to know in the least what you do mean, children. What practical difference is there between 'that,' and what you are talking about? The Samaritan children had no voice of their own in the business, it is true; but
neither had Iphigenia: the Greek girl was certainly neither boiled, nor eaten; but that only makes a difference in the dramatic effect; not in the principle.

Dora (biting her lip). Well, then, tell us what we ought to mean. As if you didn't teach it all to us, and mean it yourself, at this moment, more than we do, if you wouldn't be tiresome!

L. I mean, and have always meant, simply this, Dora;—that the will of God respecting us is that we shall live by each other's happiness, and life; not by each other's misery, or death. I made you read that verse which so shocked you. It now, because the relations of parent and child are typical of all beautiful human help. A child may have to die for its parents; but the purpose of Heaven is that it shall rather live for them;—that, not by its sacrifice, but by its strength, its joy, its force of being, it shall be to them renewal of strength; and as the arrow in the hand of the giant. So it is in all other right relations. Men help each other by their joy, not by their sorrow. They are not intended to slay themselves for each other, but to strengthen themselves for each other. And among the many apparently beautiful things which turn, through mistaken use, to utter evil, I am not sure but that the thoughtlessly meek and self-sacrificing spirit of good men must be named as one of the fatefullest. They have so often been taught that there is a virtue in mere suffering, as such; and foolishly to hope that good may be brought by Heaven out of all on which Heaven itself has set the stamp of evil, that we may avoid it,—that they accept pain and defeat as if these were their appointed portion; never understanding that their defeat is not the less to be mourned because it is more fatal to their enemies than to them. The one thing that a good man has to do, and to see done, is justice; he is neither to slay himself nor others causelessly: so far from denying himself, since he is pleased by good, he is to do his utmost to get his pleasure accomplished. And I only wish there were strength, fidelity, and sense enough, among the good Englishmen of this day, to render it possible for them to band together in a vowed brotherhood, to enforce, by strength of
heart and hand, the doing of human justice among all who
came within their sphere. And finally, for your own teach-
ing, observe, although there may be need for much self-sacri-
cifice and self-denial in the correction of faults of character,
the moment the character is formed, the self-denial ceases.
Nothing is really well done, which it costs you pain to do.

Violet. But surely, sir, you are always pleased with us
when we try to please others, and not ourselves?

L. My dear child, in the daily course and discipline of right
life, we must continually and reciprocally submit and sur-
render in all kind and courteous and affectionate ways: and
these submissions and ministries to each other, of which you
all know (none better) the practice and the preciousness, are
as good for the yielder as the receiver: they strengthen and
perfect as much as they soften and refine. But the real sacri-
cifice of all our strength, or life, or happiness to others (though
it may be needed, and though all brave creatures hold their
lives in their hand, to be given, when such need comes, as
frankly as a soldier gives his life in battle), is yet always a
mournful and momentary necessity; not the fulfilment of the
continuous law of being. Self-sacrifice which is sought after,
and triumphed in, is usually foolish; and calamitous in its
issue: and by the sentimental proclamation and pursuit of it,
good people have not only made most of their own lives use-
less, but the whole framework of their religion so hollow,
that at this moment, while the English nation, with its lips,
pretends to teach every man to 'love his neighbour as him-
self,' with its hands and feet it clutches and tramples like a
wild beast; and practically lives, every soul of it that can, on
other people's labour. Briefly, the constant duty of every man
to his fellows is to ascertain his own powers and special gifts;
and to strengthen them for the help of others. Do you think
Titian would have helped the world better by denying him-
self, and not painting; or Casella by denying himself, and not
singing? The real virtue is to be ready to sing the moment
people ask us; as he was, even in purgatory. The very word
'veirtue' means not 'conduct' but 'strength,' vital energy in
the heart. Were not you reading about that group of words
beginning with V,—vital, virtuous, vigorous, and so on,—in Max Muller, the other day, Sibyl? Can’t you tell the others about it?

Sibyl. No, I can’t; will you tell us, please?

L. Not now, it is too late. Come to me some idle time to-morrow, and I’ll tell you about it, if all’s well. But the gist of it is, children, that you should at least know two Latin words; recollect that ‘mors’ means death and delaying; and ‘vita’ means life and growing: and try always, not to mortify yourselves, but to vivify yourselves.

Violet. But, then, are we not to mortify our earthly affections? and surely we are to sacrifice ourselves, at least in God’s service, if not in man’s?

L. Really, Violet, we are getting too serious. I’ve given you enough ethics for one talk, I think! Do let us have a little play. Lily, what were you so busy about, at the ant-hill in the wood, this morning?

Lily. Oh, it was the ants who were busy, not I; I was only trying to help them a little.

L. And they wouldn’t be helped, I suppose?

Lily. No, indeed. I can’t think why ants are always so tiresome, when one tries to help them! They were carrying bits of stick, as fast as they could, through a piece of grass; and pulling and pushing, so hard; and tumbling over and over,—it made one quite pity them; so I took some of the bits of stick, and carried them forward a little, where I thought they wanted to put them; but instead of being pleased, they left them directly, and ran about looking quite angry and frightened; and at last ever so many of them got up my sleeves, and bit me all over, and I had to come away.

L. I couldn’t think what you were about. I saw your French grammar lying on the grass behind you, and thought perhaps you had gone to ask the ants to hear you a French verb.

Isabel. Ah! but you didn’t, though!

L. Why not, Isabel? I knew, well enough, Lily couldn’t learn that verb by herself.

Isabel. No; but the ants couldn’t help her.
CRYSTAL QUARRELS

L. Are you sure the ants could not have helped you, Lily?
LILY (thinking). I ought to have learned something from
them, perhaps.
L. But none of them left their sticks to help you through
the irregular verb?
LILY. No, indeed. (Laughing, with some others.)
L. What are you laughing at, children? I cannot see
why the ants should not have left their tasks to help Lily in her’s,
—since here is Violet thinking she ought to leave her tasks,
to help God in His. Perhaps, however, she takes Lily’s more
modest view, and thinks only that ‘He ought to learn some-
thing from her.’

(Tears in Violet’s eyes.)

DORA (scarlet). It’s too bad—it’s a shame:—poor Violet!
L. My dear children, there’s no reason why one should be
so red, and the other so pale, merely because you are made
for a moment to feel the absurdity of a phrase which you
have been taught to use, in common with half the religious
world. There is but one way in which man can ever help
God—that is, by letting God help him: and there is no way
in which his name is more guiltily taken in vain, than by call-
ing the abandonment of our own work, the performance of
His.

God is a kind Father. He sets us all in the places where
He wishes us to be employed; and that employment is truly
‘our Father’s business.’ He chooses work for every creature
which will be delightful to them, if they do it simply and
humbly. He gives us always strength enough, and sense
enough, for what He wants us to do; if we either tire our-
selves or puzzle ourselves, it is our own fault. And we may
always be sure, whatever we are doing, that we cannot be
pleasing Him, if we are not happy ourselves. Now, away
with you, children; and be as happy as you can. And when
you cannot, at least don’t plume yourselves upon pouting.
LECTURE VII.

HOME VIRTUES.

By the fireside, in the Drawing-room. Evening.

DORA. Now, the curtains are drawn, and the fire's bright and here's your arm-chair—and you're to tell us all about what you promised.

L. All about what?

DORA. All about virtue.

KATHLEEN. Yes, and about the words that begin with V.

L. I heard you singing about a word that begins with V, in the playground, this morning, Miss Katie.

KATHLEEN. Me singing?

MAY. Oh tell us—tell us.

L. 'Vilikens and his—'

KATHLEEN (stopping his mouth). Oh! please don't. Where were you?

ISABEL. I'm sure I wish I had known where he was! We lost him among the rhododendrons, and I don't know where he got to; oh, you naughty—naughty—(climbs on his knee).

DORA. Now, Isabel, we really want to talk.

L. I don't.

DORA. Oh, but you must. You promised, you know.

L. Yes, if all was well; but all's ill. I'm tired, and cross; and I won't.

DORA. You're not a bit tired, and you're not crosser than two sticks; and we'll make you talk, if you were crosser than six. Come here, Egypt; and get on the other side of him.

(Egypt takes up a commanding position near the hearth-brush.)

DORA (reviewing her forces). Now, Lily, come and sit on the rug in front.

(Lily does as she is bid.)
L. (seeing he has no chance against the odds.) Well, well; but I'm really tired. Go and dance a little, first; and let me think.

Dora. No; you mustn't think. You will be wanting to make us think next; that will be tiresome.

L. Well, go and dance first, to get quit of thinking; and then I'll talk as long as you like.

Dora. Oh, but we can't dance to-night. There isn't time; and we want't to hear about virtue.

L. Let me see a little of it first. Dancing is the first of girl's virtues.

Egypt. Indeed! And the second?

L. Dressing.

Egypt. Now, you needn't say that! I mended that tear the first thing before breakfast this morning.

L. I cannot otherwise express the ethical principle, Egypt; whether you have mended your gown or not.

Dora. Now don't be tiresome. We really must hear about virtue, please; seriously.

L. Well. I'm telling you about it, as fast as I can.

Dora. What! the first of girls' virtues is dancing?

L. More accurately, it is wishing to dance, and not wishing to tease, nor hear about virtue.

Dora (to Egypt). Isn't he cross?

Egypt. How many balls must we go to in the season, to be perfectly virtuous?

L. As many as you can without losing your colour. But I did not say you should wish to go to balls. I said you should be always wanting to dance.

Egypt. So we do; but everybody says it is very wrong.

L. Why, Egypt, I thought—

'There was a lady once,
That would not be a queen,—that would she not,
For all the mud in Egypt.'

You were complaining the other day of having to go out a great deal oftener than you liked.
THE ETHICS OF THE DUST.

Egypt. Yes, so I was; but then, it isn't to dance. There's no room to dance: it's—(Pausing to consider what it is for).

L. It is only to be seen, I suppose. Well, there's no harm in that. Girls ought to like to be seen.

Dora (her eyes flashing). Now, you don't mean that; and you're too provoking; and we won't dance again, for a month.

L. It will answer every purpose of revenge, Dora, if you only banish me to the library; and dance by yourselves: but I don't think Jessie and Lily will agree to that. You like me to see you dancing, don't you Lily?

Lily. Yes, certainly.—when we do it rightly.

L. And besides, Miss Dora, if young ladies really do not want to be seen, they should take care not to let their eyes flash when they dislike what people say: and, more than that, it is all nonsense from beginning to end, about not wanting to be seen. I don't know any more tiresome flower in the borders than your especially 'modest' snowdrop; which one always has to stoop down and take all sorts of tiresome trouble with, and nearly break its poor little head off, before you can see it; and then, half of it is not worth seeing. Girls should be like daisies; nice and white, with an edge of red, if you look close; making the ground bright wherever they are; knowing simply and quietly that they do it, and are meant to do it, and that it would be very wrong if they didn't do it. Not want to be seen, indeed! How long were you in doing your back hair, this afternoon, Jessie?

(Jessie not immediately answering, Dora comes to her assistance.)

Dora. Not above three-quarters of an hour, I think, Jess?

Jessie (putting her finger up). Now, Dorothy, you needn't talk, you know!

L. I know she needn't, Jessie; I shall ask her about those dark plaits presently. (Dora looks round to see if there is any way open for retreat.) But never mind; it was worth the time, whatever it was; and nobody will ever mistake that golden wreath for a chignon: but if you don't want it to be seen, you had better wear a cap.
JESSIE. Ah, now, are you really going to do nothing but play? And we all have been thinking, and thinking, all day; and hoping you would tell us things; and now—!

L. And now I am telling you things, and true things, and things good for you; and you won’t believe me. You might as well have let me go to sleep at once, as I wanted to.

(Endeavours again to make himself comfortable.)

ISABEL. Oh, no, no, you sha’n’t go to sleep, you naughty—Kathleen, come here.

L. (knowing what he has to expect if Kathleen comes). Get away, Isabel, you’re too heavy. (Sitting up.) What have I been saying?

DORA. I do believe he has been asleep all the time! You never heard anything like the things you’ve been saying.

L. Perhaps not. If you have heard them, and anything like them, it is all I want.

EGYPT. Yes, but we don’t understand, and you know we don’t; and we want to.

L. What did I say first?

DORA. That the first virtue of girls was wanting to go to balls.

L. I said nothing of the kind.

JESSIE. ‘Always wanting to dance,’ you said.

L. Yes, and that’s true. Their first virtue is to be intensely happy;—so happy that they don’t know what to do with themselves for happiness,—and dance, instead of walking. Don’t you recollect ‘Louisa,’

‘No fountain from a rocky cave
E’er tripped with foot so free;
She seemed as happy as a wave
That dances on the sea.’

A girl is always like that, when everything’s right with her.

VIOLET. But, surely, one must be sad sometimes?

L. Yes, Violet; and dull sometimes, and stupid sometimes, and cross sometimes. What must be, must; but it is always
either our own fault, or somebody else's. The last and worst thing that can be said of a nation is, that it has made its young girls sad, and weary.

May. But I am sure I have heard a great many good people speak against dancing?

L. Yes, May; but it does not follow they were wise as well as good. I suppose they think Jeremiah liked better to have to write Lamentations for his people, than to have to write that promise for them, which everybody seems to hurry past, that they may get on quickly to the verse about Rachel weeping for her children; though the verse they pass is the counter-blessing to that one: 'Then shall the virgin rejoice in the dance; and both young men and old together; and I will turn their mourning into joy.'

(The children get very serious, but look at each other, as if pleased.)

Mary. They understand now: but, do you know what you said next?

L. Yes; I was not more than half asleep. I said their second virtue was dressing.

Mary. Well! what did you mean by that?

L. What do you mean by dressing?

Mary. Wearing fine clothes.

L. Ah! there's the mistake. I mean wearing plain ones.

Mary. Yes, I daresay! but that's not what girls understand by dressing, you know.

L. I can't help that. If they understand by dressing, buying dresses, perhaps they also understand by drawing, buying pictures. But when I hear them say they can draw, I understand that they can make a drawing; and when I hear them say they can dress, I understand that they can make a dress and—which is quite as difficult—wear one.

Dora. I'm not sure about the making; for the wearing, we can all wear them—out, before anybody expects it.

Egypt (aside, to L., piteously). Indeed I have mended that torn flounce quite neatly; look if I haven't!

L. (aside, to Egypt). All right; don't be afraid. (Aloud to
Dora.) Yes, doubtless; but you know that is only a slow way of undressing.

Dora. Then, we are all to learn dress-making, are we?

L. Yes; and always to dress yourselves beautifully—not finely, unless on occasion; but then very finely and beautifully too. Also, you are to dress as many other people as you can; and to teach them how to dress, if they don't know; and to consider every ill-dressed woman or child whom you see anywhere, as a personal disgrace; and to get at them, somehow, until everybody is as beautifully dressed as birds.

(Silence; the children drawing their breaths hard, as if they had come from under a shower bath.)

L (seeing objections begin to express themselves in the eyes). Now you needn't say you can't; for you can: and it's what you were meant to do, always; and to dress your houses, and your gardens, too; and to do very little else, I believe, except singing; and dancing, as we said, of course; and—one thing more.

Dora. Our third and last virtue, I suppose?

L. Yes; on Violet's system of triplicities.

Dora. Well, we are prepared for anything now. What is it?

L. Cooking.

Dora. Cardinal, indeed! If only Beatrice were here with her seven handmaids, that she might see what a fine eighth we had found for her!

Mary. And the interpretation? What does 'cooking' mean?

L. It means the knowledge of Medea, and of Circe, and of Calypso, and of Helen, and of Rebekah, and of the Queen of Sheba. It means the knowledge of all herbs, and fruits, and balms, and spices; and of all that is healing and sweet in fields and groves, and savoury in meats; it means carefulness, and inventiveness, and watchfulness, and willingness, and readiness of appliance; it means the economy of your great-grandmothers, and the science of modern chemists; it means much tasting, and no wasting; it means English thoroughness, and French art, and Arabian hospitality; and it means, in fine, that you are to be perfectly and always,
THE ETHICS OF THE DUST.

ladies'—'loaf-givers;' and, as you are to see, imperatively, that everybody has something pretty to put on,—so you are to see, yet more imperatively, that everybody has something nice to eat.

(Another pause, and long drawn breath.)

Dora (slowly recovering herself) to Egypt. We had better have let him go to sleep, I think, after all!

L. You had better let the younger ones go to sleep now: for I haven't half done.

Isabel (panic-struck). Oh! please, please! just one quarter of an hour.

L. No, Isabel; I cannot say what I've got to say, in a quarter of an hour; and it is too hard for you, besides:—you would be lying awake, and trying to make it out, half the night. That will never do.

Isabel. Oh, please!

L. It would please me exceedingly, mousie: but there are times when we must both be displeased; more's the pity. Lily may stay for half an hour, if she likes.

Lily. I can't; because Isey never goes to sleep, if she is waiting for me to come.

Isabel. Oh, yes, Lily; I'll go to sleep to-night, I will, indeed.

Lily. Yes, it's very likely, Isey, with those fine round eyes!

(To L.) You'll tell me something of what you've been saying, to-morrow, won't you?

L. No, I won't, Lily. You must choose. It's only in Miss Edgeworth's novels that one can do right, and have one's cake and sugar afterwards, as well (not that I consider the dilemma, to-night, so grave).

(Lily, sighing, takes Isabel's hand.)

Yes, Lily dear, it will be better, in the outcome of it, so, than if you were to hear all the talks that ever were talked, and all the stories that ever were told. Good night.

(The door leading to the condemned cells of the Dormitory closes on Lily, Isabel, Florrie, and other diminutive and submissive victims.)
JESSIE (after a pause). Why, I thought you were so fond of Miss Edgeworth!

L. So I am; and so you ought all to be. I can read her over and over again, without ever tiring; there's no one whose every page is so full, and so delightful; no one who brings you into the company of pleasanter or wiser people; no one who tells you more truly how to do right. And it is very nice, in the midst of a wild world, to have the very ideal of poetical justice done always to one's hand:—to have everybody found out, who tells lies; and everybody decorated with a red riband, who doesn't; and to see the good Laura, who gave away her half sovereign, receiving a grand ovation from an entire dinner party disturbed for the purpose; and poor, dear, little Rosamond, who chooses purple jars instead of new shoes, left at last without either her shoes or her bottle. But it isn't life: and, in the way children might easily understand it, it isn't morals.

JESSIE. How do you mean we might understand it?

L. You might think Miss Edgeworth meant that the right was to be done mainly because one was always rewarded for doing it. It is an injustice to her to say that: her heroines always do right simply for its own sake, as they should; and her examples of conduct and motive are wholly admirable. But her representation of events is false and misleading. Her good characters never are brought into the deadly trial of goodness,—the doing right, and suffering for it, quite finally. And that is life, as God arranges it. 'Taking up one's cross' does not at all mean having ovations at dinner parties, and being put over everybody else's head.

DORA. But what does it mean then? That is just what we couldn't understand, when you were telling us about not sacrificing ourselves, yesterday.

L. My dear, it means simply that you are to go the road which you see to be the straight one; carrying whatever you find is given you to carry, as well and stoutly as you can; without making faces, or calling people to come and look at you. Above all, you are neither to load, nor unload, yourself; nor cut your cross to your own liking. Some people
think it would be better for them to have it large; and many, that they could carry it much faster if it were small; and even those who like it largest are usually very particular about its being ornamental, and made of the best ebony. But all that you have really to do is to keep your back as straight as you can; and not think about what is upon it—above all, not to boast of what is upon it. The real and essential meaning of 'virtue' is in that straightness of back. Yes; you may laugh, children, but it is. You know I was to tell about the words that began with V. Sibyl, what does 'virtue' mean, literally?

Sibyl. Does it mean courage?

L. Yes; but a particular kind of courage. It means courage of the nerve; vital courage. That first syllable of it, if you look in Max Müller, you will find really means 'nerve,' and from it come 'vis,' and 'vin,' and 'virgin' (through video), and the connected word 'virga'—'a rod;'—the green rod, or springing bough of a tree, being the type of perfect human strength, both in the use of it in the Mosaic story, when it becomes a serpent, or strikes the rock; or when Aaron's bears its almonds; and in the metaphorical expressions, the 'Rod out of the stem of Jesse,' and the 'Man whose name is the Branch,' and so on. And the essential idea of real virtue is that of a vital human strength, which instinctively, constantly, and without motive, does what is right. You must train men to this by habit, as you would the branch of a tree; and give them instincts and manners (or morals) of purity, justice, kindness, and courage. Once rightly trained, they act as they should, irrespectively of all motive, of fear, or of reward. It is the blackest sign of putrescence in a national religion, when men speak as if it were the only safeguard of conduct; and assume that, but for the fear of being burned, or for the hope of being rewarded, everybody would pass their lives in lying, stealing, and murdering. I think quite one of the notablest historical events of this century (perhaps the very notablest), was that council of clergymen, horror-struck at the idea of any diminution in our dread of hell, at which the last of English
clergymen whom one would have expected to see in such a function, rose as the devil's advocate; to tell us how impossible it was we could get on without him.

VIOLET (after a pause). But, surely, if people weren't afraid — (hesitates again).

L. They should be afraid of doing wrong, and of that only, my dear. Otherwise, if they only don't do wrong for fear of being punished, they have done wrong in their hearts, already.

VIOLET. Well, but surely, at least one ought to be afraid of displeasing God; and one's desire to please Him should be one's first motive?

L. He never would be pleased with us, if it were, my dear. When a father sends his son out into the world—suppose as an apprentice—fancy the boy's coming home at night, and saying, 'Father, I could have robbed the till to-day; but I didn't, because I thought you wouldn't like it.' Do you think the father would be particularly pleased?

(VIOLET is silent.)

He would answer, would he not, if he were wise and good, 'My boy, though you had no father, you must not rob tills'? And nothing is ever done so as really to please our Great Father, unless we would also have done it, though we had had no Father to know of it.

VIOLET (after long pause). But, then, what continual threatenings, and promises of reward there are!

L. And how vain both! with the Jews, and with all of us. But the fact is, that the threat and promise are simply statements of the Divine law, and of its consequences. The fact is truly told you,—make what use you may of it: and as collateral warning, or encouragement, or comfort, the knowledge of future consequences may often be helpful to us; but helpful chiefly to the better state when we can act without reference to them. And there's no measuring the poisoned influence of that notion of future reward on the mind of Christian Europe, in the early ages. Half the monastic system rose out of that, acting on the occult pride and ambition
of good people (as the other half of it came of their follies and misfortunes). There is always a considerable quantity of pride, to begin with, in what is called 'giving one's self to God.' As if one had ever belonged to anybody else!

DORA. But, surely, great good has come out of the monastic system—our books,—our sciences—all saved by the monks?

L. Saved from what, my dear? From the abyss of misery and ruin which that false Christianity allowed the whole active world to live in. When it had become the principal amusement, and the most admired art, of Christian men, to cut one another's throats, and burn one another's towns; of course the few feeble or reasonable persons left, who desired quiet, safety, and kind fellowship, got into cloisters; and the gentlest, thoughtfullest, noblest men and women shut themselves up, precisely where they could be of least use. They are very fine things, for us painters, now,—the towers and white arches upon the tops of the rocks; always in places where it takes a day's climbing to get at them; but the intense tragi-comedy of the thing, when one thinks of it, is unspeakable. All the good people of the world getting themselves hung up out of the way of mischief, like Bailie Nicol Jarvie;—poor little lambs, as it were, dangling there for the sign of the Golden Fleece; or like Socrates in his basket in the 'Clouds'! (I must read you that bit of Aristophanes again, by the way.) And believe me, children, I am no warped witness, as far as regards monasteries; or if I am, it is in their favour. I have always had a strong leaning that way; and have pensively shivered with Augustines at St. Bernard; and happily made hay with Franciscans at Fesolé; and sat silent with Carthusians in their little gardens, south of Florence; and mourned through many a day-dream, at Melrose and Bolton. But the wonder is always to me, not how much, but how little, the monks have, on the whole, done, with all that leisure, and all that good-will! What nonsense monks characteristically wrote;—what little progress they made in the sciences to which they devoted themselves as a duty,—medicine especially;—and, last and worst, what depths of degradation they can sometimes see one another,
and the population round them, sink into; without either doubting their system, or reforming it!

(Seeing questions rising to lips.) Hold your little tongues, children; it's very late, and you'll make me forget what I've to say. Fancy yourselves in pews, for five minutes. There's one point of possible good in the conventual system, which is always attractive to young girls; and the idea is a very dangerous one;—the notion of a merit, or exalting virtue, consisting in a habit of meditation on the 'things above,' or things of the next world. Now it is quite true, that a person of beautiful mind, dwelling on whatever appears to them most desirable and lovely in a possible future will not only pass their time pleasantly, but will even acquire, at last, a vague and wildly gentle charm of manner and feature, which will give them an air of peculiar sanctity in the eyes of others. Whatever real or apparent good there may be in this result, I want you to observe, children, that we have no real authority for the reveries to which it is owing. We are told nothing distinctly of the heavenly world; except that it will be free from sorrow, and pure from sin. What is said of pearl gates, golden floors, and the like, is accepted as merely figurative by religious enthusiasts themselves; and whatever they pass their time in conceiving, whether of the happiness of risen souls, of their intercourse, or of the appearance and employment of the heavenly powers, is entirely the product of their own imagination; and as completely and distinctly a work of fiction, or romantic invention, as any novel of Sir Walter Scott's. That the romance is founded on religious theory or doctrine;—that no disagreeable or wicked persons are admitted into the story; —and that the inventor fervently hopes that some portion of it may hereafter come true, does not in the least alter the real nature of the effort or enjoyment.

Now, whatever indulgence may be granted to amiable people for pleasing themselves in this innocent way, it is beyond question, that to seclude themselves from the rough duties of life, merely to write religious romances, or, as in most cases, merely to dream them, without taking so much
trouble as is implied in writing, ought not to be received as an act of heroic virtue. But, observe, even in admitting thus much, I have assumed that the fancies are just and beautiful, though fictitious. Now, what right have any of us to assume that our own fancies will assuredly be either the one or the other? That they delight us, and appear lovely to us, is no real proof of its not being wasted time to form them: and we may surely be led somewhat to distrust our judgment of them by observing what ignoble imaginations have sometimes sufficiently, or even enthusiastically, occupied the hearts of others. The principal source of the spirit of religious contemplation is the East; now I have here in my hand a Byzantine image of Christ, which, if you will look at it seriously, may, I think, at once and for ever render you cautious in the indulgence of a merely contemplative habit of mind. Observe, it is the fashion to look at such a thing only as a piece of barbarous art; that is the smallest part of its interest. What I want you to see, is the baseness and falseness of a religious state of enthusiasm, in which such a work could be dwelt upon with pious pleasure. That a figure, with two small round black beads for eyes; a gilded face, deep cut into horrible wrinkles; an open gash for a mouth, and a distorted skeleton for a body, wrapped about, to make it fine, with striped enamel of blue and gold;—that such a figure, I say, should ever have been thought helpful towards the conception of a Redeeming Deity, may make you, I think, very doubtful, even of the Divine approval,—much more of the Divine inspiration,—of religious reverie in general. You feel, doubtless, that your own idea of Christ would be something very different from this; but in what does the difference consist? Not in any more divine authority in your imagination; but in the intellectual work of six intervening centuries; which, simply, by artistic discipline, has refined this crude conception for you, and filled you, partly with an innate sensation, partly with an acquired knowledge, of higher forms,—which render this Byzantine crucifix as horrible to you, as it was pleasing to its maker. More is required to excite your fancy; but your fancy is of
no more authority than his was: and a point of national art-skill is quite conceivable, in which the best we can do now will be as offensive to the religious dreamers of the more highly cultivated time, as this Byzantine crucifix is to you.

Mary. But surely, Angelico will always retain his power over everybody?

L. Yes, I should think, always; as the gentle words of a child will: but you would be much surprised, Mary, if you thoroughly took the pains to analyse, and had the perfect means of analysing, that power of Angelico,—to discover its real sources. Of course it is natural, at first, to attribute it to the pure religious fervour by which he was inspired; but do you suppose Angelico was really the only monk, in all the Christian world of the middle ages, who laboured, in art, with a sincere religious enthusiasm?

Mary. No, certainly not.

L. Anything more frightful, more destructive of all religious faith whatever, than such a supposition, could not be. And yet, what other monk ever produced such work? I have myself examined carefully upwards of two thousand illuminated missals, with especial view to the discovery of any evidence of a similar result upon the art, from the monkish devotion; and utterly in vain.

Mary. But then, was not Fra Angelico a man of entirely separate and exalted genius?

L. Unquestionably; and granting him to be that, the peculiar phenomenon in his art is, to me, not its loveliness, but its weakness. The effect of 'inspiration,' had it been real, on a man of consummate genius, should have been, one would have thought, to make everything that he did faultless and strong, no less than lovely. But of all men, deserving to be called 'great,' Fra Angelico permits to himself the least pardonable faults, and the most palpable follies. There is evidently within him a sense of grace, and power of invention, as great as Ghiberti's:—we are in the habit of attributing those high qualities to his religious enthusiasm; but, if they were produced by that enthusiasm in him, they ought to be produced by the same feelings in others; and we see they
are not. Whereas, comparing him with contemporary great artists, of equal grace and invention, one peculiar character remains notable in him—which, logically, we ought therefore to attribute to the religious fervour;—and that distinctive character is, the contented indulgence of his own weaknesses, and perseverance in his own ignorances.

MARY. But that's dreadful! And what is the source of the peculiar charm which we all feel in his work?

L. There are many sources of it, Mary; united and seeming like one. You would never feel that charm but in the work of an entirely good man; be sure of that; but the goodness is only the recipient and modifying element, not the creative one. Consider carefully what delights you in any original picture of Angelico's. You will find, for one minor thing, an exquisite variety and brightness of ornamental work. That is not Angelico's inspiration. It is the final result of the labour and thought of millions of artists, of all nations; from the earliest Egyptian potters downwards—Greeks, Byzantines, Hindoos, Arabs, Gauls, and Northmen—all joining in the toil; and consummating it in Florence, in that century, with such embroidery of robe and inlaying of armour as had never been seen till then; nor, probably, ever will be seen more. Angelico merely takes his share of this inheritance, and applies it in the tenderest way to subjects which are peculiarly acceptant of it. But the inspiration, if it exist anywhere, flashes on the knight's shield quite as radiantly as on the monk's picture. Examining farther into the sources of your emotion in the Angelico work, you will find much of the impression of sanctity dependent on a singular repose and grace of gesture, consummating itself in the floating, flying, and above all, in the dancing groups. That is not Angelico's inspiration. It is only a peculiarly tender use of systems of grouping which had been long before developed by Giotto, Memmi, and Orcagna; and the real root of it all is simply—What do you think, children? The beautiful dancing of the Florentine maidens!

DORA (indignant again). Now, I wonder what next! Why not say it all depended on Herodias' daughter, at once?
L. Yes; it is certainly a great argument against singing, that there were once sirens.

Dora. Well, it may be all very fine and philosophical, but shouldn't I just like to read you the end of the second volume of 'Modern Painters'?

L. My dear, do you think any teacher could be worth your listening to, or anybody else's listening to, who had learned nothing, and altered his mind in nothing, from seven and twenty to seven and forty? But that second volume is very good for you as far as it goes. It is a great advance, and a thoroughly straight and swift one, to be led, as it is the main business of that second volume to lead you, from Dutch cattle pieces, and ruffian-pieces, to Fra Angelico. And it is right for you also, as you grow older, to be strengthened in the general sense and judgment which may enable you to distinguish the weaknesses from the virtues of what you love: else you might come to love both alike; or even the weaknesses without the virtues. You might end by liking Overbeck and Cornelius as well as Angelico. However, I have perhaps been leaning a little too much to the merely practical side of things, in to-night's talk; and you are always to remember, children, that I do not deny, though I cannot affirm, the spiritual advantages resulting, in certain cases, from enthusiastic religious reverie, and from the other practices of saints and anchorites. The evidence respecting them has never yet been honestly collected, much less dispassionately examined: but assuredly, there is in that direction a probability, and more than a probability, of dangerous error, while there is none whatever in the practice of an active, cheerful, and benevolent life. The hope of attaining a higher religious position, which induces us to encounter, for its exalted alternative, the risk of unhealthy error, is often, as I said, founded more on pride than piety; and those who, in modest usefulness, have accepted what seemed to them here the lowliest place in the kingdom of their Father, are not, I believe, the least likely to receive hereafter the command, then unmistakable, 'Friend, go up higher.'
LECTURE VIII.

CRYSTAL CAPRICE.

Formal Lecture in Schoolroom, after some practical examination of minerals.

L. We have seen enough, children, though very little of what might be seen if we had more time, of mineral structures produced by visible opposition, or contest among elements; structures of which the variety, however great, need not surprise us: for we quarrel, ourselves, for many and slight causes;—much more, one should think, may crystals, who can only feel the antagonism, not argue about it. But there is a yet more singular mimicry of our human ways in the varieties of form which appear owing to no antagonistic force; but merely to the variable humour and caprice of the crystals themselves: and I have asked you all to come into the schoolroom to-day, because, of course, this is a part of the crystal mind which must be peculiarly interesting to a feminine audience. (Great symptoms of disapproval on the part of said audience.) Now, you need not pretend that it will not interest you; why should it not? It is true that we men are never capricious; but that only makes us the more dull and disagreeable. You, who are crystalline in brightness, as well as in caprice, charm infinitely, by infinitude of change. (Audible murmurs of 'Worse and worse!' 'As if we could be got over that way!' &c. The Lecturer, however, observing the expression of the features to be more complacent, proceeds.) And the most curious mimicry, if not of your changes of fashion, at least of your various modes (in healthy periods) of national costume, takes place among the crystals of different countries. With a little experience, it is quite possible to say at a glance, in what districts certain crystals have been
found; and although, if we had knowledge extended and accurate enough, we might of course ascertain the laws and circumstances which have necessarily produced the form peculiar to each locality, this would be just as true of the fancies of the human mind. If we could know the exact circumstances which affect it, we could foretell what now seems to us only caprice of thought, as well as what now seems to us only caprice of crystal: nay, so far as our knowledge reaches, it is on the whole easier to find some reason why the peasant girls of Berne should wear their caps in the shape of butterflies; and the peasant girls of Munich their’s in the shape of shells, than to say why the rock-crystals of Dauphiné should all have their summits of the shape of lip-pieces of flageolets, while those of St. Gothard are symmetrical; or why the fluor of Chamouni is rose-coloured, and in octahedrons, while the fluor of Weardale is green, and in cubes. Still farther removed is the hope, at present, of accounting for minor differences in modes of grouping and construction. Take, for instance, the caprices of this single mineral, quartz; —variations upon a single theme. It has many forms; but see what it will make out of this one, the six-sided prism. For shortness’ sake, I shall call the body of the prism its ‘column,’ and the pyramid at the extremities its ‘cap.’ Now, here, first you have a straight column, as long and thin as a stalk of asparagus, with two little caps at the ends; and here you have a short thick column, as solid as a haystack, with two fat caps at the ends; and here you have two caps fastened together, and no column at all between them! Then here is a crystal with its column fat in the middle, and tapering to a little cap; and here is one stalked like a mushroom, with a huge cap put on the top of a slender column! Then here is a column built wholly out of little caps, with a large smooth cap at the top. And here is a column built of columns and caps; the caps all truncated about half way to their points. And in both these last, the little crystals are set anyhow, and build the large one in a disorderly way; but here is a crystal made of columns and truncated caps, set in regular terraces all the way up.
But are not these, groups of crystals, rather than one crystal?

L. What do you mean by a group, and what by one crystal?

Dora (audibly aside, to Mary, who is brought to pause). You know you are never expected to answer, Mary.

L. I'm sure this is easy enough. What do you mean by a group of people?

Mary. Three or four together, or a good many together, like the caps in these crystals.

L. But when a great many persons get together they don't take the shape of one person?

(Mary still at pause.)

Isabel. No, because they can't; but, you know the crystals can; so why shouldn't they?

L. Well, they don't; that is to say, they don't always, nor even often. Look here, Isabel.

Isabel. What a nasty ugly thing!

L. I'm glad you think it so ugly. Yet it is made of beautiful crystals; they are a little grey and cold in colour, but most of them are clear.

Isabel. But they're in such horrid, horrid disorder!

L. Yes; all disorder is horrid, when it is among things that are naturally orderly. Some little girl's rooms are naturally disorderly, I suppose; or I don't know how they could live in them, if they cry out so when they only see quartz crystals in confusion.

Isabel. Oh! but how come they to be like that?

L. You may well ask. And yet you will always hear people talking as if they thought order more wonderful than disorder! It is wonderful—as we have seen; but to me, as to you, child, the supremely wonderful thing is that nature should ever be ruinous or wasteful, or deathful! I look at this wild piece of crystallisation with endless astonishment.

Mary. Where does it come from?

L. The Tête Noire of Chamonix. What makes it more strange is that it should be in a vein of fine quartz rock. If it
CRYSTAL CAPRICE.

were in a mouldering rock, it would be natural enough; but in the midst of so fine substance, here are the crystals tossed in a heap; some large, myriads small (almost as small as dust), tumbling over each other like a terrified crowd, and glued together by the sides, and edges, and backs, and heads; some warped, and some pushed out and in, and all spoiled, and each spoiling the rest.

Mary. And how flat they all are!

L. Yes; that's the fashion at the Tête Noire.

Mary. But surely this is ruin, not caprice?

L. I believe it is in great part misfortune; and we will examine these crystal troubles in next lecture. But if you want to see the gracefulllest and happiest caprices of which dust is capable, you must go to the Hartz; not that I ever mean to go there myself, for I want to retain the romantic feeling about the name; and I have done myself some harm already by seeing the monotonous and heavy form of the Brocken from the suburbs of Brunswick. But whether the mountains be picturesque or not, the tricks which the goblins (as I am told) teach the crystals in them, are incomparably pretty. They work chiefly on the mind of a docile, bluish coloured, carbonate of lime; which comes out of a grey limestone. The goblins take the greatest possible care of its education, and see that nothing happens to it to hurt its temper; and when it may be supposed to have arrived at the crisis which is, to a well brought up mineral, what presentation at court is to a young lady—after which it is expected to set fashions—there's no end to its pretty ways of behaving. First it will make itself into pointed darts as fine as hoar-frost; here, it is changed into a white fur as fine as silk; here into little crowns and circlets, as bright as silver; as if for the gnome princesses to wear; here it is in beautiful little plates, for them to eat off; presently it is in towers which they might be imprisoned in; presently in caves and cells, where they may make nun-gnomes of themselves, and no gnome ever hear of them more; here is some of it in sheaves, like corn; here, some in drifts, like snow; here, some in rays, like stars: and, though these are, all of them, necessarily, shapes that the mineral
takes in other places, they are all taken here with such a grace that you recognise the high caste and breeding of the crystals wherever you meet them; and know at once they are Hartz-born.

Of course, such fine things as these are only done by crystals which are perfectly good, and good-humoured; and of course, also, there are ill-humoured crystals who torment each other, and annoy quieter crystals, yet without coming to anything like serious war. Here (for once) is some ill-disposed quartz, tormenting a peaceable octahedron of fluor, in mere caprice. I looked at it the other night so long, and so wonderfully, just before putting my candle out, that I fell into another strange dream. But you don't care about dreams.

Dora. No; we didn't, yesterday; but you know we are made up of caprice; so we do, to-day: and you must tell it us directly.

L. Well, you see, Neith and her work were still much in my mind; and then, I had been looking over these Hartz things for you, and thinking of the sort of grotesque sympathy there seemed to be in them with the beautiful fringe and pinnacle work of Northern architecture. So, when I fell asleep, I thought I saw Neith and St. Barbara talking together.

Dora. But what had St. Barbara to do with it? *

L. My dear, I am quite sure St. Barbara is the patroness of good architects: not St. Thomas, whatever the old builders thought. It might be very fine, according to the monks' notions, in St. Thomas, to give all his employer's money away to the poor: but breaches of contract are bad foundations; and I believe, it was not he, but St. Barbara, who overlooked the work in all the buildings you and I care about. However that may be, it was certainly she whom I saw in my dream with Neith. Neith was sitting weaving, and I thought she looked sad, and threw her shuttle slowly; and St. Barbara was standing at her side, in a stiff little gown, all ins and outs, and angles; but so bright with embroidery that it dazzled me whenever she moved; the train of it was just like a heap of broken

* Note v.
jewels, it was so stiff, and full of corners, and so many-coloured, and bright. Her hair fell over her shoulders in long, delicate waves, from under a little three pinnacled crown, like a tower. She was asking Neith about the laws of architecture in Egypt and Greece; and when Neith told her the measures of the pyramids, St. Barbara said she thought they would have been better three-cornered: and when Neith told her the measures of the Parthenon, St. Barbara said she thought it ought to have had two transepts. But she was pleased when Neith told her of the temple of the dew, and of the Caryan maidens bearing its frieze: and then she thought that perhaps Neith would like to hear what sort of temples she was building herself, in the French valleys, and on the crags of the Rhine. So she began gossiping, just as one of you might to an old lady: and certainly she talked in the sweetest way in the world to Neith; and explained to her all about crockets and pinnacles: and Neith sat, looking very grave; and always graver as St. Barbara went on; till at last, I'm sorry to say, St. Barbara lost her temper a little.

May (very grave herself). 'St. Barbara?'

L. Yes, May. Why shouldn't she? It was very tiresome of Neith to sit looking like that.

May. But, then, St. Barbara was a saint!

L. What's that, May?

May. A saint! A saint is—I am sure you know!

L. If I did, it would not make me sure that you knew too, May: but I don't.

Violet (expressing the incredulity of the audience). Oh,—sir!

L. That is to say, I know that people are called saints who are supposed to be better than others: but I don't know how much better they must be, in order to be saints; nor how nearly anybody may be a saint, and yet not be quite one; nor whether everybody who is called a saint was one; nor whether everybody who isn't called a saint, isn't one.

(General silence; the audience feeling themselves on the verge of the Infinities—and a little shocked—and much puzzled by so many questions at once.)
L. Besides, did you never hear that verse about being 'called to be saints'?

**May (repeats Rom. i. 7.)**

L. Quite right, May. Well, then, who are called to be that?

**May.** Everybody, I suppose, whom God loves.

L. What! little girls as well as other people?

**May.** All grown-up people, I mean.

L. Why not little girls? Are they wickeder when they are little?

**May.** Oh, I hope not.

L. Why not little girls, then?

(Pause.)

**Lily.** Because, you know, we can't be worth anything if we're ever so good;—I mean, if we try to be ever so good; and we can't do difficult things—like saints.

L. I am afraid, my dear, that old people are not more able or willing for their difficulties than you children are for yours. All I can say is, that if ever I see any of you, when you are seven or eight and twenty, knitting your brows over any work you want to do or to understand, as I saw you, Lily, knitting your brows over your slate this morning, I should think you very noble women. But—to come back to my dream—St. Barbara did lose her temper a little; and I was not surprised. For you can't think how provoking Neith looked, sitting there just like a statue of sandstone; only going on weaving, like a machine; and never quickening the cast of her shuttle; while St. Barbara was telling her so eagerly all about the most beautiful things, and chattering away, as fast as bells ring on Christmas Eve, till she saw that Neith didn't care; and then St. Barbara got as red as a rose, and stopped, just in time;—or I think she would really have said something naughty.

**Isabel.** Oh, please, but didn't Neith say anything then?

L. Yes. She said, quite quietly, 'It may be very pretty, my love; but it is all nonsense.'

**Isabel.** Oh dear, oh dear; and then?

L. Well; then I was a little angry myself, and hoped St
Barbara would be quite angry; but she wasn't. She bit her lips first; and then gave a great sigh—such a wild, sweet sigh—and then she knelt down and hid her face on Neith's knees. Then Neith smiled a little, and was moved.

Isabel. Oh, I am so glad!

And she touched St. Barbara's forehead with a flower of white lotus; and St. Barbara sobbed once or twice, and then said: 'If you only could see how beautiful it is, and how much it makes people feel what is good and lovely; and if you could only hear the children singing in the Lady chapels!' And Neith smiled,—but still sadly,—and said, 'How do you know what I have seen, or heard, my love? Do you think all those vaults and towers of yours have been built without me? There was not a pillar in your Giotto's Santa Maria del Fiore which I did not set true by my spearshaft as it rose. But this pinnacle and flame work which has set your little heart on fire, is all vanity; and you will see what it will come to, and that soon; and none will grieve for it more than I. And then every one will disbelieve your pretty symbols and types. Men must be spoken simply to, my dear; if you would guide them kindly, and long.' But St. Barbara answered, that, 'Indeed she thought every one liked her work,' and that 'the people of different towns were as eager about their cathedral towers as about their privileges or their markets;' and then she asked Neith to come and build something with her, wall against tower; and 'see whether the people will be as much pleased with your building as with mine.' But Neith answered, 'I will not contend with you, my dear. I strive not with those who love me; and for those who hate me, it is not well to strive with me, as weaver Arachne knows. And remember, child, that nothing is ever done beautifully, which is done in rivalship; nor nobly, which is done in pride.'

Then St. Barbara hung her head quite down, and said she was very sorry she had been so foolish; and kissed Neith; and stood thinking a minute: and then her eyes got bright again, and she said, she would go directly and build a chapel with five windows in it; four for the four cardinal virtues,
and one for humility, in the middle, bigger than the rest
And Neith very nearly laughed quite out, I thought; cer-
tainly her beautiful lips lost all their sternness for an instant;
than she said, 'Well, love, build it, but do not put so many
colours into your windows as you usually do; else no one
will be able to see to read, inside: and when it is built, let
a poor village priest consecrate it, and not an archbishop.'
St. Barbara started a little, I thought, and turned as if to say
something; but changed her mind, and gathered up her
train, and went out. And Neith bent herself again to her
loom, in which she was weaving a web of strange dark col-
ours, I thought; but perhaps it was only after the glittering
of St. Barbara's embroidered train: and I tried to make out
the figures in Neith's web, and confused myself among them,
as one always does in dreams; and then the dream changed
altogether, and I found myself, all at once, among a crowd of
little Gothic and Egyptian spirits, who were quarrelling: at
least the Gothic ones were trying to quarrel; for the Egyp-
tian ones only sat with their hands on their knees, and their
aprons sticking out very stiffly; and stared. And after a
while I began to understand what the matter was. It seemed
that some of the troublesome building imps, who meddle and
make continually, even in the best Gothic work, had been
listening to St. Barbara's talk with Neith; and had made up
their minds that Neith had no workpeople who could build
against them. They were but dull imps, as you may fancy
by their thinking that; and never had done much, except
disturbing the great Gothic building angels at their work,
and playing tricks to each other; indeed, of late they had
been living years and years, like bats, up under the cornices
of Strasbourg and Cologne cathedrals, with nothing to do
but to make mouths at the people below. However, they
thought they knew everything about tower building; and
those who had heard what Neith said, told the rest; and
they all flew down directly, chattering in German, like jack-
daws, to show Neith's people what they could do. And they
had found some of Neith's old workpeople somewhere near
Sais, sitting in the sun, with their hands on their knees; and
abused them heartily: and Neith's people did not mind at
first, but, after a while, they seemed to get tired of the noise;
and one or two rose up slowly, and laid hold of their measur-
ing rods, and said, 'If St. Barbara's people liked to build
with them, tower against pyramid, they would show them
how to lay stones.' Then the little Gothic spirits threw a
great many double somersaults for joy; and put the tips of
their tongues out slily to each other, on one side; and I heard
the Egyptians say, 'they must be some new kind of frog—
they didn't think there was much building in them.' How-
ever, the stiff old workers took their rods, as I said, and
measured out a square space of sand; but as soon as the
German spirits saw that, they declared they wanted exactly
that bit of ground to build on, themselves. Then the Egy-
prian builders offered to go farther off, and the Germans ones
said, 'Ja wohl.' But as soon as the Egyptians had measured
out another square, the little Germans said they must have
some of that too. Then Neith's people laughed; and said,
'they might take as much as they liked, but they would not
move the plan of their pyramid again.' Then the little Ger-
mans took three pieces, and began to build three spires
directly; one large, and two little. And when the Egyptians
saw they had fairly begun, they laid their foundation all
round, of large square stones: and began to build, so steadily
that they had like to have swallowed up the three little Ger-
man spires. So when the Gothic spirits saw that, they built
their spires leaning, like the tower of Pisa, that they might
stick out at the side of the pyramid. And Neith's people
stared at them; and thought it very clever, but very wrong;
and on they went, in their own way, and said nothing. Then
the little Gothic spirits were terribly provoked because they
could not spoil the shape of the pyramid; and they sat down
all along the ledges of it to make faces; but that did no good.
Then they ran to the corners, and put their elbows on their
knees, and stuck themselves out as far as they could, and
made more faces; but that did no good, neither. Then they
looked up to the sky, and opened their mouths wide, and
gobbled, and said it was too hot for work, and wondered
when it would rain; but that did no good, neither. And all the while the Egyptian spirits were laying step above step, patiently. But when the Gothic ones looked, and saw how high they had got, they said, 'Ach, Himmel!' and flew down in a great black cluster to the bottom; and swept out a level spot in the sand with their wings, in no time, and began building a tower straight up, as fast as they could. And the Egyptians stood still again to stare at them; for the Gothic spirits had got quite into a passion, and were really working very wonderfully. They cut the sandstone into strips as fine as reeds; and put one reed on the top of another, so that you could not see where they fitted: and they twisted them in and out like basket work, and knotted them into likenesses of ugly faces, and of strange beasts biting each other; and up they went, and up still, and they made spiral staircases at the corners, for the loaded workers to come up by (for I saw they were but weak imps, and could not fly with stones on their backs), and then they made traceried galleries for them to run round by; and so up again; with finer and finer work, till the Egyptians wondered whether they meant the thing for a tower or a pillar: and I heard them saying to one another, 'It was nearly as pretty as lotus stalks; and if it were not for the ugly faces, there would be a fine temple, if they were going to build it all with pillars as big as that!' But in a minute afterwards,—just as the Gothic spirits had carried their work as high as the upper course, but three or four, of the pyramid—the Egyptians called out to them to 'mind what they were about, for the sand was running away from under one of their tower corners.' But it was too late to mind what they were about; for, in another instant, the whole tower sloped aside; and the Gothic imps rose out of it like a flight of puffins, in a single cloud; but screaming worse than any puffins you ever heard: and down came the tower, all in a piece, like a falling poplar, with its head right on the flank of the pyramid; against which it snapped short off. And of course that waked me!

**MARY.** What a shame of you to have such a dream, after all you have told us about Gothic architecture!
L. If you have understood anything I ever told you about it, you know that no architecture was ever corrupted more miserably; or abolished more justly by the accomplishment of its own follies. Besides, even in its days of power, it was subject to catastrophes of this kind. I have stood too often, mourning, by the grand fragment of the apse of Beauvais, not to have that fact well burnt into me. Still, you must have seen, surely, that these imps were of the Flamboyant school; or, at least, of the German schools correspondent with it in extravagance.

MARY. But, then, where is the crystal about which you dreamed all this?

L. Here; but I suppose little Pthah has touched it again, for it is very small. But, you see, here is the pyramid, built of great square stones of fluor spar, straight up; and here are the three little pinnacles of mischievous quartz, which have set themselves, at the same time, on the same foundation; only they lean like the tower of Pisa, and come out obliquely at the side: and here is one great spire of quartz which seems as if it had been meant to stand straight up, a little way off; and then had fallen down against the pyramid base, breaking its pinnacle away. In reality, it has crystallised horizontally, and terminated imperfectly: but, then, by what caprice does one crystal form horizontally, when all the rest stand upright? But this is nothing to the phantasies of fluor, and quartz, and some other such companions, when they get leave to do anything they like. I could show you fifty specimens, about every one of which you might fancy a new fairy tale. Not that, in truth, any crystals get leave to do quite what they like; and many of them are sadly tried, and have little time for caprices—poor things!

MARY. I thought they always looked as if they were either in play or in mischief! What trials have they?

L. Trials much like our own. Sickness, and starvation; fevers, and agues, and palsy; oppression; and old age, and the necessity of passing away in their time, like all else. If there's any pity in you, you must come to-morrow, and take some part in these crystal griefs.
Dora. I am sure we shall cry till our eyes are red.

L. Ah, you may laugh, Dora: but I've been made grave, not once, nor twice, to see that even crystals 'cannot choose but be old' at last. It may be but a shallow proverb of the Justice's; but it is a shrewdly wide one.

Dora (pensive, for once). I suppose it is very dreadful to be old! But then (brightening again), what should we do without our dear old friends, and our nice old lecturers?

L. If all nice old lecturers were minded as little as one I know of——

Dora. And if they all meant as little what they say, would they not deserve it? But we'll come—we'll come, and cry.
LECTURE IX.

CRYSTAL SORROWS.

Working Lecture in Schoolroom.

L. We have been hitherto talking, children, as if crystals might live, and play, and quarrel, and behave ill or well, according to their characters, without interruption from anything else. But so far from this being so, nearly all crystals, whatever their characters, have to live a hard life of it, and meet with many misfortunes. If we could see far enough, we should find, indeed, that, at the root, all their vices were misfortunes: but to-day I want you to see what sort of troubles the best crystals have to go through, occasionally, by no fault of their own.

This black thing, which is one of the prettiest of the very few pretty black things in the world, is called "Tourmaline." It may be transparent, and green, or red, as well as black; and then no stone can be prettier (only, all the light that gets into it, I believe, comes out a good deal the worse; and is not itself again for a long while). But this is the commonest state of it,—opaque, and as black as jet.

MARY. What does "Tourmaline" mean?

L. They say it is Ceylanese, and I don't know Ceylanese; but we may always be thankful for a graceful word, whatever it means.

MARY. And what is it made of?

L. A little of everything; there's always flint, and clay, and magnesia in it; and the black is iron, according to its fancy; and there's boracic acid, if you know what that is; and if you don't, I cannot tell you to-day; and it doesn't signify: and there's potash, and soda; and, on the whole, the chemistry of it is more like a mediaeval doctor's prescription, than
the making of a respectable mineral: but it may, perhaps, be
owing to the strange complexity of its make, that it has a
notable habit which makes it, to me, one of the most inter-
esting of minerals. You see these two crystals are broken
right across, in many places, just as if they had been shafts
of black marble fallen from a ruinous temple; and here they
lie, imbedded in white quartz, fragment succeeding fragment,
keeping the line of the original crystal, while the quartz fills
up the intervening spaces. Now tourmaline has a trick of
doing this, more than any other mineral I know: here is
another bit which I picked up on the glacier of Macugnaga;
it is broken, like a pillar built of very flat broad stones, into
about thirty joints, and all these are heaved and warped away
from each other sideways, almost into a line of steps; and
then all is filled up with quartz paste. And here, lastly, is a
green Indian piece, in which the pillar is first disjointed, and
then wrung round into the shape of an S.

Marx. How can this have been done?

L. There are a thousand ways in which it may have been
done; the difficulty is not to account for the doing of it; but
for the showing of it in some crystals, and not in others. You
never by any chance get a quartz crystal broken or twisted in
this way. If it break or twist at all, which it does sometimes,
like the spire of Dijon, it is by its own will or fault; it never
seems to have been passively crushed. But, for the forces
which cause this passive ruin of the tourmaline,—here is a
stone which will show you multitudes of them in operation
at once. It is known as ‘brecciated agate,’ beautiful, as you
see; and highly valued as a pebble: yet, so far as I can read
or hear, no one has ever looked at it with the least attention.
At the first glance, you see it is made of very fine red striped
agates, which have been broken into small pieces, and fast-
ened together again by paste, also of agate. There would be
nothing wonderful in this, if this were all. It is well known
that by the movements of strata, portions of rock are often
shattered to pieces:—well known also that agate is a deposit
of flint by water under certain conditions of heat and press-
ure: there is, therefore, nothing wonderful in an agate’s
being broken; and nothing wonderful in its being mended with the solution out of which it was itself originally congealed. And with this explanation, most people, looking at a brecciated agate, or brecciated anything, seem to be satisfied. I was so myself, for twenty years; but, lately happening to stay for some time at the Swiss Baden, where the beach of the Limmat is almost wholly composed of brecciated limestone, I began to examine them thoughtfully; and perceived, in the end, that they were, one and all, knots of as rich mystery as any poor little human brain was ever lost in. That piece of agate in your hand, Mary, will show you many of the common phenomena of breccias; but you need not knit your brows over it in that way; depend upon it, neither you nor I shall ever know anything about the way it was made, as long as we live.

Dora. That does not seem much to depend upon.

L. Pardon me, puss. When once we gain some real notion of the extent and the unconquerableness of our ignorance, it is a very broad and restful thing to depend upon: you can throw yourself upon it at ease, as on a cloud, to feast with the gods. You do not thenceforward trouble yourself,—nor any one else,—with theories, or the contradiction of theories; you neither get headache nor heartburning; and you never more waste your poor little store of strength, or allowance of time.

However, there are certain facts, about this agate-making, which I can tell you; and then you may look at it in a pleasant wonder as long as you like; pleasant wonder is no loss of time.

First, then, it is not broken freely by a blow; it is slowly wrung, or ground, to pieces. You can only with extreme dimness conceive the force exerted on mountains in transitional states of movement. You have all read a little geology; and you know how coolly geologists talk of mountains being raised or depressed. They talk coolly of it, because they are accustomed to the fact; but the very universality of the fact prevents us from ever conceiving distinctly the conditions of force involved. You know I was living last year
in Savoy; my house was on the back of a sloping mountain, which rose gradually for two miles, behind it; and then fell at once in a great precipice towards Geneva, going down three thousand feet in four or five cliffs, or steps. Now that whole group of cliffs had simply been torn away by sheer strength from the rocks below, as if the whole mass had been as soft as biscuit. Put four or five captains' biscuits on the floor, on the top of one another; and try to break them all in half, not by bending, but by holding one half down, and tearing the other halves straight up;—of course you will not be able to do it, but you will feel and comprehend the sort of force needed. Then, fancy each captains' biscuit a bed of rock, six or seven hundred feet thick; and the whole mass torn straight through; and one half heaved up three thousand feet, grinding against the other as it rose,—and you will have some idea of the making of the Mont Salève.

Max. But it must crush the rocks all to dust!

L. No; for there is no room for dust. The pressure is too great; probably the heat developed also so great that the rock is made partly ductile; but the worst of it is, that we never can see these parts of mountains in the state they were left in at the time of their elevation; for it is precisely in these rents and dislocations that the crystalline power principally exerts itself. It is essentially a styptic power, and wherever the earth is torn, it heals and binds; nay, the torture and grieving of the earth seem necessary to bring out its full energy; for you only find the crystalline living power fully in action, where the rents and faults are deep and many.

Dora. If you please, sir,—would you tell us,—what are 'faults'?

L. You never heard of such things?

Dora. Never in all our lives.

L. When a vein of rock which is going on smoothly, is interrupted by another troublesome little vein, which stops it, and puts it out, so that it has to begin again in another place—that is called a fault. I always think it ought to be called the fault of the vein that interrupts it; but the miners always call it the fault of the vein that is interrupted.
Dora. So it is, if it does not begin again where it left off.

L. Well, that is certainly the gist of the business: but, whatever good-natured old lecturers may do, the rocks have a bad habit, when they are once interrupted, of never asking 'Where was I?'

Dora. When the two halves of the dining table came separate, yesterday, was that a 'fault'?

L. Yes; but not the table's. However, it is not a bad illustration, Dora. When beds of rock are only interrupted by a fissure, but remain at the same level, like the two halves of the table, it is not called a fault, but only a fissure; but if one half of the table be either tilted higher than the other, or pushed to the side, so that the two parts will not fit, it is a fault. You had better read the chapter on faults in Jukes's Geology; then you will know all about it. And this rent that I am telling you of in the Salève, is one only of myriads, to which are owing the forms of the Alps, as I believe, of all great mountain chains. Wherever you see a precipice on any scale of real magnificence, you will nearly always find it owing to some dislocation of this kind; but the point of chief wonder to me, is the delicacy of the touch by which these gigantic rents have been apparently accomplished. Note, however, that we have no clear evidence, hitherto, of the time taken to produce any of them. We know that a change of temperature alters the position and the angles of the atoms of crystals, and also the entire bulk of rocks. We know that in all volcanic, and the greater part of all subterranean, action, temperatures are continually changing, and therefore masses of rock must be expanding or contracting, with infinite slowness, but with infinite force. This pressure must result in mechanical strain somewhere, both in their own substance, and in that of the rocks surrounding them; and we can form no conception of the result of irresistible pressure, applied so as to rend and raise, with imperceptible slowness of gradation, masses thousands of feet in thickness. We want some experiments tried on masses of iron and stone; and we can't get them tried, because Christian creatures never will seriously and sufficiently spend money, except to find out the shortest ways
of killing each other. But, besides this slow kind of pressure, there is evidence of more or less sudden violence, on the same terrific scale; and, through it all, the wonder, as I said, is always to me the delicacy of touch. I cut a block of the Salève limestone from the edge of one of the principal faults which have formed the precipice; it is a lovely compact limestone, and the fault itself is filled up with a red breccia, formed of the crushed fragments of the torn rock, cemented by a rich red crystalline paste. I have had the piece I cut from it smoothed, and polished across the junction; here it is; and you may now pass your soft little fingers over the surface, without so much as feeling the place where a rock which all the hills of England might have been sunk in the body of, and not a summit seen, was torn asunder through that whole thickness, as a thin dress is torn when you tread upon it.

(The audience examine the stone, and touch it timidly; but the matter remains inconceivable to them.)

MARY (struck by the beauty of the stone). But this is almost marble?

L. It is quite marble. And another singular point in the business, to my mind, is that these stones, which men have been cutting into slabs, for thousands of years, to ornament their principal buildings with,—and which, under the general name of 'marble,' have been the delight of the eyes, and the wealth of architecture, among all civilised nations,—are precisely those on which the signs and brands of these earth-agonies have been chiefly struck; and there is not a purple vein nor flaming zone in them, which is not the record of their ancient torture. What a boundless capacity for sleep, and for serene stupidity, there is in the human mind! Fancy reflective beings, who cut and polish stones for three thousand years, for the sake of the pretty stains upon them; and educate themselves to an art at last (such as it is), of imitating these veins by dexterous painting; and never a curious soul of them, all that while, asks, 'What painted the rocks?'

(The audience look dejected, and ashamed of themselves.)
CRYSTAL SORROWS.

The fact is, we are all, and always, asleep, through our lives; and it is only by pinching ourselves very hard that we ever come to see, or understand, anything. At least, it is not always we who pinch ourselves; sometimes other people pinch us; which I suppose is very good of them,—or other things, which I suppose is very proper of them. But it is a sad life; made up chiefly of naps and pinches.

(Some of the audience, on this, appearing to think that the others require pinching, the Lecturer changes the subject.)

Now, however, for once, look at a piece of marble carefully, and think about it. You see this is one side of the fault; the other side is down or up, nobody knows where; but, on this side, you can trace the evidence of the dragging and tearing action. All along the edge of this marble, the ends of the fibres of the rock are torn, here an inch, and there half an inch, away from each other; and you see the exact places where they fitted, before they were torn separate; and you see the rents are now all filled up with the sanguine paste, full of the broken pieces of the rock; the paste itself seems to have been half melted, and partly to have also melted the edge of the fragments it contains, and then to have crystallised with them, and round them. And the brecciated agate I first showed you contains exactly the same phenomena; a zoned crystallisation going on amidst the cemented fragments, partly altering the structure of those fragments themselves, and subject to continual change, either in the intensity of its own power, or in the nature of the materials submitted to it;—so that, at one time, gravity acts upon them, and disposes them in horizontal layers, or causes them to droop in stalactites; and at another, gravity is entirely defied, and the substances in solution are crystallised in bands of equal thickness on every side of the cell. It would require a course of lectures longer than these (I have a great mind,—you have behaved so saucily—to stay and give them) to describe to you the phenomena of this kind, in agates and chalcedonies only;—nay, there is a single sarcophagus in the British Museum, covered with grand sculpture of the 18th dynasty.
which contains in the magnificent breccia (agates and jaspers imbedded in porphyry), out of which it is hewn, material for the thought of years; and record of the earth-sorrow of ages in comparison with the duration of which, the Egyptian letters tell us but the history of the evening and morning of a day.

Agates, I think, of all stones, confess most of their past history; but all crystallisation goes on under, and partly records, circumstances of this kind—circumstances of infinite variety, but always involving difficulty, interruption, and change of condition at different times. Observe, first, you have the whole mass of the rock in motion, either contracting itself, and so gradually widening the cracks; or being compressed, and thereby closing them, and crushing their edges;—and, if one part of its substance be softer, at the given temperature, than another, probably squeezing that softer substance out into the veins. Then the veins themselves, when the rock leaves them open by its contraction, act with various power of suction upon its substance;—by capillary attraction when they are fine,—by that of pure vacuity when they are larger, or by changes in the constitution and condensation of the mixed gases with which they have been originally filled. Those gases themselves may be supplied in all variation of volume and power from below; or, slowly, by the decomposition of the rocks themselves; and, at changing temperatures, must exert relatively changing forces of decomposition and combination on the walls of the veins they fill; while water, at every degree of heat and pressure (from beds of everlasting ice, alternate with cliffs of native rock, to volumes of red hot, or white hot, steam), congeals, and drips, and throbs, and thrills, from crag to crag; and breathes from pulse to pulse of foaming or fiery arteries, whose beating is felt through chains of the great islands of the Indian seas, as your own pulses lift your bracelets, and makes whole kingdoms of the world quiver in deadly earthquake, as if they were light as aspen leaves. And, remember, the poor little crystals have to live their lives, and mind their own affairs, in the midst of all this, as best they may. They are wonderfully like human
creatures,—forget all that is going on if they don't see it, however dreadful; and never think what is to happen to-morrow. They are spiteful or loving, and indolent or painstaking, and orderly or licentious, with no thought whatever of the lava or the flood which may break over them any day; and evaporate them into air-bubbles, or wash them into a solution of salts. And you may look at them, once understanding the surrounding conditions of their fate, with an endless interest. You will see crowds of unfortunate little crystals, who have been forced to constitute themselves in a hurry, their dissolving element being fiercely scorched away; you will see them doing their best, bright and numberless, but tiny. Then you will find indulged crystals, who have had centuries to form themselves in, and have changed their mind and ways continually; and have been tired, and taken heart again; and have been sick, and got well again; and thought they would try a different diet, and then thought better of it; and made but a poor use of their advantages, after all. And others you will see, who have begun life as wicked crystals; and then have been impressed by alarming circumstances, and have become converted crystals, and behaved amazingly for a little while, and fallen away again, and ended, but discreditably, perhaps even in decomposition; so that one doesn't know what will become of them. And sometimes you will see deceitful crystals, that look as soft as velvet, and are deadly to all near them; and sometimes you will see deceitful crystals, that seem flint-edged, like our little quartz-crystal of a housekeeper here, (hush! Dora,) and are endlessly gentle and true wherever gentleness and truth are needed. And sometimes you will see little child-crystals put to school like school-girls, and made to stand in rows; and taken the greatest care of, and taught how to hold themselves up, and behave: and sometimes you will see unhappy little child-crystals left to lie about in the dirt, and pick up their living, and learn manners, where they can. And sometimes you will see fat crystals eating up thin ones, like great capitalists and little labourers; and politico-economic crystals teaching the stupid ones how to eat each other, and cheat each other; and foolish crystals getting in the way of wise
ones; and impatient crystals spoiling the plans of patient
ones, irreparably; just as things go on in the world. And
sometimes you may see hypocritical crystals taking the shape
of others, though they are nothing like in their minds; and
vampire crystals eating out the hearts of others; and hermit-
crab crystals living in the shells of others; and parasite crys-
tals living on the means of others; and courtier crystals glit-
tering in attendance upon others; and all these, besides the
two great companies of war and peace, who ally themselves,
resolutely to attack, or resolutely to defend. And for the
close, you see the broad shadow and deadly force of inevitable
fate, above all this: you see the multitudes of crystals whose
time has come; not a set time, as with us, but yet a time,
sooner or later, when they all must give up their crystal ghosts:
—when the strength by which they grew, and the breath given
to breathe, pass away from them; and they fail, and
are consumed, and vanish away; and another generation is
brought to life, framed out of their ashes.

MARY. It is very terrible. Is it not the complete fulfilment,
down into the very dust, of that verse: 'The whole creation
groaneth and travaileth in pain'?

L. I do not know that it is in pain, Mary: at least, the
evidence tends to show that there is much more pleasure than
pain, as soon as sensation becomes possible.

LUCILLA. But then, surely, if we are told that it is pain, it
must be pain?

L. Yes; if we are told; and told in the way you mean,
Lucilla; but nothing is said of the proportion to pleasure.
Unmitigated pain would kill any of us in a few hours; pain
equal to our pleasures would make us loathe life; the word
itself cannot be applied to the lower conditions of matter, in
its ordinary sense. But wait till to-morrow to ask me about
this. To-morrow is to be kept for questions and difficulties;
let us keep to the plain facts to-day. There is yet one group
of facts connected with this rending of the rocks, which I
especially want you to notice. You know, when you have
mended a very old dress, quite meritoriously, till it won't
mend any more——
EGYPT (interrupting). Could not you sometimes take gentlemen's work to illustrate by?

L. Gentlemen's work is rarely so useful as yours, Egypt; and when it is useful, girls cannot easily understand it.

DORA. I am sure we should understand it better than gentlemen understand about sewing.

L. My dear, I hope I always speak modestly, and under correction, when I touch upon matters of the kind too high for me; and besides, I never intend to speak otherwise than respectfully of sewing;—though you always seem to think I am laughing at you. In all seriousness, illustrations from sewing are those which Neith likes me best to use; and which young ladies ought to like everybody to use. What do you think the beautiful word 'wife' comes from?

DORA (tossing her head). I don't think it is a particularly beautiful word.

L. Perhaps not. At your ages you may think 'bride' sounds better; but wife's the word for wear, depend upon it. It is the great word in which the English and Latin languages conquer the French and the Greek. I hope the French will some day get a word for it, yet, instead of their dreadful 'femme.' But what do you think it comes from?

DORA. I never did think about it.

L. Nor you, Sibyl?

SIBYL. No; I thought it was Saxon, and stopped there.

L. Yes; but the great good of Saxon words is, that they usually do mean something. Wife means 'weaver.' You have all the right to call yourselves little 'housewives,' when you sew neatly.

DORA. But I don't think we want to call ourselves 'little housewives.'

L. You must either be house-Wives, or house-Moths; remember that. In the deep sense, you must either weave men's fortunes, and embroider them; or feed upon, and bring them to decay. You had better let me keep my sewing illustration, and help me out with it.

DORA. Well we'll hear it, under protest.

L. You have heard it before; but with reference to other
matters. When it is said, 'no man putteth a piece of new cloth on an old garment, else it taketh from the old,' does it not mean that the new piece tears the old one away at the sewn edge?

Dora. Yes; certainly.

L. And when you mend a decayed stuff with strong thread, does not the whole edge come away sometimes, when it tears again?

Dora. Yes; and then it is of no use to mend it any more.

L. Well, the rocks don't seem to think that: but the same thing happens to them continually. I told you they were full of rents, or veins. Large masses of mountain are sometimes as full of veins as your hand is; and of veins nearly as fine (only you know a rock vein does not mean a tube, but a crack or cleft). Now these clefts are mended, usually, with the strongest material the rock can find; and often literally with threads; for the gradually opening rent seems to draw the substance it is filled with into fibres, which cross from one side of it to the other, and are partly crystalline; so that, when the crystals become distinct, the fissure has often exactly the look of a tear, brought together with strong cross stitches. Now when this is completely done, and all has been fastened and made firm, perhaps some new change of temperature may occur, and the rock begin to contract again. Then the old vein must open wider; or else another open elsewhere. If the old vein widen, it may do so at its centre; but it constantly happens, with well filled veins, that the cross stitches are too strong to break; the walls of the vein, instead, are torn away by them; and another little supplementary vein—often three or four successively—will be thus formed at the side of the first.

Mary. That is really very much like our work. But what do the mountains use to sew with?

L. Quartz, whenever they can get it: pure limestones are obliged to be content with carbonate of lime; but most mixed rocks can find some quartz for themselves. Here is a piece of black slate from the Buet: it looks merely like dry dark mud;—you could not think there was any quartz in it; but,
you see, its rents are all stitched together with beautiful white thread, which is the purest quartz, so close drawn that you can break it like flint, in the mass; but, where it has been exposed to the weather, the fine fibrous structure is shown: and, more than that, you see the threads have been all twisted and pulled aside, this way and the other, by the warpings and shifting of the sides of the vein as it widened.

Mary. It is wonderful! But is that going on still? Are the mountains being torn and sewn together again at this moment?

L. Yes, certainly, my dear: but I think, just as certainly (though geologists differ on this matter), not with the violence, or on the scale, of their ancient ruin and renewal. All things seem to be tending towards a condition of at least temporary rest; and that groaning and travailing of the creation, as, assuredly, not wholly in pain, is not, in the full sense, 'until now.'

Mary. I want so much to ask you about that!

Sibyl. Yes; and we all want to ask you about a great many other things besides.

L. It seems to me that you have got quite as many new ideas as are good for any of you at present: and I should not like to burden you with more; but I must see that those you have are clear, if I can make them so; so we will have one more talk, for answer of questions, mainly. Think over all the ground, and make your difficulties thoroughly presentable. Then we'll see what we can make of them.

Dora. They shall all be dressed in their very best; and curtsey as they come in.

L. No, no, Dora; no curtseys, if you please. I had enough of them the day you all took a fit of reverence, and curtseied me out of the room.

Dora. But, you know, we cured ourselves of the fault, at once, by that fit. We have never been the least respectful since. And the difficulties will only curtsey themselves out of the room, I hope;—come in at one door—vanish at the other.

L. What a pleasant world it would be, if all its difficulties were taught to behave so! However, one can generally make
something, or (better still) nothing, or at least less, of them, if they thoroughly know their own minds; and your difficulties—I must say that for you, children,—generally do know their own minds, as you do yourselves.

Dora. That is very kindly said for us. Some people would not allow so much as that girls had any minds to know.

L. They will at least admit that you have minds to change, Dora.

Mary. You might have left us the last speech, without a retouch. But we'll put our little minds, such as they are, in the best trim we can, for to-morrow.
LECTURE X.

THE CRYSTAL REST.

Evening. The fireside. L's arm-chair in the comfortablest corner.

L. (perceiving various arrangements being made of foot stool, cushion, screen, and the like). Yes, yes, it's all very fine! and I am to sit here to be asked questions till supper-time, am I?

Dora. I don't think you can have any supper to-night:—we've got so much to ask.

Lily. Oh, Miss Dora! We can fetch it him here, you know, so nicely!

L. Yes, Lily, that will be pleasant, with competitive examination going on over one's plate; the competition being among the examiners. Really, now that I know what teasing things girls are, I don't so much wonder that people used to put up patiently with the dragons who took them for supper. But I can't help myself, I suppose;—no thanks to St. George. Ask away, children, and I'll answer as civilly as may be.

Dora. We don't so much care about being answered civilly, as about not being asked things back again.

L. 'Ayez seulement la patience que je le parle.' There shall be no requitals.

Dora. Well, then, first of all—What shall we ask first, Mary?

Mary. It does not matter. I think all the questions come into one, at last, nearly.

Dora. You know, you always talk as if the crystals were alive; and we never understand how much you are in play, and how much in earnest. That's the first thing.

L. Neither do I understand, myself, my dear, how much I am in earnest. The stones puzzle me as much as I puzzle you. They look as if they were alive, and make me speak as if they were; and I do not in the least know how much truth
there is in the appearance. I'm not to ask things back again to-night, but all questions of this sort lead necessarily to the one main question, which we asked, before, in vain, 'What is it to be alive?'

Dora. Yes; but we want to come back to that: for we've been reading scientific books about the 'conservation of forces,' and it seems all so grand, and wonderful; and the experiments are so pretty; and I suppose it must be all right: but then the books never speak as if there were any such thing as 'life.'

L. They mostly omit that part of the subject, certainly, Dora; but they are beautifully right as far as they go; and life is not a convenient element to deal with. They seem to have been getting some of it into and out of bottles, in their 'ozone' and 'antizone' lately; but they still know little of it: and, certainly, I know less.

Dora. You promised not to be provoking, to-night.

L. Wait a minute. Though, quite truly, I know less of the secrets of life than the philosophers do; I yet know one corner of ground on which we artists can stand, literally as 'Life Guards' at bay, as steadily as the Guards at Inkermann; however hard the philosophers push. And you may stand with us, if once you learn to draw nicely.

Dora. I'm sure we are all trying! but tell us where we may stand.

L. You may always stand by Form, against Force. To a painter, the essential character of anything is the form of it; and the philosophers cannot touch that. They come and tell you, for instance, that there is as much heat, or motion, or calorific energy (or whatever else they like to call it), in a tea-kettle as in a Gier-eagle. Very good; that is so; and it is very interesting. It requires just as much heat as will boil the kettle, to take the Gier-eagle up to his nest; and as much more to bring him down again on a hare or a partridge. But we painters, acknowledging the equality and similarity of the kettle and the bird in all scientific respects, attach, for our part, our principal interest to the difference in their forms. For us, the primarily cognisable facts, in the two
things, are, that the kettle has a spout, and the eagle a beak; the one a lid on its back, the other a pair of wings;—not to speak of the distinction also of volition, which the philosophers may properly call merely a form or mode of force;—but then, to an artist, the form, or mode, is the gist of the business. The kettle chooses to sit still on the hob; the eagle to recline on the air. It is the fact of the choice, not the equal degree of temperature in the fulfilment of it, which appears to us the more interesting circumstance;—though the other is very interesting too. Exceedingly so! Don't laugh, children; the philosophers have been doing quite splendid work lately, in their own way: especially, the transformation of force into light is a great piece of systematised discovery; and this notion about the sun's being supplied with his flame by ceaseless meteoric hail is grand, and looks very likely to be true. Of course, it is only the old gun-lock,—flint and steel,—on a large scale: but the order and majesty of it are sublime. Still, we sculptors and painters care little about it. 'It is very fine,' we say, 'and very useful, this knocking the light out of the sun, or into it, by an eternal cataract of planets. But you may hail away, so, for ever, and you will not knock out what we can. Here is a bit of silver, not the size of half-a-crown, on which, with a single hammer stroke, one of us, two thousand and odd years ago, hit out the head of the Apollo of Clazomene. It is merely a matter of form; but if any of you philosophers, with your whole planetary system to hammer with, can hit out such another bit of silver as this,—we will take off our hats to you. For the present, we keep them on.'

Mary. Yes, I understand; and that is nice; but I don't think we shall any of us like having only form to depend upon.

L. It was not neglected in the making of Eve, my dear.

Mary. It does not seem to separate us from the dust of the ground. It is that breathing of the life which we want to understand.

L. So you should: but hold fast to the form, and defend that first, as distinguished from the mere transition of forces. Discern the moulding hand of the potter commanding the
clay, from his merely beating foot, as it turns the wheel. If you can find incense, in the vase, afterwards,—well: but it is curious how far mere form will carry you ahead of the philosophers. For instance, with regard to the most interesting of all their modes of force—light;—they never consider how far the existence of it depends on the putting of certain vitreous and nervous substances into the formal arrangement which we call an eye. The German philosophers began the attack, long ago, on the other side, by telling us, there was no such thing as light at all, unless we chose to see it: now, German and English, both, have reversed their engines, and insist that light would be exactly the same light that it is, though nobody could ever see it. The fact being that the force must be there, and the eyes there; and 'light' means the effect of the one on the other;—and perhaps, also—(Plato saw farther into that mystery than any one has since, that I know of),—on something a little way within the eyes; but we may stand quite safe, close behind the retina, and defy the philosophers.

Sibyl. But I don't care so much about defying the philosophers, if only one could get a clear idea of life, or soul, for one's self.

L. Well, Sibyl, you used to know more about it, in that cave of yours, than any of us. I was just going to ask you about inspiration, and the golden bough, and the like; only I remembered I was not to ask anything. But, will not you, at least, tell us whether the ideas of Life, as the power of putting things together, or 'making' them; and of Death, as the power of pushing things separate, or 'unmaking' them, may not be very simply held in balance against each other?

Sibyl. No, I am not in my cave to-night; and cannot tell you anything.

L. I think they may. Modern Philosophy is a great separator; it is little more than the expansion of Molière's great sentence, 'Il s'ensuit de là, que tout ce qu'il y a de beau est dans les dictionnaires; il n'y a que les mots qui sont transposés.' But when you used to be in your cave, Sibyl, and to be inspired, there was (and there remains still in some small
measure), beyond the merely formative and sustaining power, another, which we painters call 'passion'—I don't know what the philosophers call it; we know it makes people red, or white; and therefore it must be something, itself; and perhaps it is the most truly 'poetic' or 'making' force of all, creating a world of its own out of a glance, or a sigh: and the want of passion is perhaps the truest death, or 'unmaking' of everything;—even of stones. By the way, you were all reading about that ascent of the Aiguille Verte, the other day?

Sibyl. Because you had told us it was so difficult, you thought it could not be ascended.

L. Yes; I believed the Aiguille Verte would have held its own. But do you recollect what one of the climbers exclaimed, when he first felt sure of reaching the summit?

Sibyl. Yes, it was, 'Oh, Aiguille Verte, vous êtes morte, vous êtes morte!'

L. That was true instinct. Real philosophic joy. Now can you at all fancy the difference between that feeling of triumph in a mountain's death; and the exultation of your beloved poet, in its life—

'Quantus Athos, ant quantus Eryx, ant ipse coruscis
Quum fremit ilicibus quantus, gaudetque nivali
Vertice, se attollens pater Apenninus ad auras.'

Dora. You must translate for us mere house-keepers, please,—whatever the cave-keepers may know about it.

Mary. Will Dryden do?

L. No. Dryden is a far way worse than nothing, and nobody will 'do.' You can't translate it. But this is all you need know; that the lines are full of a passionate sense of the Apennines' fatherhood, or protecting power over Italy; and of sympathy with their joy in their snowy strength in heaven; and with the same joy, shuddering through all the leaves of their forests.

Mary. Yes, that is a difference indeed! but then, you know, one can't help feeling that it is fanciful. It is very delightful to imagine the mountains to be alive; but then,—are they alive?
THE ETHICS OF THE DUST.

L. It seems to me, on the whole, Mary, that the feelings of the purest and most mightily passioned human souls are likely to be the truest. Not, indeed, if they do not desire to know the truth, or blind themselves to it that they may please themselves with passion; for then they are no longer pure: but if, continually seeking and accepting the truth as far as it is discernible, they trust their Maker for the integrity of the instincts He has gifted them with, and rest in the sense of a higher truth which they cannot demonstrate, I think they will be most in the right, so.

DORA and JESSIE (clapping their hands). Then we really may believe that the mountains are living?

L. You may at least earnestly believe, that the presence of the spirit which culminates in your own life, shows itself in dawning, wherever the dust of the earth begins to assume any orderly and lovely state. You will find it impossible to separate this idea of gradated manifestation from that of the vital power. Things are not either wholly alive, or wholly dead. They are less or more alive. Take the nearest, most easily examined instance—the life of a flower. Notice what a different degree and kind of life there is in the calyx and the corolla. The calyx is nothing but the swaddling clothes of the flower; the child-blossom is bound up in it, hand and foot; guarded in it, restrained by it, till the time of birth. The shell is hardly more subordinate to the germ in the egg, than the calyx to the blossom. It bursts at last; but it never lives as the corolla does. It may fall at the moment its task is fulfilled, as in the poppy; or wither gradually, as in the buttercup; or persist in a ligneous apathy, after the flower is dead, as in the rose; or harmonise itself so as to share in the aspect of the real flower, as in the lily; but it never shares in the corolla’s bright passion of life. And the gradations which thus exist between the different members of organic creatures, exist no less between the different ranges of organism. We know no higher or more energetic life than our own; but there seems to me this great good in the idea of gradation of life—it admits the idea of a life above us, in other creatures, as much nobler than ours, as ours is nobler than that of the dust.
Mary. I am glad you have said that; for I know Violet and Lucilla and May want to ask you something; indeed, we all do; only you frightened Violet so about the ant-hill, that she can't say a word; and May is afraid of your teasing her, too: but I know they are wondering why you are always telling them about heathen gods and goddesses, as if you half believed in them; and you represent them as good; and then we see there is really a kind of truth in the stories about them; and we are all puzzled: and, in this, we cannot even make our difficulty quite clear to ourselves;—it would be such a long confused question, if we could ask you all we should like to know.

L. Nor is it any wonder, Mary; for this is indeed the longest, and the most wildly confused question that reason can deal with; but I will try to give you, quickly, a few clear ideas about the heathen gods, which you may follow out afterwards, as your knowledge increases.

Every heathen conception of deity in which you are likely to be interested, has three distinct characters:—

I. It has a physical character. It represents some of the great powers or objects of nature—sun or moon, or heaven, or the winds, or the sea. And the fables first related about each deity represent, figuratively, the action of the natural power which it represents; such as the rising and setting of the sun, the tides of the sea, and so on.

II. It has an ethical character, and represents, in its history, the moral dealings of God with man. Thus Apollo is first, physically, the sun contending with darkness; but morally, the power of divine life contending with corruption. Athena is, physically, the air; morally, the breathing of the divine spirit of wisdom. Neptune is, physically, the sea; morally, the supreme power of agitating passion; and so on.

III. It has, at last, a personal character; and is realised in the minds of its worshippers as a living spirit, with whom men may speak face to face, as a man speaks to his friend.

Now it is impossible to define exactly, how far, at any period of a national religion, these three ideas are mingled; or how far one prevails over the other. Each enquirer
usually takes up one of these ideas, and pursues it, to the exclusion of the others: no impartial effort seems to have been made to discern the real state of the heathen imagination in its successive phases. For the question is not at all what a mythological figure meant in its origin; but what it became in each subsequent mental development of the nation inheriting the thought. Exactly in proportion to the mental and moral insight of any race, its mythological figures mean more to it, and become more real. An early and savage race means nothing more (because it has nothing more to mean) by its Apollo, than the sun; while a cultivated Greek means every operation of divine intellect and justice. The Neith, of Egypt, meant, physically, little more than the blue of the air; but the Greek, in a climate of alternate storm and calm, represented the wild fringes of the storm-cloud by the serpents of her aegis; and the lightning and cold of the highest thunder-clouds, by the Gorgon on her shield: while morally, the same types represented to him the mystery and changeful terror of knowledge, as her spear and helm its ruling and defensive power. And no study can be more interesting, or more useful to you, than that of the different meanings which have been created by great nations, and great poets, out of mythological figures given them, at first, in utter simplicity. But when we approach them in their third, or personal, character (and, for its power over the whole national mind, this is far the leading one), we are met at once by questions which may well put all of you at pause. Were they idly imagined to be real beings? and did they so usurp the place of the true God? Or were they actually real beings—evil spirits,—leading men away from the true God? Or is it conceivable that they might have been real beings,—good spirits,—entrusted with some message from the true God? These were the questions you wanted to ask; were they not, Lucilla?

Lucilla. Yes, indeed.

L. Well, Lucilla, the answer will much depend upon the clearness of your faith in the personality of the spirits which are described in the book of your own religion;—their personality, observe, as distinguished from merely symbolical vis-
ions. For instance, when Jeremiah has the vision of the seething pot with its mouth to the north, you know that this which he sees is not a real thing; but merely a significant dream. Also, when Zechariah sees the speckled horses among the myrtle trees in the bottom, you still may suppose the vision symbolical;—you do not think of them as real spirits, like Pegasus, seen in the form of horses. But when you are told of the four riders in the Apocalypse, a distinct sense of personality begins to force itself upon you. And though you might, in a dull temper, think that (for one instance of all) the fourth rider on the pale horse was merely a symbol of the power of death,—in your stronger and more earnest moods you will rather conceive of him as a real and living angel. And when you look back from the vision of the Apocalypse to the account of the destruction of the Egyptian first-born, and of the army of Sennacherib, and again to David’s vision at the threshing floor of Araunah, the idea of personality in this death-angel becomes entirely defined, just as in the appearance of the angels to Abraham, Manoah, or Mary.

Now, when you have once consented to this idea of a personal spirit, must not the question instantly follow: ‘Does this spirit exercise its functions towards one race of men only, or towards all men? Was it an angel of death to the Jew only, or to the Gentile also?’ You find a certain Divine agency made visible to a King of Israel, as an armed angel, executing vengeance, of which one special purpose was to lower his kingly pride. You find another (or perhaps the same) agency, made visible to a Christian prophet as an angel standing in the sun, calling to the birds that fly under heaven to come, that they may eat the flesh of kings. Is there anything impious in the thought that the same agency might have been expressed to a Greek king, or Greek seer, by similar visions?—that this figure, standing in the sun, and armed with the sword, or the bow (whose arrows were drunk with blood), and exercising especially its power in the humiliation of the proud, might, at first, have been called only ‘Destroyer,’ and afterwards, as the light, or sun, of justice, was recognised in the chastisement, called also ‘Physician’ or
'Healer?' If you feel hesitation in admitting the possibility of such a manifestation, I believe you will find it is caused, partly indeed by such trivial things as the difference to your ear between Greek and English terms; but, far more, by uncertainty in your own mind respecting the nature and truth, of the visions spoken of in the Bible. Have any of you intently examined the nature of your belief in them? You, for instance, Lucilla, who think often, and seriously, of such things?

Lucilla. No; I never could tell what to believe about them. I know they must be true in some way or other; and I like reading about them.

L. Yes; and I like reading about them too, Lucilla; as I like reading other grand poetry. But, surely, we ought both to do more than like it? Will God be satisfied with us, think you, if we read His words merely for the sake of an entirely meaningless poetical sensation?

Lucilla. But do not the people who give themselves to seek out the meaning of these things, often get very strange, and extravagant?

L. More than that, Lucilla. They often go mad. That abandonment of the mind to religious theory, or contemplation, is the very thing I have been pleading with you against. I never said you should set yourself to discover the meanings; but you should take careful pains to understand them, so far as they are clear; and you should always accurately ascertain the state of your mind about them. I want you never to read merely for the pleasure of fancy; still less as a formal religious duty (else you might as well take to repeating Paters at once; for it is surely wiser to repeat one thing we understand, than read a thousand which we cannot). Either, therefore, acknowledge the passages to be, for the present, unintelligible to you; or else determine the sense in which you at present receive them; or, at all events, the different senses between which you clearly see that you must choose. Make either your belief, or your difficulty, definite; but do not go on, all through your life, believing nothing intelligently, and yet supposing that your having read the words
of a divine book must give you the right to despise every religion but your own. I assure you, strange as it may seem, our scorn of Greek tradition depends, not on our belief, but our disbelief, of our own traditions. We have, as yet, no sufficient clue to the meaning of either; but you will always find that, in proportion to the earnestness of our own faith, its tendency to accept a spiritual personality increases: and that the most vital and beautiful Christian temper rests joyfully in its conviction of the multitudinous ministry of living angels, infinitely varied in rank and power. You all know one expression of the purest and happiest form of such faith, as it exists in modern times, in Richter's lovely illustrations of the Lord's Prayer. The real and living death-angel, girt as a pilgrim for journey, and softly crowned with flowers, beckons at the dying mother's door; child-angels sit talking face to face with mortal children, among the flowers;—hold them by their little coats, lest they fall on the stairs;—whisper dreams of heaven to them, leaning over their pillows; carry the sound of the church bells for them far through the air; and even descending lower in service, fill little cups with honey, to hold out to the weary bee. By the way, Lily, did you tell the other children that story about your little sister, and Alice, and the sea?

LILY. I told it to Alice, and to Miss Dora. I don't think I did to anybody else. I thought it wasn't worth.

L. We shall think it worth a great deal now, Lily, if you will tell it us. How old is Dotty, again? I forget.

LILY. She is not quite three; but she has such odd little old ways, sometimes.

L. And she was very fond of Alice?

LILY. Yes; Alice was so good to her always!

L. And so when Alice went away?

LILY. Oh, it was nothing, you know, to tell about; only it was strange at the time.

L. Well; but I want you to tell it.

LILY. The morning after Alice had gone, Dotty was very sad and restless when she got up; and went about, looking into all the corners, as if she could find Alice in them, and at last she came to me, and said, 'Is Alie gone over the great sea?'
And I said, 'Yes, she is gone over the great, deep sea, but she will come back again some day.' Then Dotty looked round the room; and I had just poured some water out into the basin; and Dotty ran to it, and got up on a chair, and dashed her hands through the water, again and again; and cried, 'Oh, deep, deep sea! send little Alie back to me.'

L. Isn't that pretty, children? There's a dear little heathen for you! The whole heart of Greek mythology is in that; the idea of a personal being in the elemental power;—of its being moved by prayer;—and of its presence everywhere, making the broken diffusion of the element sacred.

Now, remember, the measure in which we may permit ourselves to think of this trusted and adored personality, in Greek, or in any other, mythology, as conceivably a shadow of truth, will depend on the degree in which we hold the Greeks, or other great nations, equal, or inferior, in privilege and character, to the Jews, or to ourselves. If we believe that the great Father would use the imagination of the Jew as an instrument by which to exalt and lead him; but the imagination of the Greek only to degrade and mislead him: if we can suppose that real angels were sent to minister to the Jews and to punish them; but no angels, or only mocking spectra of angels, or even devils in the shapes of angels, to lead Lycurgus and Leonidas from desolate cradle to hopeless grave:—and if we can think that it was only the influence of spectres, or the teaching of demons, which issued in the making of mothers like Cornelia, and of sons like Cleobis and Bito, we may, of course, reject the heathen Mythology in our privileged scorn: but, at least, we are bound to examine strictly by what faults of our own it has come to pass, that the ministry of real angels among ourselves is occasionally so ineffectual, as to end in the production of Cornelias who entrust their child-jewels to Charlotte Winsors for the better keeping of them; and of sons like that one who, the other day, in France, beat his mother to death with a stick; and was brought in by the jury, 'guilty, with extenuating circumstances.'

May. Was that really possible?

L. Yes, my dear. I am not sure that I can lay my hand
on the reference to it (and I should not have said 'the other
day'—it was a year or two ago), but you may depend on the
fact; and I could give you many like it, if I chose. There
was a murder done in Russia, very lately, on a traveller.
The murderess's little daughter was in the way, and found it
out, somehow. Her mother killed her, too, and put her into
the oven. There is a peculiar horror about the relations be-
tween parent and child, which are being now brought about
by our variously degraded forms of European white slavery.
Here is one reference, I see, in my notes on that story of
Cleobis and Bito; though I suppose I marked this chiefly
for its quaintness, and the beautifully Christian names of
the sons; but it is a good instance of the power of the King
of the Valley of Diamonds* among us.

In 'Galignani' of July 21-22, 1862, is reported a trial of a
farmer's son in the department of the Yonne. The father,
two years ago, at Malay le Grand, gave up his property to
his two sons, on condition of being maintained by them.
Simon fulfilled his agreement, but Pierre would not. The
tribunal of Sens condemns Pierre to pay eighty-four francs
a year to his father. Pierre replies, 'he would rather die than
pay it.' Actually, returning home, he throws himself into the
river, and the body is not found till next day.

Mary. But—but—I can't tell what you would have us
think. Do you seriously mean that the Greeks were better
than we are; and that their gods were real angels?

L. No, my dear. I mean only that we know, in reality,
less than nothing of the dealings of our Maker with our
fellow-men; and can only reason or conjecture safely about
them, when we have sincerely humble thoughts of ourselves
and our creeds.

We owe to the Greeks every noble discipline in literature;
every radical principle of art; and every form of convenient
beauty in our household furniture and daily occupations of
life. We are unable, ourselves, to make rational use of half
that we have received from them: and, of our own, we have
nothing but discoveries in science, and fine mechanical adap-

* Note vi.
tations of the discovered physical powers. On the other hand, the vice existing among certain classes, both of the rich and poor, in London, Paris, and Vienna, could have been conceived by a Spartan or Roman of the heroic ages only as possible in a Tartarus, where fiends were employed to teach, but not to punish, crime. It little becomes us to speak contemptuously of the religion of races to whom we stand in such relations; nor do I think any man of modesty or thoughtfulness will ever speak so of any religion, in which God has allowed one good man to die, trusting.

The more readily we admit the possibility of our own cherished convictions being mixed with error, the more vital and helpful whatever is right in them will become: and no error is so conclusively fatal as the idea that God will not allow us to err, though He has allowed all other men to do so. There may be doubt of the meaning of other visions, but there is none respecting that of the dream of St. Peter; and you may trust the Rock of the Church's Foundation for true interpreting, when he learned from it that, 'in every nation, he that feareth God and worketh righteousness, is accepted with Him.' See that you understand what that righteousness means; and set hand to it stoutly: you will always measure your neighbors' creed kindly, in proportion to the substantial fruits of your own. Do not think you will ever get harm by striving to enter into the faith of others, and to sympathise, in imagination, with the guiding principles of their lives. So only can you justly love them, or pity them, or praise. By the gracious effort you will double, treble—nay, indefinitely multiply, at once the pleasure, the reverence, and the intelligence with which you read: and, believe me, it is wiser and holier, by the fire of your own faith to kindle the ashes of expired religions, than to let your soul shiver and stumble among their graves, through the gathering darkness, and communicable cold.

Mary (after some pause). We shall all like reading Greek history so much better after this! but it has put everything else out of our heads that we wanted to ask.

L. I can tell you one of the things; and I might take
credit for generosity in telling you; but I have a personal reason—Lucilla's verse about the creation.

Dora. Oh, yes—yes; and its 'pain together, until now.'

L. I call you back to that, because I must warn you against an old error of my own. Somewhere in the fourth volume of 'Modern Painters,' I said that the earth seemed to have passed through its highest state: and that, after ascending by a series of phases, culminating in its habitation by man, it seems to be now gradually becoming less fit for that habitation.

Mary. Yes, I remember.

L. I wrote those passages under a very bitter impression of the gradual perishing of beauty from the loveliest scenes which I knew in the physical world;—not in any doubtful way, such as I might have attributed to loss of sensation in myself—but by violent and definite physical action; such as the filling up of the Lac de Chède by landslips from the Rochers des Fiz;—the narrowing of the Lake Lucerne by the gaining delta of the stream of the Muotta-Thal, which, in the course of years, will cut the lake into two, as that of Brienz has been divided from that of Thun;—the steady diminishing of the glaciers north of the Alps, and still more, of the sheets of snow on their southern slopes, which supply the refreshing streams of Lombardy;—the equally steady increase of deadly maremma round Pisa and Venice; and other such phenomena, quite measurably traceable within the limits even of short life, and unaccompanied, as it seemed, by redeeming or compensatory agencies. I am still under the same impression respecting the existing phenomena; but I feel more strongly, every day, that no evidence to be collected within historical periods can be accepted as any clue to the great tendencies of geological change; but that the great laws which never fail, and to which all change is subordinate, appear such as to accomplish a gradual advance to lovelier order, and more calmly, yet more deeply, animated Rest. Nor has this conviction ever fastened itself upon me more distinctly, than during my endeavour to trace the laws which govern the lowly framework of the dust. For, through all the phases of its transition and
dissolution, there seems to be a continual effort to raise itself into a higher state; and a measured gain, through the fierce revulsion and slow renewal of the earth's frame, in beauty, and order, and permanence. The soft white sediments of the sea draw themselves, in process of time, into smooth knots of sphered symmetry; burdened and strained under increase of pressure, they pass into a nascent marble; scorched by fervent heat, they brighten and blanch into the snowy rock of Paros and Carrara. The dark drift of the inland river, or stagnant slime of inland pool and lake, divides, or resolves itself as it dries, into layers of its several elements; slowly purifying each by the patient withdrawal of it from the anarchy of the mass in which it was mingled. Contracted by increasing drought, till it must shatter into fragments, it infuses continually a finer ichor into the opening veins, and finds in its weakness the first rudiments of a perfect strength. Rent at last, rock from rock, nay, atom from atom, and tormented in lambent fire, it knits, through the fusion, the fibres of a perennial endurance; and, during countless subsequent centuries, declining, or rather let me say, rising to repose, finishes the infallible lustre of its crystalline beauty, under harmonies of law which are wholly beneficent, because wholly inexorable.

(The children seem pleased, but more inclined to think over these matters than to talk.)

L. (after giving them a little time). Mary, I seldom ask you to read anything out of books of mine; but there is a passage about the Law of Help, which I want you to read to the children now, because it is of no use merely to put it in other words for them. You know the place I mean, do not you?

Mary. Yes (presently finding it); where shall I begin?

L. Here; but the elder ones had better look afterwards at the piece which comes just before this.

Mary (reads):

'A pure or holy state of anything is that in which all its parts are helpful or consistent. The highest and first law of the universe, and the other name of life, is therefore, “help.” The other name of death is “separation.” Government and
co-operation are in all things, and eternally, the laws of life. Anarchy and competition, eternally, and in all things, the laws of death.

'Perhaps the best, though the most familiar, example we could take of the nature and power of consistence, will be that of the possible changes in the dust we tread on.

'Exclusive of animal decay, we can hardly arrive at a more absolute type of impurity, than the mud or slime of a damp, over-trodden path, in the outskirts of a manufacturing town. I do not say mud of the road, because that is mixed with animal refuse; but take merely an ounce or two of the blackest slime of a beaten footpath, on a rainy day, near a manufacturing town. That slime we shall find in most cases composed of clay (or brick dust, which is burnt clay), mixed with soot, a little sand and water. All these elements are at helpless war with each other, and destroy reciprocally each other's nature and power: competing and fighting for place at every tread of your foot; sand squeezing out clay, and clay squeezing out water, and soot meddling everywhere, and defiling the whole. Let us suppose that this ounce of mud is left in perfect rest, and that its elements gather together, like to like, so that their atoms may get into the closest relations possible.

'Let the clay begin. Ridding itself of all foreign substance, it gradually becomes a white earth, already very beautiful, and fit, with help of congealing fire, to be made into finest porcelain, and painted on, and be kept in kings' palaces. But such artificial consistence is not its best. Leave it still quiet, to follow its own instinct of unity, and it becomes, not only white but clear; not only clear, but hard; nor only clear and hard, but so set that it can deal with light in a wonderful way, and gather out of it the loveliest blue rays only, refusing the rest. We call it then a sapphire.

'Such being the consummation of the clay, we give similar permission of quiet to the sand. It also becomes, first, a white earth; then proceeds to grow clear and hard, and at last arranges itself in mysterious, infinitely fine parallel lines, which have the power of reflecting, not merely the blue rays, but the blue, green, purple, and red rays, in the greatest beauty in which they can be seen through any hard material whatsoever. We call it then an opal.

'In next order the soot sets to work. It cannot make itself white at first; but, instead of being discouraged, tries harder and harder; and comes out clear at last; and the hardest
thing in the world: and for the blackness that it had, obtain in exchange the power of reflecting all the rays of the sun at once, in the vividest blaze that any solid thing can shoot. We call it then a diamond.

'Last of all, the water purifies, or unites itself; contented enough if it only reach the form of a dewdrop: but, if we insist on its proceeding to a more perfect consistence, it crystallises into the shape of a star. And, for the ounce of slime which we had by political economy of competition, we have, by political economy of co-operation, a sapphire, an opal, and a diamond, set in the midst of a star of snow.'

L. I have asked you to hear that, children, because, from all that we have seen in the work and play of these past days, I would have you gain at least one grave and enduring thought. The seeming trouble,—the unquestionable degradation,—of the elements of the physical earth, must passively wait the appointed time of their repose, or their restoration. It can only be brought about for them by the agency of external law. But if, indeed, there be a nobler life in us than in these strangely moving atoms;—if, indeed, there is an eternal difference between the fire which inhabits them, and that which animates us,—it must be shown, by each of us in his appointed place, not merely in the patience, but in the activity of our hope; not merely by our desire, but our labour, for the time when the Dust of the generations of men shall be confirmed for foundations of the gates of the city of God. The human clay, now trampled and despised, will not be,—cannot be,—knit into strength and light by accident or ordinances of unassisted fate. By human cruelty and iniquity it has been afflicted;—by human mercy and justice it must be raised: and, in all fear or questioning of what is or is not, the real message of creation, or of revelation, you may assuredly find perfect peace, if you are resolved to do that which your Lord has plainly required,—and content that He should indeed require no more of you,—than to do Justice, to love Mercy, and to walk humbly with Him.
NOTES.

Note I.
Page 24.

'That third pyramid of hers.'

Throughout the dialogues, it must be observed that 'Sibyl' is addressed (when in play) as having once been the Cumaean Sibyl; and 'Egypt' as having been queen Nitocris,—the Cinderella, and 'the greatest heroine and beauty' of Egyptian story. The Egyptians called her 'Neith the Victorious' (Nitocris), and the Greeks 'Face of the Rose' (Rhodope). Chaucer's beautiful conception of Cleopatra in the 'Legend of Good Women,' is much more founded on the traditions of her than on those of Cleopatra; and, especially in its close, modified by Herodotus's terrible story of the death of Nitocris, which, however, is mythologically nothing more than a part of the deep monotonous ancient dirge for the fulfilment of the earthly destiny of Beauty; 'She cast herself into a chamber full of ashes.'

I believe this Queen is now sufficiently ascertained to have either built, or increased to double its former size, the third pyramid of Gizeh: and the passage following in the text refers to an imaginary endeavour, by the Old Lecturer and the children together, to make out the description of that pyramid in the 167th page of the second volume of Bunsen's 'Egypt's Place in Universal History'—ideal endeavour,—which ideally terminates as the Old Lecturer's real endeavours to the same end always have terminated. There are, however, valuable notes respecting Nitocris at page 210 of the same volume: but the 'Early Egyptian History for the Young,' by the author of Sidney Gray, contains, in a pleasant form, as much information as young readers will usually need.

Note II.
Page 25.

'Pyramid of Asychis.'

This pyramid, in mythology, divides with the Tower of Babel the shame, or vain glory, of being presumptuously, and first among great edifices, built with 'brick for stone.' This was the inscription on it according to Herodotus:
'Despise me not, in comparing me with the pyramids of stone; for I have the pre-eminence over them, as far as Jupiter has pre-eminence over the gods. For, striking with staves into the pool, men gathered the clay which fastened itself to the staff, and kneaded bricks out of it, and so made me.'

The word I have translated 'kneaded' is literally 'drew;' in the sense of drawing, for which the Latins used 'duco;' and thus gave us our 'ductile' in speaking of dead clay. and Duke, Doge, or leader, in speaking of living clay. As the asserted pre-eminence of the edifice is made, in this inscription, to rest merely on the quantity of labour consumed in it, this pyramid is considered, in the text, as the type, at once, of the base building, and of the lost labour, of the future ages, so far at least as the spirits of measured and mechanical effort deal with it: but Neith, exercising her power upon it, makes it a type of the work of wise and inspired builders.

NOTE III.

Page 25.

'The Greater Pthah.'

It is impossible, as yet, to define with distinctness the personal agencies of the Egyptian deities. They are continually associated in function, or hold derivative powers, or are related to each other in mysterious triads; uniting always symbolism of physical phenomena with real spiritual power. I have endeavoured partly to explain this in the text of the tenth Lecture: here, it is only necessary for the reader to know that the Greater Pthah more or less represents the formative power of order and measurement; he always stands on a four-square pedestal, 'the Egyptian cubit, metaphorically used as the hieroglyphic for truth;' his limbs are bound together, to signify fixed stability, as of a pillar; he has a measuring-rod in his hand; and at Philæ, is represented as holding an egg on a potter's wheel; but I do not know if this symbol occurs in older sculptures. His usual title is the 'Lord of Truth.' Others, very beautiful: 'King of the Two Worlds, of Gracious Countenance,' 'Superintendent of the Great Abode.' &c., are given by Mr. Birch in Arundale's 'Gallery of Antiquities,' which I suppose is the book of best authority easily accessible. For the full titles and utterances of the gods, Rosellini is as yet the only—and I believe, still a very question-able—authority; and Arundale's little book, excellent in the text, has this great defect, that its drawings give the statues invariably a ludicrous or ignoble character. Readers who have not access to the original must be warned against this frequent fault in modern illustration (especially existing also in some of the painted casts of Gothic and Norman
work at the Crystal Palace). It is not owing to any wilful want of
veracity: the plates in Arundale's book are laboriously faithful: but
the expressions of both face and body in a figure depend merely on
emphasis of touch; and, in barbaric art, most draughtsmen emphasise
what they plainly see—the barbarism; and miss conditions of noble-
ness, which they must approach the monument in a different temper
before they will discover, and draw with great subtlety before they can
express.

The character of the Lower Pthah, or perhaps I ought rather to say,
of Pthah in his lower office, is sufficiently explained in the text of the
third Lecture; only the reader must be warned that the Egyptian
symbolism of him by the beetle was not a scornful one; it expressed
only the idea of his presence in the first elements of life. But it may
not unjustly be used, in another sense, by us, who have seen his power
in new development; and, even as it was, I cannot conceive that the
Egyptians should have regarded their beetle-headed image of him
(Champollion, 'Pantheon,' pl. 12), without some occult scorn. It is the
most painful of all their types of any beneficent power; and even
among those of evil influences, none can be compared with it, except
its opposite, the tortoise-headed demon of indolence.

Pasht (p. 24, line 32) is connected with the Greek Artemis, especially
in her offices of judgment and vengeance. She is usually lioness-
headed; sometimes cat-headed; her attributes seeming often trivial or
ludicrous unless their full meaning is known; but the enquiry is much
too wide to be followed here. The cat was sacred to her; or rather to
the sun, and secondarily to her. She is alluded to in the text because
she is always the companion of Pthah (called 'the beloved of Pthah,'
it may be as Judgment, demanded and longed for by Truth); and it
may be well for young readers to have this fixed in their minds, even
by chance association. There are more statues of Pasht in the British
Museum than of any other Egyptian deity; several of them fine in
workmanship; nearly all in dark stone, which may be, presumably, to
connect her, as the moon, with the night; and in her office of avenger,
with grief.

Thoth (p. 27, line 17), is the Recording Angel of Judgment; and the
Greek Hermes Phre (line 20), is the Sun.

Neith is the Egyptian spirit of divine wisdom; and the Athena of the
Greeks. No sufficient statement of her many attributes, still less of their
meanings, can be shortly given; but this should be noted respecting
the veiling of the Egyptian image of her by vulture wings—that as she
is, physically, the goddess of the air, this bird, the most powerful cre-
ature of the air known to the Egyptians, naturally became her symbol.
It had other significations; but certainly this, when in connection with
Neith. As representing her, it was the most important sign, next to the
winged sphere, in Egyptian sculpture; and, just as in Homer, Athena

NOTES.
NOTES.

herself guides her heroes into battle, this symbol of wisdom, giving victory, floats over the heads of the Egyptian kings. The Greeks, representing the goddess herself in human form, yet would not lose the power of the Egyptian symbol, and changed it into an angel of victory. First seen in loveliness on the early coins of Syracuse and Leontium, it gradually became the received sign of all conquest, and the so-called 'Victory' of later times; which, little by little, loses its truth, and is accepted by the moderns only as a personification of victory itself,—not as an actual picture of the living Angel who led to victory. There is a wide difference between these two conceptions,—all the difference between insincere poetry, and sincere religion. This I have also endeavoured farther to illustrate in the tenth Lecture; there is however one part of Athena's character which it would have been irrelevant to dwell upon there; yet which I must not wholly leave unnoticed.

As the goddess of the air, she physically represents both its beneficent calm, and necessary tempest: other storm-deities (as Chrysaor and Æolus) being invested with a subordinate and more or less malignant function, which is exclusively their own, and is related to that of Athena as the power of Mars is related to hers in war. So also Virgil makes her able to wield the lightning herself, while Juno cannot, but must pray for the intervention of Æolus. She has precisely the correspondent moral authority over calmness of mind, and just anger. She soothes Achilles, as she incites Tydides; her physical power over the air being always hinted correlativelv. She grasps Achilles by his hair—as the wind would lift it—softly,

'It fanned his cheek, it raised his hair,  
Like a meadow gale in spring.'

She does not merely turn the lance of Mars from Diomed; but seizes it in both her hands, and casts it aside, with a sense of making it vain, like chaff in the wind;—to the shout of Achilles, she adds her own voice of storm in heaven—but in all cases the moral power is still the principal one—most beautifully in that seizing of Achilles by the hair, which was the talisman of his life (because he had vowed it to the Sperchius if he returned in safety), and which, in giving at Patroclus' tomb, he, knowingly, yields up the hope of return to his country, and signifies that he will die with his friend. Achilles and Tydides are, above all other heroes, aided by her in war, because their prevailing characters are the desire of justice, united in both with deep affections; and, in Achilles, with a passionate tenderness, which is the real root of his passionate anger. Ulysses is her favourite chiefly in her office as the goddess of conduct and design.
NOTES.

NOTE IV.

Page 54.

'Geometrical limitations.'

It is difficult, without a tedious accuracy, or without full illustration, to express the complete relations of crystalline structure, which dispose minerals to take, at different times, fibrous, massive, or foliated forms; and I am afraid this chapter will be generally skipped by the reader: yet the arrangement itself will be found useful, if kept broadly in mind; and the transitions of state are of the highest interest, if the subject is entered upon with any earnestness. It would have been vain to add to the scheme of this little volume any account of the geometrical forms of crystals: an available one, though still far too difficult and too copious, has been arranged by the Rev. Mr. Mitchell, for Orr's 'Circle of the Sciences'; and, I believe, the 'nets' of crystals, which are therein given to be cut out with scissors and put prettily together, will be found more conquerable by young ladies than by other students. They should also, when an opportunity occurs, be shown, at any public library, the diagram of the crystallisation of quartz referred to poles, at p. 8 of Cloizaux's 'Manuel de Minéralogie': that they may know what work is; and what the subject is.

With a view to more careful examination of the nascent states of silica, I have made no allusion in this volume to the influence of mere segregation, as connected with the crystalline power. It has only been recently, during the study of the breccias alluded to in page 113, that I have fully seen the extent to which this singular force often modifies rocks in which at first its influence might hardly have been suspected; many apparent conglomerates being in reality formed chiefly by segregation, combined with mysterious brokenly-zoned structures, like those of some malachites. I hope some day to know more of these and several other mineral phenomena (especially of those connected with the relative sizes of crystals), which otherwise I should have endeavoured to describe in this volume.

NOTE V.

Page 102.

'St. Barbara.'

I would have given the legends of St. Barbara, and St. Thomas, if I had thought it always well for young readers to have everything at once told them which they may wish to know. They will remember the stories better after taking some trouble to find them; and the text is in
telligible enough as it stands. The idea of St. Barbara, as there given is founded partly on her legend in Peter de Natalibus, partly on the beautiful photograph of Van Eyck's picture of her at Antwerp: which was some time since published at Lille.

---

NOTE VI.

Page 137.

'King of the Valley of Diamonds.'

ISABEL interrupted the Lecturer here, and was briefly bid to hold her tongue; which gave rise to some talk, apart, afterwards, between L. and Sibyl, of which a word or two may be perhaps advisably set down.

SIBYL. We shall spoil Isabel, certainly, if we don't mind: I was glad you stopped her, and yet sorry; for she wanted so much to ask about the Valley of Diamonds again, and she has worked so hard at it, and made it nearly all out by herself. She recollected Elisha's throwing in the meal, which nobody else did.

L. But what did she want to ask?

SIBYL. About the mulberry trees and the serpents; we are all stopped by that. Won't you tell us what it means?

L. Now, Sibyl, I am sure you, who never explained yourself, should be the last to expect others to do so. I hate explaining myself.

SIBYL. And yet how often you complain of other people for not saying what they meant. How I have heard you growl over the three stone steps to purgatory; for instance!

L. Yes; because Dante's meaning is worth getting at; but mine matters nothing: at least, if ever I think it is of any consequence, I speak it as clearly as may be. But you may make anything you like of the serpent forests. I could have helped you to find out what they were, by giving a little more detail, but it would have been tiresome.

SIBYL. It is much more tiresome not to find out. Tell us, please, as Isabel says, because we feel so stupid.

L. There is no stupidity; you could not possibly do more than guess at anything so vague. But I think, you, Sibyl, at least, might have recollected what first dyed the mulberry?

SIBYL. So I did; but that helped little; I thought of Dante's forest of suicides, too, but you would not simply have borrowed that?

L. No. If I had had strength to use it, I should have stolen it, to beat into another shape; not borrowed it. But that idea of souls in trees is as old as the world; or at least, as the world of man. And I did mean that there were souls in those dark branches; the souls of all those who had perished in misery through the pursuit of riches; and that the river was of their blood, gathering gradually, and flowing out
of the valley. That I meant the serpents for the souls of those who had lived carelessly and wantonly in their riches; and who have all their sins forgiven by the world, because they are rich: and therefore they have seven crimson-crested heads, for the seven mortal sins; of which they are proud: and these, and the memory and report of them, are the chief causes of temptation to others, as showing the pleasantness and absolving power of riches; so that thus they are singing serpents. And the worms are the souls of the common money-getters and traffickers, who do nothing but eat and spin: and who gain habitually by the distress or foolishness of others (as you see the butchers have been gaining out of the panic at the cattle plague, among the poor)—so they are made to eat the dark leaves, and spin, and perish.

Sibyl. And the souls of the great, cruel, rich people who oppress the poor, and lend money to government to make unjust war, where are they?

L. They change into the ice, I believe, and are knit with the gold; and make the grave-dust of the valley. I believe so, at least, for no one ever sees those souls anywhere.

(Sibyl ceases questioning.)

Isabel (who has crept up to her side without any one’s seeing). Oh, Sibyl, please ask him about the fire-flies!

L. What, you there, mousie! No; I won’t tell either Sibyl or you about the fire-flies; nor a word more about anything else. You ought to be little fire-flies yourselves, and find your way in twilight by your own wits.

Isabel. But you said they burned, you know?

L. Yes; and you may be fire-flies that way too, some of you, before long, though I did not mean that. Away with you, children. You have thought enough for to day.

NOTE TO SECOND EDITION.

Sentence out of letter from May (who is staying with Isabel just now at Cassel), dated 15th June, 1877:

"I am reading the Ethics with a nice Irish girl who is staying here, and she’s just as puzzled as I’ve always been about the fire-flies, and we both want to know so much.—Please be a very nice old Lecturer, and tell us, won’t you?"

Well, May, you never were a vain girl; so could scarcely guess that I meant them for the light, unpursued vanities, which yet blind us, confused among the stars. One evening, as I came late into Siena, the fire flies were flying high on a stormy sirocco wind,—the stars themselves no brighter, and all their host seeming, at moments, to fade as the insects faded.
On the first mild—or, at least, the first bright—day of March, in this year, I walked through what was once a country lane, between the hostelry of the Half-moon at the bottom of Herne Hill, and the secluded College of Dulwich.

In my young days, Croxsted Lane was a green bye-road traversable for some distance by carts; but rarely so traversed, and, for the most part, little else than a narrow strip of untilled field, separated by blackberry hedges from the better cared-for meadows on each side of it: growing more weeds, therefore, than they, and perhaps in spring a primrose or two—white archangel—daisies plenty, and purple thistles in autumn. A slender rivulet, boasting little of its brightness, for there are no springs at Dulwich, yet fed purely enough by the rain and morning dew, here trickled—there loitered—through the long grass beneath the hedges, and expanded itself, where it might, into moderately clear and deep pools, in which, under their veils of duck-weed, a freshwater shell or two, sundry curious little skipping shrimps, any quantity of tadpoles in their time, and even sometimes a tittlebat, offered themselves to my boyhood's pleased, and not inaccurate, observation. There, my mother and I used to gather the first buds of the hawthorn; and there, in after years, I used to walk in the summer shadows, as in a place wilder and sweeter than our garden, to think over any passage I wanted to make better than usual in Modern Painters.

So, as aforesaid, on the first kindly day of this year, being thoughtful more than usual of those old times, I went to look again at the place.
Often, both in those days, and since, I have put myself hard to it, vainly, to find words wherewith to tell of beautiful things; but beauty has been in the world since the world was made, and human language can make a shift, somehow, to give account of it, whereas the peculiar forces of devastation induced by modern city life have only entered the world lately; and no existing terms of language known to me are enough to describe the forms of filth, and modes of ruin, that varied themselves along the course of Croxsted Lane. The fields on each side of it are now mostly dug up for building, or cut through into gaunt corners and nooks of blind ground by the wild crossings and concurrencies of three railroads. Half a dozen handfuls of new cottages, with Doric doors, are dropped about here and there among the gashed ground: the lane itself, now entirely grassless, is a deep-rutted, heavy-hillocked cart-road, diverging gatelessly into various brick-fields or pieces of waste; and bordered on each side by heaps of—Hades only knows what!—mixed dust of every unclean thing that can crumble in drought, and mildew of every unclean thing that can rot or rust in damp: ashes and rags, beer-bottles and old shoes, battered pans, smashed crockery, shreds of nameless clothes, door-sweepings, floor-sweepings, kitchen garbage, back-garden sewage, old iron, rotten timber jagged with out-torn nails, cigar-ends, pipe-bowls, cinders, bones, and ordure, indescribable; and, variously kneaded into, sticking to, or fluttering foully here and there over all these,—remnants broadcast, of every manner of newspaper, advertisement or big-lettered bill, festering and flaunting out their last publicity in the pits of stinking dust and mortal slime.

The lane ends now where its prettiest windings once began; being cut off by a cross-road leading out of Dulwich to a minor railway station: and on the other side of this road, what was of old the daintiest intricacy of its solitude is changed into a straight, and evenly macadamised carriage drive, between new houses of extreme respectability, with good attached gardens and offices—most of these tenements being larger—all more pretentious, and many, I imagine, held at greatly higher rent than my father's, tenanted for twenty years at Herne Hill.
And it became matter of curious meditation to me what must here become of children resembling my poor little dreamy quondam self in temper, and thus brought up at the same distance from London, and in the same or better circumstances of worldly fortune; but with only Croxsted Lane in its present condition for their country walk. The trimly kept road before their doors, such as one used to see in the fashionable suburbs of Cheltenham or Leamington, presents nothing to their study but gravel, and gas-lamp posts; the modern addition of a vermilion letter-pillar contributing indeed to the splendour, but scarcely to the interest of the scene; and a child of any sense or fancy would hastily contrive escape from such a barren desert of politeness, and betake itself to investigation, such as might be feasible, of the natural history of Croxsted Lane.

But, for its sense or fancy, what food, or stimulus, can it find, in that foul causeway of its youthful pilgrimage? What would have happened to myself, so directed, I cannot clearly imagine. Possibly, I might have got interested in the old iron and wood-shavings; and become an engineer or a carpenter: but for the children of to-day, accustomed from the instant they are out of their cradles, to the sight of this infinite nastiness, prevailing as a fixed condition of the universe, over the face of nature, and accompanying all the operations of industrious man, what is to be the scholastic issue? unless, indeed, the thrill of scientific vanity in the primary analysis of some unheard-of process of corruption—or the reward of microscopic research in the sight of worms with more legs, and acari of more curious generation than ever vivified the more simply smelling plasma of antiquity.

One result of such elementary education is, however, already certain; namely, that the pleasure which we may conceive taken by the children of the coming time, in the analysis of physical corruption, guides, into fields more dangerous and desolate, the expatiation of imaginative literature: and that the reactions of moral disease upon itself, and the conditions of languidly monstrous character developed in an atmosphere of low vitality, have become the most valued material of mod-
ern fiction, and the most eagerly discussed texts of modern philosophy.

The many concurrent reasons for this mischief may, I believe, be massed under a few general heads.

I. There is first the hot fermentation and unwholesome secrecy of the population crowded into large cities, each mote in the misery lighter, as an individual soul, than a dead leaf, but becoming oppressive and infectious each to his neighbour, in the smoking mass of decay. The resulting modes of mental ruin and distress are continually new; and in a certain sense, worth study in their monstrosity: they have accordingly developed a corresponding science of fiction, concerned mainly with the description of such forms of disease, like the botany of leaf-lichens.

In De Balzac's story of Father Goriot, a grocer makes a large fortune, of which he spends on himself as much as may keep him alive; and on his two daughters, all that can promote their pleasures or their pride. He marries them to men of rank, supplies their secret expenses, and provides for his favourite a separate and clandestine establishment with her lover. On his deathbed, he sends for this favourite daughter, who wishes to come, and hesitates for a quarter of an hour between doing so, and going to a ball at which it has been for the last month her chief ambition to be seen. She finally goes to the ball.

This story is, of course, one of which the violent contrasts and spectral catastrophe could only take place, or be conceived, in a large city. A village grocer cannot make a large fortune, cannot marry his daughters to titled squires, and cannot die without having his children brought to him, if in the neighbourhood, by fear of village gossip, if for no better cause.

II. But a much more profound feeling than this mere curiosity of science in morbid phenomena is concerned in the production of the carefullest forms of modern fiction. The disgrace and grief resulting from the mere trampling pressure and electric friction of town life, become to the sufferers peculiarly mysterious in their undeservedness, and frightful
in their inevitableness. The power of all surroundings over them for evil; the incapacity of their own minds to refuse the pollution, and of their own wills to oppose the weight, of the staggering mass that chokes and crushes them into perdition, brings every law of healthy existence into question with them, and every alleged method of help and hope into doubt. Indignation, without any calming faith in justice, and self-contempt, without any curative self-reproach, dull the intelligence, and degrade the conscience, into sullen incredulity of all sunshine outside the dunghill, or breeze beyond the wafting of its impurity; and at last a philosophy develops itself, partly satiric, partly consolatory, concerned only with the regenerative vigour of manure, and the necessary obscurities of fimetic Providence; showing how everybody’s fault is somebody else’s, how infection has no law, digestion no will, and profitable dirt no dishonour.

And thus an elaborate and ingenious scholasticism, in what may be called the Divinity of Decomposition, has established itself in connection with the more recent forms of romance, giving them at once a complacent tone of clerical dignity, and an agreeable dash of heretical impudence; while the inculcated doctrine has the double advantage of needing no laborious scholarship for its foundation, and no painful self-denial for its practice.

III. The monotony of life in the central streets of any great modern city, but especially in those of London, where every emotion intended to be derived by men from the sight of nature, or the sense of art, is forbidden for ever, leaves the craving of the heart for a sincere, yet changeful, interest, to be fed from one source only. Under natural conditions the degree of mental excitement necessary to bodily health is provided by the course of the seasons, and the various skill and fortune of agriculture. In the country every morning of the year brings with it a new aspect of springing or fading nature; a new duty to be fulfilled upon earth, and a new promise or warning in heaven. No day is without its innocent hope, its special prudence, its kindly gift, and its sublime danger; and in every process of wise husbandry, and every
effort of contending or remedial courage, the wholesome passions, pride, and bodily power of the labourer are excited and exerted in happiest unison. The companionship of domestic, the care of serviceable, animals, soften and enlarge his life with lowly charities, and discipline him in familiar wisdoms and unboastful fortitudes; while the divine laws of seed-time which cannot be recalled, harvest which cannot be hastened, and winter in which no man can work, compel the impatiences and coveting of his heart into labour too submissive to be anxious, and rest too sweet to be wanton. What thought can enough comprehend the contrast between such life, and that in streets where summer and winter are only alternations of heat and cold; where snow never fell white, nor sunshine clear; where the ground is only a pavement, and the sky no more than the glass roof of an arcade; where the utmost power of a storm is to choke the gutters, and the finest magic of spring, to change mud into dust: where—chief and most fatal difference in state, there is no interest of occupation for any of the inhabitants but the routine of counter or desk within doors, and the effort to pass each other without collision outside; so that from morning to evening the only possible variation of the monotony of the hours, and lightening of the penalty of existence, must be some kind of mischief, limited, unless by more than ordinary godsend of fatality, to the fall of a horse, or the slitting of a pocket.

I said that under these laws of inanition, the craving of the human heart for some kind of excitement could be supplied from one source only. It might have been thought by any other than a sternly tentative philosopher, that the denial of their natural food to human feelings would have provoked a reactionary desire for it; and that the dreariness of the street would have been gilded by dreams of pastoral felicity. Experience has shown the fact to be otherwise; the thoroughly trained Londoner can enjoy no other excitement than that to which he has been accustomed, but asks for that in continually more ardent or more virulent concentration; and the ultimate power of fiction to entertain him is by varying to his fancy the modes, and defining for his dulness the horrors, of
Death. In the single novel of *Bleak House* there are nine deaths (or left for death's, in the drop scene) carefully wrought out or led up to, either by way of pleasing surprise, as the baby's at the brickmaker's, or finished in their threatenings and sufferings, with as much enjoyment as can be contrived in the anticipation, and as much pathology as can be concentrated in the description. Under the following varieties of method:—

One by assassination  .  .  .  Mr. Tulkinghorn.
One by starvation, with phthisis  Joe.
One by chagrin  .  .  .  Richard.
One by spontaneous combustion  Mr. Krook.
One by sorrow  .  .  .  Lady Dedlock's lover.
One by remorse  .  .  .  Lady Dedlock.
One by insanity  .  .  .  Miss Flite.
One by paralysis  .  .  .  Sir Leicester.

Besides the baby, by fever, and a lively young Frenchwoman left to be hanged.

And all this, observe, not in a tragic, adventurous, or military story, but merely as the further enlivenment of a narrative intended to be amusing; and as a properly representative average of the statistics of civilian mortality in the centre of London.

Observe further, and chiefly. It is not the mere number of deaths (which, if we count the odd troopers in the last scene, is exceeded in *Old Mortality*, and reached, within one or two, both in *Waverley* and *Guy Mannering*) that marks the peculiar tone of the modern novel. It is the fact that all these deaths, but one, are of inoffensive, or at least in the world's estimate respectable persons; and that they are all grotesquely either violent or miserable, purporting thus to illustrate the modern theology that the appointed destiny of a large average of our population is to die like rats in a drain, either by trap or poison. Not, indeed, that a lawyer in full practice can be usually supposed as faultless in the eye of heaven as a dove or a woodcock; but it is not, in former divinities, thought the
will of Providence that he should be dropped by a shot from a client behind his fire-screen, and retrieved in the morning by his housemaid under the chandelier. Neither is Lady Dedlock less reprehensible in her conduct than many women of fashion have been and will be: but it would not therefore have been thought poetically just, in old-fashioned morality, that she should be found by her daughter lying dead, with her face in the mud of a St. Giles's churchyard.

In the work of the great masters death is always either heroic, deserved, or quiet and natural (unless their purpose be totally and deeply tragic, when collateral meaner death is permitted, like that of Polonius or Roderigo). In *Old Mortality*, four of the deaths, Bothwell's, Ensign Grahame's, Macbriar's, and Evandale's, are magnificently heroic; Burley's and Oli-
phant's long deserved, and swift; the troopers', met in the discharge of their military duty, and the old miser's, as gentle as the passing of a cloud, and almost beautiful in its last words of—now unselfish—care.

"Ailie" (he aye ca'd me Ailie, we were auld acquaintance,) 'Ailie, take ye care and hand the gear weel thegither; for the name of Morton of Milnwood's gane out like the last sough of an auld sang.' And sae he fell out o' ae dwam into another, and ne'er spak a word mair, unless it were something we cou'dna mak out, about a dipped candle being gude enough to see to dee wi'. He cou'd ne'er bide to see a moulded ane, and there was ane, by ill luck, on the table.

In *Guy Mannering*, the murder, though unpremeditated, of a single person, (himself not entirely innocent, but at least by heartlessness in a cruel function earning his fate,) is avenged to the uttermost on all the men conscious of the crime; Mr. Bertram's death, like that of his wife, brief in pain, and each told in the space of half-a-dozen lines; and that of the heroine of the tale, self-devoted, heroic in the highest, and happy.

Nor is it ever to be forgotten, in the comparison of Scott's with inferior work, that his own splendid powers were, even 'n early life, tainted, and in his latter years destroyed, by modern conditions of commercial excitement, then first, but
FICTION—FAIR AND FOUL.

161

rapidly, developing themselves. There are parts even in his best novels coloured to meet tastes which he despised; and many pages written in his later ones to lengthen his article for the indiscriminate market.

But there was one weakness of which his healthy mind remained incapable to the last. In modern stories prepared for more refined or fastidious audiences than those of Dickens, the funereal excitement is obtained, for the most part, not by the infliction of violent or disgusting death; but in the suspense, the pathos, and the more or less by all felt, and recognised, mortal phenomena of the sick-room. The temptation, to weak writers, of this order of subject is especially great, because the study of it from the living—or dying—model is so easy, and to many has been the most impressive part of their own personal experience; while, if the description be given even with mediocre accuracy, a very large section of readers will admire its truth, and cherish its melancholy. Few authors of second or third rate genius can either record or invent a probable conversation in ordinary life; but few, on the other hand, are so destitute of observant faculty as to be unable to chronicle the broken syllables and languid movements of an invalid. The easily rendered, and too surely recognised, image of familiar suffering is felt at once to be real where all else had been false; and the historian of the gestures of fever and words of delirium can count on the applause of a gratified audience as surely as the dramatist who introduces on the stage of his flagging action a carriage that can be driven or a fountain that will flow. But the masters of strong imagination disdain such work, and those of deep sensibility shrink from it. Only under conditions of personal weakness, presently to be noted, would Scott comply with the cravings of his lower audience in scenes of terror like the death of Front-de-Boeuf. But he never once withdrew the

1 Nell, in the Old Curiosity Shop, was simply killed for the market, as a butcher kills a lamb (see Forster's Life), and Paul was written under the same conditions of illness which affected Scott—a part of the ominous palsies, grasping alike author and subject, both in Dombey and Little Dorrit.
sacred curtain of the sick-chamber, nor permitted the disgrace of wanton tears round the humiliation of strength, or the wreck of beauty.

IV. No exception to this law of reverence will be found in the scenes in Cœur de Lion's illness introductory to the principal incident in the *Talisman*. An inferior writer would have made the king charge in imagination at the head of his chivalry, or wander in dreams by the brooks of Aquitaine; but Scott allows us to learn no more startling symptoms of the king's malady than that he was restless and impatient, and could not wear his armour. Nor is any bodily weakness, or crisis of danger, permitted to disturb for an instant the royalty of intelligence and heart in which he examines, trusts and obeys the physician whom his attendants fear.

Yet the choice of the main subject in this story and its companion—the trial, to a point of utter torture, of knightly faith, and several passages in the conduct of both, more especially the exaggerated scenes in the House of Baldringham, and hermitage of Engedi, are signs of the gradual decline in force of intellect and soul which those who love Scott best have done him the worst injustice in their endeavours to disguise or deny. The mean anxieties, moral humiliations, and mercilessly demanded brain-toil, which killed him, show their sepulchral grasp for many and many a year before their final victory; and the states of more or less dulled, distorted, and polluted imagination which culminate in *Castle Dangerous*, cast a Stygian hue over *St. Ronan's Well*, *The Fair Maid of Perth*, and *Anne of Geierstein*, which lowers them, the first altogether, the other two at frequent intervals, into fellowship with the normal disease which festers throughout the whole body of our lower fictitious literature.

Fictitious! I use the ambiguous word deliberately; for it is impossible to distinguish in these tales of the prison-house how far their vice and gloom are thrown into their manufacture only to meet a vile demand, and how far they are an integral condition of thought in the minds of men trained from their youth up in the knowledge of Londinian and Parisian misery. The speciality of the plague is a delight in the
exposition of the relations between guilt and decrepitude; and I call the results of it literature 'of the prison-house,' because the thwarted habits of body and mind, which are the punishment of reckless crowding in cities, become, in the issue of that punishment, frightful subjects of exclusive interest to themselves; and the art of fiction in which they finally delight is only the more studied arrangement and illustration, by coloured firelights, of the daily bulletins of their own wretchedness, in the prison calendar, the police news, and the hospital report.

The reader will perhaps be surprised at my separating the greatest work of Dickens, Oliver Twist, with honour, from the loathsome mass to which it typically belongs. That book is an earnest and uncaricatured record of states of criminal life, written with didactic purpose, full of the gravest instruction, nor destitute of pathetic studies of noble passion. Even the Mysteries of Paris and Gaboriau's Crime d'Augival are raised, by their definiteness of historical intention and forewarning anxiety, far above the level of their order, and may be accepted as photographic evidence of an otherwise incredible civilisation, corrupted in the infernal fact of it, down to the genesis of such figures as the Vicomte d'Augival, the Stabber, the Skeleton, and the She-wolf. But the effectual head of the whole cretinous school is the renowned novel in which the hunchbacked lover watches the execution of his

1 Chourineur 'not striking with dagger-point, but ripping with knife-edge. Yet I do him, and La Louve, injustice in classing them with the two others; they are put together only as parts in the same phantasm. Compare with La Louve, the strength of wild virtue in the 'Louvé-cienne' (Lucienne) of Gaborian—she, province-born and bred; and opposed to Parisian civilisation in the character of her sempstress friend. 'De ce Paris, où elle était née, elle savait tout—elle connaissait tout. Rien ne lui connut, nul ne l'intimidait. Sa science des détails matériels de l'existence était inconcevable. Impossible de la duper!—Eh bien! cette fille si laborieuse et si économe n'avait même pas la plus vague notion des sentiments qui sont l'honneur de la femme. Je n'avais pas idée d'une si complète absence de sens moral; d'une si inconsciente dépravation, d'une impudence si effrontément naïve.'—L'Argent des autres, vol. i. p. 358.
mistress from the tower of Notre-Dame; and its strength passes gradually away into the anatomical preparations, for the general market, of novels like *Poor Miss Finch*, in which the heroine is blind, the hero epileptic, and the obnoxious brother is found dead with his hands dropped off, in the Arctic regions.¹

¹The reader who cares to seek it may easily find medical evidence of the physical effects of certain states of brain disease in producing especially images of truncated and Hermes-like deformity, complicated with grossness. Horace, in the *Epodes*, scoffs at it, but not without horror. Luca Signorelli and Raphael in their arabesques are deeply struck by it: Durer, defying and playing with it alternately, is almost beaten down again and again in the distorted faces, hewing halberds, and suspended satyrs of his arabesques round the polyglot Lord’s Prayer; it takes entire possession of Balzac in the *Contes Drolatiques*; it struck Scott in the earliest days of his childish ‘visions’ intensified by the axestroke murder of his grand aunt; L. i. 142, and see close of this note. It chose for him the subject of the *Heart of Midlothian*, and produced afterwards all the recurrent ideas of executions, tainting *Nigel*, almost spoiling *Quentin Durward*—utterly the *Fair Maid of Perth*; and culminating in *Bizarro*, L. x. 149. It suggested all the deaths by falling, or sinking, as in delirious sleep—Kennedy, Eveline Neville (nearly repeated in Clara Mowbray), Amy Robsart, the Master of Ravenswood in the quicksand, Morris, and Corporal Grace-be-here—compare the dream of Grinde, in *Nicholas Nickleby*, and Dickens’s own last words, *ou the ground*, (so also, in my own inflammation of the brain, two years ago, I dreamed that I fell through the earth and came out on the other side). In its grotesque and distorting power, it produced all the figures of the Lay Goblin, Paeolet, Flibbertigibbet, Cockledemoy, Geoffrey Hudson, Fenella, and Nectabannus; in Dickens it in like manner gives Quilp, Krook, Smike, Smallweed, Miss Mowcher, and the dwarfs and wax-work of Nell’s caravan; and runs entirely wild in *Barnaby Rudge*, where, with a *corps de drame* composed of one idiot, two madmen, a gentleman fool who is also a villain, a shop-boy fool who is also a blackguard, a hangman, a shrivelled virago, and a doll in ribands—carrying this company through riot and fire, till he hangs the hangman, one of the madmen, his mother, and the idiot, runs the gentleman-fool through in a bloody duel, and burns and crushes the shop-boy fool into shapelessness, he cannot yet be content without shooting the spare lover’s leg off, and marrying him to the doll in a wooden one; the shapeless shopboy being finally also married in two wooden ones. It is this mutilation, observe, which is the very sign manual of the plague; joined, in the artistic forms of it, with a love of thorniness—(in their mystic root, the
This literature of the Prison-house, understanding by the word not only the cell of Newgate, but also and even more definitely the cell of the Hôtel-Dieu, the Hôpital des Fous, and the grated corridor with the dripping slabs of the Morgue, truncation of the limbless serpent and the spines of the dragon’s wing. Compare Modern Painters, vol. iv., ‘Chapter on the Mountain Gloom,’ s. 19); and in all forms of it, with petrifaction or loss of power by cold in the blood, whence the last Darwinian process of the witches’ charm —‘cool it with a baboon’s blood, then the charm is firm and good.’ The two frescoes in the colossal handbills which have lately decorated the streets of London (the baboon with the mirror, and the Maskelyne and Cooke decapitation) are the final English forms of Raphael’s arabesque under this influence; and it is well worth while to get the number for the week ending April 3, 1880, of Young Folks—‘A magazine of instructive and entertaining literature for boys and girls of all ages,’ containing ‘A Sequel to Desdichado’ (the modern development of Ivanhoe), in which a quite monumental example of the kind of art in question will be found as a leading illustration of this characteristic sentence, ‘See, good Cerberus,’ said Sir Rupert, ‘my hand has been struck off. You must make me a hand of iron, one with springs in it, so that I can make it grasp a dagger.” The text is also, as it professes to be, instructive; being the ultimate degeneration of what I have above called the ‘folly’ of Ivanhoe; for folly begets folly down, and down; and whatever Scott and Turner did wrong has thousands of imitators—their wisdom none will so much as hear, how much less follow!

In both of the Masters, it is always to be remembered that the evil and good are alike conditions of literal vision: and therefore also, inseparably connected with the state of the health. I believe the first elements of all Scott’s errors were in the milk of his consumptive nurse, which all but killed him as an infant, L. i. 19—and was without doubt the cause of the teething fever that ended in his lameness (L. i. 20). Then came (if the reader cares to know what I mean by Fors, let him read the page carefully) the fearful accidents to his only sister, and her death, L. i. 17; then the madness of his nurse, who planned his own murder (21), then the stories continually told him of the executions at Carlisle (24), his aunt’s husband having seen them; issuing, he himself scarcely knows how, in the unaccountable terror that came upon him at the sight of statuary, 31—especially Jacob’s ladder; then the murder of Mrs. Swinton and finally the nearly fatal bursting of the bloodvessel at Kelso, with the succeeding nervous illness, 65–67—solaced, while he was being ‘bled and blistered till he had scarcely a pulse left,’ by that history of the Knights of Malta—fondly dwelt on and realised by actual modelling of their fortress, which returned to his mind for the theme of its last effort in passing away.
having its central root thus in the Ile de Paris—or historically and pre-eminently the 'Cité de Paris'—is, when understood deeply, the precise counter-corruption of the religion of the Sainte Chapelle, just as the worst forms of bodily and mental ruin are the corruption of love. I have therefore called it 'Fiction mécroyante,' with literal accuracy and precision; according to the explanation of the word which the reader may find in any good French dictionary, and round its Arctic pole in the Morgue, he may gather into one Caina of gelid putrescence the entire product of modern infidel imagination, amusing itself with destruction of the body, and busying itself with aberration of the mind.

Aberration, palsy, or plague, observe, as distinguished from normal evil, just as the venom of rabies or cholera differs from that of a wasp or a viper. The life of the insect and serpent deserves, or at least permits, our thoughts; not so the stages of agony in the fury-driven hound. There is some excuse, indeed, for the pathologic labour of the modern novelist in the fact that he cannot easily, in a city population, find a healthy mind to vivisect: but the greater part of such amateur surgery is the struggle, in an epoch of wild literary competition, to obtain novelty of material. The varieties of aspect and colour in healthy fruit, be it sweet or sour, may be within certain limits described exhaustively. Not so the blotches of its conceivable blight: and while the symmetries of integral human character can only be traced by harmonious and tender skill, like the branches of a living tree, the faults and gaps of one gnawed away by corroding accident can be shuffled into senseless change like the wards of a Chubb lock.

V. It is needless to insist on the vast field for this dice-cast or card-dealt calamity which opens itself in the ignorance, money-interest, and mean passion, of city marriage. Peasants know each other as children—meet, as they grow up in testing labour; and if a stout farmer's son marries a handless girl, it is his own fault. Also in the patrician families of the field, the young people know what they are doing, and marry

1 'Se dit par dénigrement, d'un chrétien qui ne croit pas les dogmes de sa religion.'—Fleming, vol. ii. p. 659.
a neighbouring estate, or a covetable title, with some conception of the responsibilities they undertake. But even among these, their season in the confused metropolis creates licentious and fortuitous temptation before unknown; and in the lower middle orders, an entirely new kingdom of discomfort and disgrace has been preached to them in the doctrines of unbridled pleasure which are merely an apology for their peculiar forms of illbreeding. It is quite curious how often the catastrophe, or the leading interest, of a modern novel, turns upon the want, both in maid and bachelor, of the common self-command which was taught to their grandmothers and grandfathers as the first element of ordinarily decent behaviour.

Rashly inquiring the other day the plot of a modern story from a female friend, I elicited, after some hesitation, that it hinged mainly on the young people's 'forgetting themselves in a boat;' and I perceive it to be accepted as nearly an axiom in the code of modern civic chivalry that the strength of amiable sentiment is proved by our incapacity on proper occasions to express, and on improper ones to control it. The pride of a gentleman of the old school used to be in his power of saying what he meant, and being silent when he ought, (not to speak of the higher nobleness which bestowed love where it was honourable, and reverence where it was due); but the automatic amours and involuntary proposals of recent romance acknowledge little further law of morality than the instinct of an insect, or the effervescence of a chemical mixture.

There is a pretty little story of Alfred de Musset's,—*La Mouche*, which, if the reader cares to glance at it, will save me further trouble in explaining the disciplinarian authority of mere old-fashioned politeness, as in some sort protective of higher things. It describes, with much grace and precision, a state of society by no means pre-eminently virtuous, or enthusiastically heroic; in which many people do extremely wrong, and none sublimely right. But as there are heights of which the achievement is unattempted, there are abysses to which fall is barred; neither accident nor temptation will make any of the principal personages swerve from an adopted
resolution, or violate an accepted principle of honour; people
are expected as a matter of course to speak with propriety on
occasion, and to wait with patience when they are bid: those
who do wrong, admit it; those who do right don't boast of
it; everybody knows his own mind, and everybody has good
manners.

Nor must it be forgotten that in the worst days of the self-
indulgence which destroyed the aristocracies of Europe, their
vices, however licentious, were never, in the fatal modern
sense, 'unprincipled.' The vainest believed in virtue; the
vilest respected it. 'Chaque chose avait son nom,'1 and the
severest of English moralists recognises the accurate wit, the
lofty intellect, and the unfretted benevolence, which redeemed
from vitiated surroundings the circle of d'Alembert and Mar-
montel.2

I have said, with too slight praise, that the vainest, in those
days, 'believed' in virtue. Beautiful and heroic examples of
it were always before them; nor was it without the secret sig-
nificance attaching to what may seem the least accidents in
the work of a master, that Scott gave to both his heroines of
the age of revolution in England the name of the queen of the
highest order of English chivalry.3

It is to say little for the types of youth and maid which
alone Scott felt it a joy to imagine, or thought it honourable
to portray, that they act and feel in a sphere where they are
never for an instant liable to any of the weaknesses which
disturb the calm, or shake the resolution, of chastity and
courage in a modern novel. Scott lived in a country and time,

1 'A son nom,' properly. The sentence is one of Victor Cherbuliez's,
in Prosper Randocce, which is full of other valuable ones. See the old
nurse's 'ici bas les choses vont de travers, comme un chien qui va à
vêpres, p. 93; and compare Prosper's treasures, 'la petite Vénus, et le
petit Christ d'ivoire,' p. 121; also Madame Brehanne's request for the
divertissement of 'quelque belle batterie à coups de couteau' with Did-
ier's answer. 'Hélas! madame, vous jouez de malheur, ici dans la
Drôme, l'on se massacre aussi peu que possible,' p. 33.
2 Edgeworth's Tides (Hunter, 1827), 'Harrington and Ormond,' vol.
iii. p. 260.
3 Alice of Salisbury, Alice Lee, Alice Bridgnowth.
when, from highest to lowest, but chiefly in that dignified and nobly severe 1 middle class to which he himself belonged, a habit of serene and stainless thought was as natural to the people as their mountain air. Women like Rose Bradwardine and Ailie Dinmont were the grace and guard of almost every household (God be praised that the race of them is not yet extinct, for all that Mall or Boulevard can do), and it has perhaps escaped the notice of even attentive readers that the comparatively uninteresting character of Sir Walter's heroes had always been studied among a class of youths who were simply incapable of doing anything seriously wrong; and could only be embarrassed by the consequences of theirlevity or impi-
dence.

But there is another difference in the woof of a Waverley novel from the cobweb of a modern one, which depends on Scott's larger view of human life. Marriage is by no means, in his conception of man and woman, the most important business of their existence; 2 nor love the only reward to be proposed to their virtue or exertion. It is not in his reading of the laws of Providence a necessity that virtue should, either by love or any other external blessing, be rewarded at all; 3 and marriage is in all cases thought of as a constituent of the happiness of life, but not as its only interest, still less its only aim. And upon analysing with some care the motives of his principal stories, we shall often find that the love in them is merely a light by which the sterner features of character are to be irradiated, and that the marriage of the hero is as subordinate to the main bent of the story as Henry the Fifth's

1 Scott's father was habitually ascetic. 'I have heard his son tell that it was common with him, if any one observed that the soup was good, to taste it again, and say, 'Yes—it is too good, bairns,' and dash a tumbler of cold water into his plate.'—Lockhart's *Life* (Black, Edinburgh, 1869), vol. i. p. 312. In other places I refer to this book in the simple form of *L.*

2 A young lady sang to me, just before I copied out this page for press, a Miss Somebody's 'great song,' 'Live, and Love, and Die.' Had it been written for nothing better than silkworms, it should at least have added—Spin.

3 See passage of introduction to *Ivanhoe*, wisely quoted in L. vi 106.
courtship of Katherine is to the battle of Agincourt. Nay, the fortunes of the person who is nominally the subject of the tale are often little more than a background on which grander figures are to be drawn, and deeper fates forth-shadowed. The judgments between the faith and chivalry of Scotland at Drumclog and Bothwell bridge owe little of their interest in the mind of a sensible reader to the fact that the captain of the Popinjay is carried a prisoner to one battle, and returns a prisoner from the other: and Scott himself, while he watches the white sail that bears Queen Mary for the last time from her native land, very nearly forgets to finish his novel, or to tell us—and with small sense of any consolation to be had out of that minor circumstance,—that 'Roland and Catherine were united, spite of their differing faiths.'

Neither let it be thought for an instant that the slight, and sometimes scornful, glance with which Scott passes over scenes which a novelist of our own day would have analysed with the airs of a philosopher, and painted with the curiosity of a gossp, indicate any absence in his heart of sympathy with the great and sacred elements of personal happiness. An era like ours, which has with diligence and ostentation swept its heart clear of all the passions once known as loyalty, patriotism, and piety, necessarily magnifies the apparent force of the one remaining sentiment which sighs through the barren chambers, or clings inextricably round the chasms of ruin; nor can it but regard with awe the unconquerable spirit which still tempts or betrays the sagacities of selfishness into error or frenzy which is believed to be love.

That Scott was never himself, in the sense of the phrase as employed by lovers of the Parisian school, 'ivre d'amour,' may be admitted without prejudice to his sensibility, and that he never knew 'l'amor che move l' sol e l'altre stelle,' was the chief, though unrecognised, calamity of his deeply chequered life. But the reader of honour and feeling will not therefore suppose that the love which Miss Vernon sacrifices, stooping for an instant from her horse, is of less noble stamp, or less

¹ See below, note, p. 25, on the conclusion of Woodstock.
enduring faith, than that which troubles and degrades the whole existence of Consuelo; or that the affection of Jeanie Deans for the companion of her childhood, drawn like a field of soft blue heaven beyond the cloudy wrack of her sorrow, is less fully in possession of her soul than the hesitating and self-reproachful impulses under which a modern heroine forgets herself in a boat, or compromises herself in the cool of the evening.

I do not wish to return over the waste ground we have traversed, comparing, point by point, Scott’s manner with those of Bermondsey and the Faubourgs; but it may be, perhaps, interesting at this moment to examine, with illustration from those Waverley novels which have so lately retracted the attention of a fair and gentle public, the universal conditions of ‘style,’ rightly so called, which are in all ages, and above all local currents or wavering tides of temporary manners, pillars of what is for ever strong, and models of what is for ever fair.

But I must first define, and that within strict horizon, the works of Scott, in which his perfect mind may be known, and his chosen ways understood.

His great works of prose fiction, excepting only the first half-volume of Waverley, were all written in twelve years, 1814–26 (of his own age forty-three to fifty-five), the actual time employed in their composition being not more than a couple of months out of each year; and during that time only the morning hours and spare minutes during the professional day. ‘Though the first volume of Waverley was begun long ago, and actually lost for a time, yet the other two were begun and finished between the 4th of June and the first of July, during all which I attended my duty in court, and proceeded without loss of time or hindrance of business.’

Few of the maxims for the enforcement of which, in Modern Painters, long ago, I got the general character of a lover of paradox, are more singular, or more sure, than the statement, apparently so encouraging to the idle, that if a great

1 L. iv. 177.
thing can be done at all, it can be done easily. But it is in
that kind of ease with which a tree blossoms after long years
of gathered strength, and all Scott's great writings were the
recreations of a mind confirmed in dutiful labour, and rich
with organic gathering of boundless resource.

Omitting from our count the two minor and ill-finished
sketches of the Black Dwarf and Legend of Montrose, and, for
a reason presently to be noticed, the unhappy St. Ronan's, the
memorable romances of Scott are eighteen, falling into three
distinct groups, containing six each.

The first group is distinguished from the other two by
characters of strength and felicity which never more appeared
after Scott was struck down by his terrific illness in 1819.
It includes Waverley, Guy Mannering, The Antiquary, Rob Roy,
Old Mortality, and The Heart of Midlothian.

The composition of these occupied the mornings of his
happiest days, between the ages of 43 and 48. On the 8th of
April, 1819 (he was 48 on the preceding 15th of August) he
began for the first time to dictate—being unable for the ex-
ertion of writing—The Bride of Lammermuir, the affection-
ate Laidlaw beseeching him to stop dictating, when his audi-
ble suffering filled every pause. "Nay, Willie," he answered
"only see that the doors are fast. I would fain keep all the
cry as well as all the wool to ourselves; but as for giving
over work, that can only be when I am in woollen." 1 From
this time forward the brightness of joy and sincerity of in-
evitable humour, which perfected the imagery of the earlier
novels, are wholly absent, except in the two short intervals of
health unaccountably restored, in which he wrote Redgauntlet
and Nigel.

It is strange, but only a part of the general simplicity of
Scott's genius, that these revivals of earlier power were un-
conscious, and that the time of extreme weakness in which he
wrote St. Ronan's Well, was that in which he first asserted his
own restoration.

It is also a deeply interesting characteristic of his noble
nature that he never gains anything by sickness; the whole

1 L. vi. 67.
man breathes or faints as one creature; the ache that stiffens a limb chills his heart, and every pang of the stomach paralyses the brain. It is not so with inferior minds, in the workings of which it is often impossible to distinguish native from narcotic fancy, and throbs of conscience from those of indigestion. Whether in exaltation or languor, the colours of mind are always morbid, which gleam on the sea for the 'Ancient Mariner,' and through the casements on 'St. Agnes' Eve;' but Scott is at once blinded and stultified by sickness; never has a fit of the cramp without spoiling a chapter, and is perhaps the only author of vivid imagination who never wrote a foolish word but when he was ill.

It remains only to be noticed on this point that any strong natural excitement, affecting the deeper springs of his heart, would at once restore his intellectual powers in all their fullness, and that, far towards their sunset: but that the strong will on which he prided himself, though it could trample upon pain, silence grief, and compel industry, never could warm his imagination, or clear the judgment in his darker hours.

I believe that this power of the heart over the intellect is common to all great men; but what the special character of emotion was, that alone could lift Scott above the power of death, I am about to ask the reader, in a little while, to observe with joyful care.

The first series of romances then, above named, are all that exhibit the emphasis of his unharmed faculties. The second group, composed in the three years subsequent to illness all but mortal, bear every one of them more or less the seal of it. They consist of the Bride of Lammermuir, Ivanhoe, the Monastery, the Abbot, Kenilworth, and the Pirate.¹ The marks of broken health on all these are essentially twofold—prevailing melancholy, and fantastic improbability. Three of the tales are agonizingly tragic, the Abbot scarcely less so in its main event, and Ivanhoe deeply wounded through all its

¹ One other such novel, and there's an end; but who can last for ever? who ever lasted so long?—Sydney Smith (of the Pirate) to Jeffrey, December 30, 1821. (Letters, vol. ii. p. 223.)
bright panoply; while even in that most powerful of the series, the impossible archeries and axestrokes, the incredibly opportune appearances of Locksley, the death of Ulrica, and the resuscitation of Athelstane, are partly boyish, partly feverish. Caleb in the Bride, Triptolemus and Halero in the Pirate, are all laborious, and the first incongruous; half a volume of the Abbot is spent in extremely dull detail of Roland's relations with his fellow-servants and his mistress, which have nothing whatever to do with the future story; and the lady of Avenel herself disappears after the first volume, 'like a snow wreath when it's thaw, Jeanie.' The public has for itself pronounced on the Monastery, though as much too harshly as it has foolishly praised the horrors of Ravenswood and the nonsense of Ivanhoe; because the modern public finds in the torture and adventure of these, the kind of excitement which it seeks at an opera, while it has no sympathy whatever with the pastoral happiness of Glendearg, or with the lingering simplicities of superstition which give historical likelihood to the legend of the White Lady.

But both this despised tale and its sequel have Scott's heart in them. The first was begun to refresh himself in the intervals of artificial labour on Ivanhoe. 'It was a relief,' he said, 'to interlay the scenery most familiar to me with the strange world for which I had to draw so much on imagination.' Through all the closing scenes of the second he is

1 L. vi. p. 188. Compare the description of Fairy Dean, vii. 192.

2 All, alas! were now in a great measure so written. Ivanhoe, The Monastery, The Abbot and Kenilworth were all published between December 1819 and January 1821, Constable & Co. giving five thousand guineas for the remaining copyright of them, Scott clearing ten thousand before the bargain was completed; and before the Fortunes of Nigel issued from the press Scott had exchanged instruments and received his bookseller's bills for no less than four 'works of fiction,' not one of them otherwise described in the deeds of agreement, to be produced in unbroken succession, each of them to fill up at least three volumes, but with proper saving clauses as to increase of copy money in case any of them should run to four; and within two years all this anticipation had been wiped off by Peveril of the Peak, Quentin Durward, St. Ronan's Well, and Redgauntlet.
raised to his own true level by his love for the queen. And within the code of Scott's work to which I am about to appeal for illustration of his essential powers, I accept the Monastery and Abbot, and reject from it the remaining four of this group.

The last series contains two quite noble ones, Redgauntlet and Nigel; two of very high value, Durward and Woodstock; the slovenly and diffuse Peveril, written for the trade; the sickly Tales of the Crusaders, and the entirely broken and diseased St. Ronan's Well. This last I throw out of count altogether, and of the rest, accept only the four first named as sound work; so that the list of the novels in which I propose to examine his methods and ideal standards, reduces itself to these following twelve (named in order of production): Waverley, Guy Mannering, the Antiquary, Rob Roy, Old Mortality, the Heart of Midlothian, the Monastery, the Abbot, the Fortunes of Nigel, Quentin Durward, and Woodstock.¹

It is, however, too late to enter on my subject in this article, which I may fitly close by pointing out some of the merely verbal characteristics of his style, illustrative in little ways of the questions we have been examining, and chiefly of the one which may be most embarrassing to many readers, the difference, namely, between character and disease.

One quite distinctive charm in the Waverleys is their modified use of the Scottish dialect; but it has not generally been observed, either by their imitators, or the authors of different taste who have written for a later public, that there is a difference between the dialect of a language, and its corruption.

A dialect is formed in any district where there are persons of intelligence enough to use the language itself in all its fineness and force, but under the particular conditions of life, climate, and temper, which introduce words peculiar to the scenery, forms of word and idioms of sentence peculiar to the race, and pronunciations indicative of their character and disposition.

¹ Woodstock was finished 26th March 1826. He knew then of his ruin; and wrote in bitterness, but not in weakness. The closing pages are the most beautiful of the book. But a month afterwards Lady Scott died; and he never wrote glad word more.
Thus 'burn' (of a streamlet) is a word possible only in a country where there are brightly running waters, 'lassie,' a word possible only where girls are as free as the rivulets, and 'auld,' a form of the southern 'old,' adopted by a race of finer musical ear than the English.

On the contrary, mere deteriorations, or coarse, stridulent, and, in the ordinary sense of the phrase, 'broad' forms of utterance, are not dialects at all, having nothing dialectic in them, and all phrases developed in states of rude employment, and restricted intercourse, are injurious to the tone and narrowing to the power of the language they affect. Mere breadth of accent does not spoil a dialect as long as the speakers are men of varied idea and good intelligence; but the moment the life is contracted by mining, millwork, or any oppressive and monotonous labour, the accents and phrases become debased. It is part of the popular folly of the day to find pleasure in trying to write and spell these abortive, crippled, and more or less brutal forms of human speech.

Abortive, crippled, or brutal, are however not necessarily 'corrupted' dialects. Corrupt language is that gathered by ignorance, invented by vice, misused by insensibility, or minced and mouthed by affectation, especially in the attempt to deal with words of which only half the meaning is understood, or half the sound heard. Mrs. Gamp's 'aperiently so' —and the 'undermined' with primal sense of undermine, of—I forget which gossip, in the Mill on the Floss, are master-and mistress pieces in this latter kind. Mrs. Malaprop's 'allegories on the banks of the Nile' are in a somewhat higher order of mistake: Miss Tabitha Bramble's ignorance is vulgarised by her selfishness, and Winifred Jenkins' by her conceit. The 'wot' of Noah Claypole, and the other degradations of cockneyism (Sam Weller and his father are in nothing more admirable than in the power of heart and sense that can purify even these); the 'trewh' of Mr. Chadband, and 'natur' of Mr. Squeers, are examples of the corruption of words by insensibility: the use of the word 'bloody' in modern low English is a deeper corruption, not altering the form of the word, but defiling the thought in it.
Thus much being understood, I shall proceed to examine thoroughly a fragment of Scott's Lowland Scottish dialect; not choosing it of the most beautiful kind; on the contrary, it shall be a piece reaching as low down as he ever allows Scotch to go—it is perhaps the only unfair patriotism in him, that if ever he wants a word or two of really villainous slang, he gives it in English or Dutch—not Scotch.

I had intended in the close of this paper to analyse and compare the characters of Andrew Fairservice and Richie Moniplies for examples, the former of innate evil, unaffected by external influences, and undiseased, but distinct from natural goodness as a nettle is distinct from balm or lavender; and the latter of innate goodness, contracted and pinched by circumstance, but still undiseased, as an oak-leaf crisped by frost, not by the worm. This, with much else in my mind, I must put off; but the careful study of one sentence of Andrew's will give us a good deal to think of.

I take his account of the rescue of Glasgow Cathedral at the time of the Reformation.

Ah! it's a brave kirk—nane o' yere whigmaleeries and curliewurlies and opensteek hems about it—a' solid, weel-jointed mason-wark, that will stand as lang as the world, keep hands and gunpowther aff it. It had amaist a douncome lang syne at the Reformation, when they pu'd doun the kirks of St. Andrews and Perth, and thereawa', to cleanse them o' Papery, and idolatry, and image-worship, and surplices, and sic-like rags o' the muckle hure that sitteth on seven hills, as if ane wasna braid enough for her auld hinder end. Sae the commons o' Renfrew, and o' the Barony, and the Gorbals, and a' about, they behaved to come into Glasgow ae fair morning, to try their hand on purging the High Kirk o' Popish nick-nackets. But the townsman o' Glasgow, they were feared their auld edifice might slip the girths in gaun through siccan rough physic, sce they rang the common bell, and assembled the train-bands wi' took o' drum. By good luck, the worthy James Rabat was Dean o' Guild that year—and a gude mason he was himsell, made him the keener to keep up the auld bigging), and the trades assembled, and offered downright battle to the commons, rather than their kirk should coup the crans, as others had done elsewhere. It wasna for luve o'
Paperie—na, na!—name could ever say that o' the trades o' Glasgow—Sae they sune came to an agreement to take a' the idolatrous statues of sants (sorrow be on them !) out o' their neiks—And sae the bits o' stane idols were broken in pieces by Scripture warrant, and flung into the Molendinar burn, and the auld kirk stood as crouse as a cat when the flaes are kaimed aff her, and a'body was alike pleased. And I hae heard wise folk say, that if the same had been done in ilk a kirk in Scotland, the Reform wad just hae been as pure as it is e'en now, and we wad hae mair Christian-like kirks; for I hae been sae lang in England, that naething will drived out o' my head, that the dog-kennel at Osbaldistone-Hall is better than mony a house o' God in Scotland.

Now this sentence is in the first place a piece of Scottish history of quite inestimable and concentrated value. Andrew's temperament is the type of a vast class of Scottish—shall we call it 'sow-thistlian'—mind, which necessarily takes the view of either Pope or saint that the thistle in Lebanon took of the cedar or lilies in Lebanon; and the entire force of the passions which, in the Scottish revolution, foretold and forearmed the French one, is told in this one paragraph; the coarseness of it, observe, being admitted, not for the sake of the laugh, any more than an onion in broth merely for its flavour, but for the meat of it; the inherent constancy of that coarseness being a fact in this order of mind, and an essential part of the history to be told.

Secondly, observe that this speech, in the religious passion of it, such as there may be, is entirely sincere. Andrew is a thief, a liar, a coward, and, in the Fair service from which he takes his name, a hypocrite; but in the form of prejudice, which is all that his mind is capable of in the place of religion, he is entirely sincere. He does not in the least pretend detestation of image worship to please his master, or any one else; he honestly scorns the 'carnal morality' as dowd and fusionless as rue-leaves at Yule 'of the sermon in the upper cathedral; and when wrapt in critical attention to the 'real savour o' doctrine' in the crypt, so completely forgets the hypocrisy of

1 Compare Mr. Spurgeon's not unfrequent orations on the same subject.
his fair service as to return his master's attempt to disturb him with hard punches of the elbow.

Thirdly. He is a man of no mean sagacity, quite up to the average standard of Scottish common sense, not a low one; and, though incapable of understanding any manner of lofty thought or passion, is a shrewd measurer of weaknesses, and not without a spark or two of kindly feeling. See first his sketch of his master's character to Mr. Hammorgaw, beginning: 'He's no a'thegither sae void o' sense, neither;' and then the close of the dialogue: 'But the lad's no a bad lad after a', and he needs some careful' body to look after him.'

Fourthly. He is a good workman; knows his own business well, and can judge of other craft, if sound, or otherwise.

All these four qualities of him must be known before we can understand this single speech. Keeping them in mind, I take it up, word by word.

You observe, in the outset, Scott makes no attempt whatever to indicate accents or modes of pronunciation by changed spelling, unless the word becomes a quite definitely new and scarcely writeable one. The Scottish way of pronouncing 'James,' for instance, is entirely peculiar, and extremely pleasant to the ear. But it is so, just because it does not change the word into Jeems, nor into Jims, nor into Jawms. A modern writer of dialects would think it amusing to use one or other of these ugly spellings. But Scott writes the name in pure English, knowing that a Scots reader will speak it rightly, and an English one be wise in letting it alone. On the other hand he writes 'weel' for 'well,' because that word is complete in its change, and may be very closely expressed by the double e. The ambiguous u's in 'gude' and 'sune' are admitted, because far liker the sound than the double o would be, and that in 'hure,' for grace' sake, to soften the word;—so also 'flaes' for 'feas.' 'Mony' for 'many' is again positively right in sound, and 'neuk' differs from our 'nook' in sense, and is not the same word at all, as we shall presently see.

Secondly, observe, not a word is corrupted in any indecent haste, slowness, slovenliness, or incapacity of pronunciation. There is no lisping, drawing, slobbering, or snuffling; the
speech is as clear as a bell and as keen as an arrow: and its elisions and contractions are either melodious, (‘na,’ for ‘not,’ —‘pu’d,’ for ‘pulled,’) or as normal as in a Latin verse. The long words are delivered without the slightest bungling; and ‘bigging’ finished to its last g.

I take the important words now in their places.

Brave. The old English sense of the word in ‘to go brave’ retained, expressing Andrew’s sincere and respectful admiration. Had he meant to insinuate a hint of the church’s being too fine, he would have said ‘braw.’

Kirk. This is of course just as pure and unprovincial a word as ‘Kirche,’ or ‘église.’

Whigmaleerie. I cannot get at the root of this word, but it is one showing that the speaker is not bound by classic rules, but will use any syllables that enrich his meaning. ‘Nipperry-tipperty’ (of his master’s ‘poetry-nonsense’) is another word of the same class. ‘Curlieurlie’ is of course just as pure as Shakespeare’s ‘Hurly-burly.’ But see first suggestion of the idea to Scott at Blair-Adam (L. vi. 264).

Opensteek hems. More description, or better, of the later Gothic cannot be put into four syllables. ‘Steek,’ melodious for stitch, has a combined sense of closing or fastening. And note that the later Gothic, being precisely what Scott knew best (in Melrose) and liked best, it is, here as elsewhere, quite as much himself ¹ as Frank, that he is laughing at, when he laughs with Andrew, whose ‘opensteek hems’ are only a ruder metaphor for his own ‘willow-wreaths changed to stone.’

Gunpowther. ‘-Ther’ is a lingering vestige of the French ‘-dre.’

Syne. One of the melodious and mysterious Scottish words which have partly the sound of wind and stream in them, and partly the range of softened idea which is like a distance of blue hills over border land (‘far in the distant Cheviot’s blue’). Perhaps even the least sympathetic ‘Englisher’ might recognise this, if he heard ‘Old Long Since’ vocally substituted

¹ There are three definite and intentional portraits of himself, in the novels, each giving a separate part of himself: Mr. Oldbuck, Frank Os- baldistone, and Alan Fairford.
for the Scottish words to the air. I do not know the root; but the word's proper meaning is not 'since,' but before or after an interval of some duration, 'as weel sune as syne.'

'But first on Sawnie gies a ca', Syne, baudly in she enters.'

Behoved (to come). A rich word, with peculiar idiom, always used more or less ironically of anything done under a partly mistaken and partly pretended notion of duty.

Siccan. Far prettier, and fuller in meaning than 'such.' It contains an added sense of wonder; and means properly 'so great' or 'so unusual.'

Took (o' drum). Classical 'tuck' from Italian 'toccata,' the preluding 'touch' or flourish, on any instrument (but see Johnson under word 'tucket,' quoting Othello). The deeper Scottish vowels are used here to mark the deeper sound of the bass drum, as in more solemn warning.

Bigging. The only word in all the sentence of which the Scottish form is less melodious than the English, 'and what for no,' seeing that Scottish architecture is mostly little beyond Bessie Bell's and Mary Gray's? 'They biggit a bow're by yon burnside, and theekit it ow're wi rashes.' But it is pure Anglo-Saxon in roots; see glossary to Fairbairn's edition of the Douglas Virgil, 1710.

Coup. Another of the much-embracing words; short for 'upset,' but with a sense of awkwardness as the inherent cause of fall; compare Richie Monilies (also for sense of 'behoved '): 'Ae auld hirplin deevil of a potter behoved just to step in my way, and offer me a pig (earthen pot—etym. dub.), as he said "just to put my Scotch ointment in;" and I gave him a push, as but natural, and the tottering deevil coupit owre amang his own pigs, and damaged a score of them.' So also Dandie Dinmont in the postchaise: 'Od! I hope they'll no coup us.'

The Crans. Idiomatic; root unknown to me, but it means in this use, full, total, and without recovery.

Molendinar. From 'molendinium,' the grinding-place. I do not know if actually the local name, or Scott's invention.

1 Andrew knows Latin, and might have coined the word in his conceit; but, writing to a kind friend in Glasgow, I find the brook was
Compare Sir Piercie’s ‘Molinaras.’ But at all events used here with bye-sense of degradation of the formerly idle saints to grind at the mill.

_Croutse._ Courageous, softened with a sense of comfort.

_Ikka._ Again a word with azure distance, including the whole sense of ‘each’ and ‘every.’ The reader must carefully and reverently distinguish these comprehensive words, which gather two or more perfectly understood meanings into one _chord_ of meaning, and are harmonies more than words, from the above-noted blunders between two half-hit meanings, struck as a bad piano-player strikes the edge of another note. In English we have fewer of these combined thoughts; so that Shakespeare rather plays with the distinct lights of his words, than melts them into one. So again Bishop Douglas spells, and doubtless spoke, the word ‘rose,’ differently, according to his purpose; if as the chief or governing ruler of flowers, ‘rois,’ but if only in her own beauty, rose.

_Christian-like._ The sense of the decency and order proper to Christianity is stronger in Scotland than in any other country, and the word ‘Christian’ more distinctly opposed to ‘beast.’ Hence the back-handed cut at the English for their over-pious care of dogs.

I am a little surprised myself at the length to which this examination of one small piece of Sir Walter’s first-rate work has carried us, but here I must end for this time, trusting, if the Editor of the _Nineteenth Century_ permit me, yet to trespass, perhaps more than once, on his readers’ patience; but, at all events, to examine in a following paper the technical characteristics of Scott’s own style, both in prose and verse, called ‘Molyndona’ even before the building of the Sub-dean Mill in 1446. See also account of the locality in Mr. George’s admirable volume, _Old Glasgow_, pp. 129, 149, &c. The Protestantism of Glasgow, since throwing that powder of saints into her brook Kidron, has presented it with other pious offerings; and my friend goes on to say that the brook, once famed for the purity of its waters (much used for bleaching), ‘has for nearly a hundred years been a crawling stream of loathsomeness. It is now bricked over, and a carriage-way made on the top of it; underneath the foul mess still passes through the heart of the city, till it falls into the Clyde close to the harbour.’
together with Byron's, as opposed to our fashionably recent dialects and rhythms; the essential virtues of language, in both the masters of the old school, hinging ultimately, little as it might be thought, on certain unalterable views of theirs concerning the code called 'of the Ten Commandments,' wholly at variance with the dogmas of automatic morality which, summed again by the witches' line, 'Fair is foul, and foul is fair,' hover through the fog and filthy air of our prosperous England.

JOHN RUSKIN.

'He hated greetings in the market-place, and there were generally loiterers in the streets to persecute him either about the events of the day, or about some petty pieces of business.'

These lines, which the reader will find near the beginning of the sixteenth chapter of the first volume of the Antiquary, contain two indications of the old man's character, which, receiving the ideal of him as a portrait of Scott himself, are of extreme interest to me. They mean essentially that neither Monkbarns nor Scott had any mind to be called of men, Rabbi, in mere hearing of the mob; and especially that they hated to be drawn back out of their far-away thoughts, or forward out of their long-ago thoughts, by any manner of 'daily' news, whether printed or gabbled. Of which two vital characteristics, deeper in both the men, (for I must always speak of Scott's creations as if they were as real as himself,) than any of their superficial vanities, or passing enthusiasms, I have to speak more at another time. I quote the passage just now, because there was one piece of the daily news of the year 1815 which did extremely interest Scott, and materially direct the labour of the latter part of his life; nor is there any piece of history in this whole nineteenth century quite so pregnant with various instruction as the study of the reasons which influenced Scott and Byron in their opposite views of the glories of the battle of Waterloo.

But I quote it for another reason also. The principal greeting which Mr. Oldbuck on this occasion receives in the market-place, being compared with the speech of Andrew
Fairservice, examined in my first paper, will furnish me with the text of what I have mainly to say in the present one.

"Mr. Oldbuck," said the town-clerk (a more important person, who came in front and ventured to stop the old gentleman), "the provost, understanding you were in town, begs on no account that you'll quit it without seeing him; he wants to speak to ye about bringing the water frae the Fairwell spring through a part o' your lands."

"What the deuce!—have they nobody's land but mine to cut and carve on?—I won't consent, tell them."

"And the provost," said the clerk, going on, without noticing the rebuff, "and the council, wad be agreeable that you should hae the auld stanes at Donagild's Chapel, that ye was wussing to hae."

"Eh?—what?—Oho! that's another story—Well, well, I'll call upon the provost, and we'll talk about it."

"But ye maun speak your mind on't forthwith, Monk-barns, if ye want the stanes; for Deacon Harlewalls thinks the carved through-stanes might be put with advantage on the front of the new council-house—that is, the twa cross-legged figures that the callants used to ca' Robbin and Bobbin, ane on ilka door-cheek; and the other stane, that they ca'd Ailie Dailie, abune the door. It will be very tastefu', the Deacon says, and just in the style of modern Gothic."

"Good Lord deliver me from this Gothic generation!" exclaimed the Antiquary,—"a monument of a knight-templar on each side of a Grecian porch, and a Madonna on the top of it!—*O criminis!*—Well, tell the provost I wish to have the stones, and we'll not differ about the water-course.—It's lucky I happened to come this way to-day."

'They parted mutually satisfied; but the wily clerk had most reason to exult in the dexterity he had displayed, since the whole proposal of an exchange between the monuments (which the council had determined to remove as a nuisance, because they encroached three feet upon the public road) and the privilege of conveying the water to the burgh, through the estate of Monk-barns, was an idea which had originated with himself upon the pressure of the moment.'
In this single page of Scott, will the reader please note the kind of prophetic instinct with which the great men of every age mark and forecast its destinies? The water from the Fairwell is the future Thirlmere carried to Manchester; the 'auld stanes' at Donagild's Chapel, removed as a nuisance,

1 The following fragments out of the letters in my own possession, written by Scott to the builder of Abbotsford, as the outer decorations of the house were in process of completion, will show how accurately Scott had pictured himself in Monkbars.

'Abbotsford: April 21, 1817.

'Dear Sir,—Nothing can be more obliging than your attention to the old stones. You have been as true as the sundial itself.' [The sundial had just been erected.] 'Of the two I would prefer the larger one, as it is to be in front of a parapet quite in the old taste. But in case of accidents it will be safest in your custody till I come to town again on the 12th of May. Your former favours (which were weighty as acceptable) have come safely out here, and will be disposed of with great effect.'

'Abbotsford: July 30.

'I fancy the Tolbooth still keeps its feet, but, as it must soon descend, I hope you will remember me. I have an important use for the niche above the door; and though many a man has got a niche in the Tolbooth by building, I believe I am the first that ever got a niche out of it on such an occasion. For which I have to thank your kindness, and to remain very much your obliged humble servant,

'WALTER SCOTT.'

'August 16.

'My dear Sir,—I trouble you with this [sic] few lines to thank you for the very accurate drawings and measurements of the Tolbooth door, and for your kind promise to attend to my interest and that of Abbotsford in the matter of the Thistle and Fleur de Lis. Most of our sentineons are now mounted, and look very well, as the house is something after the model of an old hall (not a castle), where such things are well in character.' [Alas—Sir Walter, Sir Walter!] 'I intend the old lion to predominate over a well which the children have christened the Fountain of the Lions. His present den, however, continues to be the hall at Castle Street.'

'September 5.

'Dear Sir,—I am greatly obliged to you for securing the stone. I am not sure that I will put up the gate quite in the old form, but I would like to secure the means of doing so. The ornamental stones are now
foretell the necessary view taken by modern cockneyism, Liberalism, and progress, of all things that remind them of the noble dead, of their father's fame, or of their own duty; and the public road becomes their idol, instead of the saint's shrine. Finally, the roguery of the entire transaction—the mean man seeing the weakness of the honourable, and 'besting' him—in modern slang, in the manner and at the pace of modern trade—'on the pressure of the moment.'

But neither are these things what I have at present quoted the passage for.

I quote it, that we may consider how much wonderful and various history is gathered in the fact, recorded for us in this piece of entirely fair fiction, that in the Scottish borough of Fairport, (Montrose, really,) in the year 17—of Christ, the knowledge given by the pastors and teachers provided for its children by enlightened Scottish Protestantism, of their fathers' history, and the origin of their religion, had resulted in this substance and sum;—that the statues of two crusading knights had become, to their children, Robin and Bobbin; and the statue of the Madonna, Ailie Dailie.

A marvellous piece of history, truly: and far too comprehensive for general comment here. Only one small piece of it I must carry forward the readers' thoughts upon.

The pastors and teachers aforesaid, (represented typically in another part of this errorless book by Mr. Blattergowl) are put up, and have a very happy effect. If you will have the kindness to let me know when the Tolbooth door comes down, I will send in my carts for the stones; I have an admirable situation for it. I suppose the door itself' [he means, the wooden one] 'will be kept for the new jail; if not, and not otherwise wanted, I would esteem it curious to possess it. Certainly I hope so many sore hearts will not pass through the celebrated door when in my possession as heretofore.'

'September 8.

'I should esteem it very fortunate if I could have the door also, though I suppose it is modern, having been burned down at the time of Porteous-mob.

'I am very much obliged to the gentlemen who thought these remains of the Heart of Midlothian are not ill bestowed on their intended possessor.'
not, whatever else they may have to answer for, answerable for these names. The names are of the children's own choosing and bestowing, but not of the children's own inventing. 'Robin' is a classically endearing cognomen, recording the errant heroism of old days—the name of the Bruce and of Rob Roy. 'Bobbin' is a poetical and symmetrical fulfilment and adornment of the original phrase. 'Ailie' is the last echo of 'Ave,' changed into the softest Scottish Christian name familiar to the children, itself the beautiful feminine form of royal 'Louis;' the 'Dailie' again symmetrically added for kinder and more musical endearment. The last vestiges, you see, of honour for the heroism and religion of their ancestors, lingering on the lips of babes and sucklings.

But what is the meaning of this necessity the children find themselves under of completing the nomenclature rhythmically and rhymingly? Note first the difference carefully, and the attainment of both qualities by the couplets in question. Rhythm is the syllabic and quantitative measure of the words, in which Robin, both in weight and time, balances Bobbin; and Dailie holds level scale with Ailie. But rhyme is the added correspondence of sound; unknown and undesired, so far as we can learn, by the Greek Orpheus, but absolutely essential to, and, as special virtue, becoming titular of, the Scottish Thomas.

The 'Ryme,'¹ you may at first fancy, is the especially childish part of the work. Not so. It is the especially chivalric and Christian part of it. It characterises the Christian chant or canticle, as a higher thing than a Greek ode, melos, or hymnos, or than a Latin carmen.

Think of it, for this again is wonderful! That these children of Montrose should have an element of music in their souls which Homer had not,—which a melos of David the Prophet and King had not,—which Orpheus and Amphion had not,—which Apollo's unrymed oracles became mute at the sound of.

¹Henceforward, not in affectation, but for the reader's better convenience, I shall continue to spell 'Ryme' without our wrongly added ë.
A strange new equity this,—melodious justice and judgment as it were,—in all words spoken solemnly and ritualistically by Christian human creatures;—Robin and Bobbin—by the Crusader’s tomb, up to ‘Dies iræ, dies illa,’ at judgment of the crusading soul.

You have to understand this most deeply of all Christian minstrels, from first to last; that they are more musical, because more joyful, than any others on earth: ethereal minstrels, pilgrims of the sky, true to the kindred points of heaven and home; their joy essentially the sky-lark’s, in light, in purity; but, with their human eyes, looking for the glorious appearing of something in the sky, which the bird cannot.

This it is that changes Etruscan murmur into Terza rima—Horatian Latin into Provençal troubadour’s melody; not, because less artful, less wise.

Here is a little bit, for instance, of French ryming just before Chaucer’s time—near enough to our own French to be intelligible to us yet.

‘O quant très-glorieuse vie,
Quant cil quit out peut et maistrie,
Veult esprouver pour nécessaire,
Ne pour quant il ne blasma mie
La vie de Marthe sa mie:
Mais il lui donna exemplaire
D’autrement vivre, et de bien plaire
A Dieu; et plut de bien à faire:
Pour se conclut-il que Marie
Qui estoit à ses piedz sans braire,
Et pensait d’entendre et de taire,
Estlent la plus saine partie.

La meilleur partie eslent-eiie
Et la plus saine et la plus belle,
Qui jà ne luy sera ostée
Car par vérité se fut celle
Qui fut tousjours fresche et nouvelle,
D’aymer Dieu et d’en estre aymée;
Car jusqu’au cœur fut entamée,
Et si ardamment enflamée,
FICTION—FAIR AND FOUL.

Que tous-jours ardoit l'estincelle;
Par quoi elle fut visitée
Et de Dieu premier comfortée;
Car charité est trop ysmelle.'

The only law of metre, observed in this song, is that each line shall be octosyllabic:

Qui fut | tousjours | fresche et | nouvelle,
D'autre | ment vi | vret de | bien (ben) plaire.
Et pen | soit den | tendret | de taire

But the reader must note that words which were two-syllabled in Latin mostly remain yet so in the French.

La vi | e de | Marthe | sa mie,
although mie, which is pet language, loving abbreviation of amica through amie, remains monosyllabic. But vie elides its e before a vowel:

Car Mar- | the me | nait vie | active
Et Ma- | ri-e | contemp | lative;

and custom endures many exceptions. Thus Marie may be three-syllabled as above, or answer to mie as a disyllable; but vierge is always, I think, disyllabic, vier-ge, with even stronger accent on the -ge, for the Latin -go.

Then, secondly, of quantity, there is scarcely any fixed law. The metres may be timed as the minstrel chooses—fast or slow—and the iambic current checked in reverted eddy, as the words chance to come.

But, thirdly, there is to be rich ryming and chiming, no matter how simply got, so only that the words jingle and tingle together with due art of interlacing and answering in different parts of the stanza, correspondent to the involutions of tracery and illumination. The whole twelve-line stanza is thus constructed with two rymes only, six of each, thus arranged:

AAAB | AAAB | BBA | BBA |

dividing the verse thus into four measures, reversed in ascent and descent, or descant more properly; and doubtless with
correspondent phases in the voice-given, and duly accompanying, or following, music; Thomas the Rymer's own precept, that 'tong is chefe in mynstrelsye,' being always kept faithfully in mind."

Here then you have a sufficient example of the pure chant of the Christian ages; which is always at heart joyful, and divides itself into the four great forms, Song of Praise, Song of Prayer, Song of Love, and Song of Battle; praise, however, being the keynote of passion through all the four forms; according to the first law which I have already given in the laws of Fesolé; 'all great Art is Praise,' of which the contrary is also true, all foul or miscreant Art is accusation, διαβολή: 'She gave me of the tree and I did eat' being an entirely museless expression on Adam's part, the briefly essential contrary of Love-song.

With these four perfect forms of Christian chant, of which we may take for pure examples the 'Te Deum,' the 'Te Lucis Ante,' the 'Amor che nella mente,' and the 'Chant de Roland,' are mingled songs of mourning, of Pagan origin (whether Greek or Danish), holding grasp still of the races that have once learned them, in times of suffering and sorrow; and songs of Christian humiliation or grief, regarding chiefly the sufferings of Christ, or the conditions of our own sin: while through the entire system of these musical complaints are interwoven moralities, instructions, and related histories, in illustration of both, passing into Epic and Romantic verse, which gradually, as the forms and learnings of society increase, becomes less joyful, and more didactic, or satiric, until the

1 L. ii. 278.
2 'Che nella mente mia ragiona.' Love—you observe, the highest Reasonableness, instead of French ireuse, or even Shakespearian 'mere folly'; and Beatrice as the Goddess of Wisdom in this third song of the Convito, to be compared with the Revolutionary Goddess of Reason; remembering of the whole poem chiefly the line:—

'Costei penso chi che mosso l'universo.'

(See Lyell's Canzoniere, p. 104.)
last echoes of Christian joy and melody vanish in the 'Vanity of human wishes.'

And here I must pause for a minute or two to separate the different branches of our inquiry clearly from one another. For one thing, the reader must please put for the present out of his head all thought of the progress of 'civilisation'—that is to say, broadly, of the substitution of wigs for hair, gas for candles, and steam for legs. This is an entirely distinct matter from the phases of policy and religion. It has nothing to do with the British Constitution, or the French Revolution, or the unification of Italy. There are, indeed, certain subtle relations between the state of mind, for instance, in Venice, which makes her prefer a steamer to a gondola, and that which makes her prefer a gazetteer to a duke; but these relations are not at all to be dealt with until we solemnly understand that whether men shall be Christians and poets, or infidels and dunces, does not depend on the way they cut their hair, tie their breeches, or light their fires. Dr. Johnson might have worn his wig in fulness conforming to his dignity, without therefore coming to the conclusion that human wishes were vain; nor is Queen Antoinette's civilised hair-powder, as opposed to Queen Bertha's savagely loose hair, the cause of Antoinette's laying her head at last in scaffold dust, but Bertha in a pilgrim-haunted tomb.

Again, I have just now used the words 'poet' and 'dunce,' meaning the degree of each quality possible to average human nature. Men are eternally divided into the two classes of poet (believer, maker, and praiser) and dunce (or unbeliever, unmaker, and dispraiser). And in process of ages they have the power of making faithful and formative creatures of themselves, or unfaithful and deformative. And this distinction between the creatures who, blessing, are blessed, and evermore benedicti, and the creatures who, cursing, are cursed, and evermore maledicti, is one going through all humanity; antediluvian in Cain and Abel, diluvian in Ham and Shem. And the question for the public of any given period is not whether they are a constitutional or unconstitutional vulgus, but whether they are a benignant or malignant vulgus. So also, whether it is
indeed the gods who have given any gentleman the grace to despise the rabble, depends wholly on whether it is indeed the rabble, or he, who are the malignant persons.

But yet again. This difference between the persons to whom Heaven, according to Orpheus, has granted 'the hour of delight,' and those whom it has condemned to the hour of detestableness, being, as I have just said, of all times and nations,—it is an interior and more delicate difference which we are examining in the gift of Christian, as distinguished from unchristian, song. Orpheus, Pindar, and Horace are indeed distinct from the prosaic rabble, as the bird from the snake; but between Orpheus and Palestrina, Horace and Sidney, there is another division, and a new power of music and song given to the humanity which has hope of the Resurrection.

This is the root of all life and all rightness in Christian harmony, whether of word or instrument; and so literally, that in precise manner as this hope disappears, the power of song is taken away, and taken away utterly. When the Christian falls back out of the bright hope of the Resurrection, even the Orpheus song is forbidden him. Not to have known the hope is blameless: one may sing, unknowing, as the swan, or Philomela. But to have known and fall away from it, and to declare that the human wishes, which are summed in that one —'Thy kingdom come'—are vain! The Fates ordain there shall be no singing after that denial.

For observe this, and earnestly. The old Orphic song, with its dim hope of yet once more Eurydice,—the Philomela song — granted after the cruel silence,—the Halcyon song — with its fifteen days of peace, were all sad, or joyful only in some vague vision of conquest over death. But the Johnsonian vanity of wishes is on the whole satisfactory to Johnson—accepted with gentlemanly resignation by Pope—triumphantly and with bray of penny trumpets and blowing of steam-whistles, proclaimed for the glorious discovery of the civilised ages, by Mrs. Barbauld, Miss Edgeworth, Adam Smith, and

1 ἵνα τῆς τέρψιος—Plato, Laws, ii., Steph. 669. 'Hour' having here nearly the power of 'Fate,' with added sense of being a daughter of Themis.
Co. There is no God, but have we not invented gunpowder?—who wants a God, with that in his pocket? There is no Resurrection, neither angel nor spirit; but have we not paper and pens, and cannot every blockhead print his opinions, and the Day of Judgment become Republican, with everybody for a judge, and the flat of the universe for the throne? There is no law, but only gravitation and congelation, and we are stuck together in an everlasting hail, and melted together in everlasting mud, and great was the day in which our worships were born. And there is no Gospel, but only, whatever we’ve got, to get more, and, wherever we are, to go somewhere else. And are not these discoveries, to be sung of, and drummed of, and fiddled of, and generally made melodiously indubitable in the eighteenth century song of praise?

The Fates will not have it so. No word of song is possible, in that century, to mortal lips. Only polished versification, sententious pentameter and hexameter, until, having turned out its toes long enough without dancing, and pattered with its lips long enough without piping, suddenly Astræa returns to the earth, and a Day of Judgment of a sort, and there bursts out a song at last again, a most curtly melodious triplet of Amphibisænic ryme. ‘Ça ira.’

Amphisbænic, fanged in each ryme with fire, and obeying Erclidoune’s precept, ‘Tong is chefe of mynstrelsye,’ to the syllable.—Don Giovanni’s hitherto fondly chanted ‘Andiam, andiam,’ become suddenly impersonal and prophetic: It shall go, and you also. A cry—before it is a song, then song and

1 'Gunpowder is one of the greatest inventions of modern times, and what has given such a superiority to civilised nations over barbarous!' (Evenings at Home—fifth evening.) No man can owe more than I both to Mrs. Barbauld and Miss Edgeworth; and I only wish that in the substance of what they wisely said, they had been more listened to. Nevertheless, the germs of all modern conceit and error respecting manufactures and industry, as rivals to Art and to Genius, are concentrated in ‘Evenings at Home’ and ‘Harry and Lucy’—being all the while themselves works of real genius, and prophetic of things that have yet to be learned and fulfilled. See for instance the paper, ‘Things by their Right Names,’ following the one from which I have just quoted (The Ship), and closing the first volume of the old edition of the Evenings.
accompaniment together—perfectly done; and the march 'to-
wards the field of Mars. The two hundred and fifty thousand
—they to the sound of stringed music—preceded by young
girls with tricolor streamers, they have shouldered soldier-
wise their shovels and picks, and with one throat are singing
Ça ira.'

Through all the springtime of 1790, 'from Brittany to Bur-
gundy, on most plains of France, under most city walls, there
march and constitutionally wheel to the Ça-iraing mood of
fife and drum—our clear glancing phalanxes;—the song of
the two hundred and fifty thousand, virgin led, is in the long
light of July.' Nevertheless, another song is yet needed, for
phalanx, and for maid. For, two springs and summers having
gone—amphisbenic,—on the 28th of August 1792, 'Dumour-
riez rode from the camp of Maulde, eastwards to Sedan.'

And Longwi has fallen basely, and Brunswick and the Prus-
sian king will beleaguer Verdun, and Clairfait and the Aus-
trians press deeper in over the northern marches, Cimmerian
Europe behind. And on that same night Dumouriez as-
sembles council of war at his lodgings in Sedan. Prussians
here, Austrians there, triumphant both. With broad highway
to Paris and little hindrance—we scattered, helpless here and
there—what to advise? The generals advise retreatting, and
retreating till Paris be sacked at the latest day possible.
Dumouriez, silent, dismisses them,—keeps only, with a sign,
Thouvenot. Silent, thus, when needful, yet having voice, it
appears, of what musicians call tenor-quality, of a rare kind.
Rubini-esque, even, but scarcely producible to fastidious ears
at opera. The seizure of the forest of Argonne follows—the
cannonade of Valmy. The Prussians do not march on Paris
this time, the autumnal hours of fate pass on—Ça ira—and on
the 6th of November, Dumouriez meets the Austrians also.
'Dumouriez wide-winged, they wide-winged—at and around
Jemappes, its green heights fringed and maned with red fire.
And Dumouriez is swept back on this wing and swept back

2 Ibid. iii. 26.
FICTION—FAIR AND FOUL.

on that, and is like to be swept back utterly, when he rushes up in person, speaks a prompt word or two, and then, with clear tenor-pipe, uplifts the hymn of the Marseillaise, ten thousand tenor or bass pipes joining, or say some forty thousand in all, for every heart leaps up at the sound; and so, with rhythmic march melody, they rally, they advance, they rush death-defying, and like the fire whirlwind sweep all manner of Austrians from the scene of action.' Thus, through the lips of Dumouriez, sings Tyrtæus, Rouget de Lisle, 1 'Aux armes—marchons!' Iambic measure with a witness! in what wide strophe here beginning—in what unthought-of antistrophe returning to that council chamber in Sedan!

While these two great songs were thus being composed, and sung, and danced to in cometary cycle, by the French nation, here in our less giddy island there rose, amidst hours of business in Scotland and of idleness in England, three troubadours of quite different temper. Different also themselves, but not opponent; forming a perfect chord, and adverse all the three of them alike to the French musicians, in this main point—that while the Ça ira and Marseillaise were essentially songs of blame and wrath, the British bards wrote, virtually, always songs of praise, though by no means psalmody in the ancient keys. On the contrary, all the three are alike moved by a singular antipathy to the priests, and are pointed at with fear and indignation by the pietists, of their day;—not without latent cause. For they are all of them, with the most loving service, servants of that world which the Puritan and monk alike despised; and, in the triple chord of their song, could not but appear to the religious persons around them as respectively and specifically the praisers—Scott of the world, Burns of the flesh, and Byron of the devil.

To contend with this carnal orchestra, the religious world, having long ago rejected its Catholic Psalms as antiquated and unscientific, and finding its Puritan melodies sunk into faint jar and twangle from their native trumpet-tone, had nothing to oppose but the innocent, rather than religious,

1 Carlyle, French Revolution, iii. 106, the last sentence altered in a word or two.
verses of the school recognised as that of the English Lakes; very creditable to them; domestic at once and refined; observing the errors of the world outside of the Lakes with a pitying and tender indignation, and arriving in lacustrine seclusion at many valuable principles of philosophy, as pure as the tarns of their mountains, and of corresponding depth.¹

I have lately seen, and with extreme pleasure, Mr. Matthew Arnold's arrangement of Wordsworth's poems; and read with sincere interest his high estimate of them. But a great poet's work never needs arrangement by other hands; and though it is very proper that Silver How should clearly understand and brightly praise its fraternal Rydal Mount, we must not forget that, over yonder, are the Andes, all the while.

Wordsworth's rank and scale among poets were determined by himself, in a single exclamation: —

'What was the great Parnassus' self to thee,
Mount Skiddaw?'

Answer his question faithfully, and you have the relation between the great masters of the Muse's teaching, and the pleasant fingerer of his pastoral flute among the reeds of Rydal.

Wordsworth is simply a Westmoreland peasant, with considerably less shrewdness than most border Englishmen or Scotsmen inherit; and no sense of humour: but gifted (in this singularly) with vivid sense of natural beauty, and a pretty turn for reflections, not always acute, but, as far as they reach, medicinal to the fever of the restless and corrupted life around him. Water to parched lips may be better than Samian wine, but do not let us therefore confuse the qualities of wine and water. I much doubt there being many inglorious Miltons in our country churchyards; but I am very sure there are many Wordsworths resting there, who were inferior to the renowned one only in caring less to hear themselves talk.

¹ I have been greatly disappointed, in taking soundings of our most majestic mountain pools, to find them, in no case, verge on the unfathomable.
With an honest and kindly heart, a stimulating egoism, a wholesome contentment in modest circumstances, and such sufficient ease, in that accepted state, as permitted the passing of a good deal of time in wishing that daisies could see the beauty of their own shadows, and other such profitable mental exercises, Wordsworth has left us a series of studies of the graceful and happy shepherd life of our lake country, which to me personally, for one, are entirely sweet and precious; but they are only so as the mirror of an existent reality in many ways more beautiful than its picture.

But the other day I went for an afternoon's rest into the cottage of one of our country people of old statesman class; cottage lying nearly midway between two village churches, but more conveniently for downhill walk towards one than the other. I found, as the good housewife made tea for me, that nevertheless she went up the hill to church. 'Why do not you go to the nearer church?' I asked. 'Don't you like the clergyman?' 'Oh no, sir,' she answered, 'it isn't that; but you know I couldn't leave my mother.' 'Your mother! she is buried at H—— then?' 'Yes, sir; and you know I couldn't go to church anywhere else.'

That feelings such as these existed among the peasants, not of Cumberland only, but of all the tender earth that gives forth her fruit for the living, and receives her dead to peace, might perhaps have been, to our great and endless comfort, discovered before now, if Wordsworth had been content to tell us what he knew of his own villages and people, not as the leader of a new and only correct school of poetry, but simply as a country gentleman of sense and feeling, fond of primroses, kind to the parish children, and reverent of the spade with which Wilkinson had tilled his lands: and I am by no means sure that his influence on the stronger minds of his time was anywise hastened or extended by the spirit of tunefulness under whose guidance he discovered that heaven rhymed to seven, and Foy to boy.

Tuneful nevertheless at heart, and of the heavenly choir, I gladly and frankly acknowledge him; and our English literature enriched with a new and a singular virtue in the aerial
purity and healthful rightness of his quiet song;—but *aerial* only,—not ethereal; and lowly in its privacy of light.

A measured mind, and calm; innocent, unrepentant; helpful to sinless creatures and scatheless, such of the flock as do not stray. Hopeful at least, if not faithful; content with intimations of immortality such as may be in skipping of lambs, and laughter of children,—incurious to see in the hands the print of the Nails.

A gracious and constant mind; as the herbage of its native hills, fragrant and pure;—yet, to the sweep and the shadow, the stress and distress, of the greater souls of men, as the tufted thyme to the laurel wilderness of Tempe,—as the gleaming euphrasy to the dark branches of Dodona.

[I am obliged to defer the main body of this paper to next month,—revises penetrating all too late into my lacustrine seclusion; as chanced also unluckily with the preceding paper, in which the reader will perhaps kindly correct the consequent misprints, p. 29, l. 20, of 'scarcely' to 'securely,' and p. 31, l. 34, 'full,' with comma, to 'fall,' without one; noticing besides that *Redgauntlet* has been omitted in the italicised list, p. 25, l. 16; and that the reference to note 2 should not be at the word 'imagination,' p. 24, but at the word 'trade,' p. 25, l. 7. My dear old friend, Dr. John Brown, sends me, from Jamieson's *Dictionary*, the following satisfactory end to one of my difficulties:—'Coup the crans.' The language is borrowed from the 'cran,' or trivet on which small pots are placed in cookery, which is sometimes turned with its feet uppermost by an awkward assistant. Thus it signifies to be *completely* upset.]

JOHN RUSKIN.

[BYRON.]

'Parching summer hath no warrant
To consume this crystal well;
Rains, that make each brook a torrent,
Neither sully it, nor swell.'

So was it, year by year, among the unthought-of hills. Little Duddon and child Rotha ran clear and glad; and laughed
from ledge to pool, and opened from pool to mere, translucent, through endless days of peace.

But eastward, between her orchard plains, Loire locked her embracing dead in silent sands; dark with blood rolled Iser; glacial-pale, Beresina-Lethe, by whose shore the weary hearts forgot their people, and their father's house.

Nor unsullied, Tiber; nor unswoln, Arno and Aufidus; and Euroclydon high on Helle's wave; meantime, let our happy piety glorify the garden rocks with snowdrop circlet, and breathe the spirit of Paradise, where life is wise and innocent.

Maps many have we, now-a-days clear in display of earth constituent, air current, and ocean tide. Shall we ever engrave the map of meaner research, whose shadings shall content themselves in the task of showing the depth, or drought, —the calm, or trouble, of Human Compassion?

For this is indeed all that is noble in the life of Man, and the source of all that is noble in the speech of Man. Had it narrowed itself then, in those days, out of all the world, into this peninsula between Cockermouth and Shap?

Not altogether so; but indeed the Vocal piety seemed conclusively to have retired (or excursed?) into that mossy hermitage, above Little Langdale. The Unvocal piety, with the uncomplaining sorrow, of Man, may have had a somewhat wider range, for aught we know: but history disregards those items; and of firmly proclaimed and sweetly canorous religion, there really seemed at that juncture none to be reckoned upon, east of Ingleborough, or north of Criffel. Only under Furness Fells, or by Bolton Priory, it seems we can still write Ecclesiastical Sonnets, stanzas on the force of Prayer, Odes to Duty, and complimentary addresses to the Deity upon His endurance for adoration. Far otherwise, over yonder, by Spezzia Bay, and Ravenna Pineta, and in ravines of Hartz. There, the softest voices speak the wildest words; and Keats discourses of Endymion, Shelley of Demogorgon, Goethe of Lucifer, and Bürger of the Resurrection of Death unto Death—while even Puritan Scotland and Episcopal Anglia produce for us only these three minstrels of doubtful tone, who show but small respect for the 'unco guid,' put but limited faith in gifted
Gilfillan, and translate with unflinching frankness the Mor-
gante Maggiore.¹

Dismal the aspect of the spiritual world, or at least the sound of it, might well seem to the eyes and ears of Saints (such as we had) of the period—dismal in angels’ eyes also assur-
edly! Yet is it possible that the dismalness in angelic sight may be otherwise quartered, as it were, from the way of mor-
tal heraldry; and that seen, and heard, of angels,—again I say —hesitatingly—is it possible that the goodness of the Unco
Guid, and the gift of Gilfillan, and the word of Mr. Blatter-
gowl, may severally not have been the goodness of God, the gift
of God, nor the word of God: but that in the much blotted
and broken efforts at goodness, and in the careless gift which
they themselves despised,² and in the sweet ryme and murmur
of their unpurposed words, the Spirit of the Lord had, indeed,
wandering, as in chaos days on lightless waters, gone forth
in the hearts and from the lips of those other three strange
prophets, even though they ate forbidden bread by the altar
of the poured-out ashes, and even though the wild beast of the
desert found them, and slew.

This, at least, I know, that it had been well for England,
though all her other prophets, of the Press, the Parliament,
the Doctor’s chair, and the Bishop’s throne, had fallen silent;
so only that she had been able to understand with her heart
here and there the simplest line of these, her despised.

¹ It must be put by the original, stanza for stanza, and verse for
verse; and you will see what was permitted in a Catholic country and a
bigoted age to Churchmen, on the score of Religion—and so tell those
buffoons who accuse me of attacking the Liturgy.

² I write in the greatest haste, it being the hour of the Corso, and I
must go and buffoon with the rest. My daughter Allegra is just gone
with the Countess G. in Count G.’s coach and six. Our old Cardinal is
dead, and the new one not appointed yet—but the masquing goes on the
same.² (Letter to Murray, 355th in Moore, dated Ravenna, Feb. 7,
1828.) ⁴ A dreadfully moral place, for you must not look at anybody’s
wife, except your neighbour’s.

² See quoted infra the mock, by Byron, of himself and all other mod-
ern poets, Juan, canto iii. stanza 86, and compare canto xiv. stanza 8.
In reference of future quotations the first numeral will stand always for
canto; the second for stanza; the third, if necessary, for line.
I take one at mere chance:

'Who thinks of self, when gazing on the sky?'

Well, I don't know; Mr. Wordsworth certainly did, and observed, with truth, that its clouds took a sober colouring in consequence of his experiences. It is much if, indeed, this sadness be unselfish, and our eyes have kept loving watch o'er Man's Mortality. I have found it difficult to make any one now-a-days believe that such sobriety can be; and that Turner saw deeper crimson than others in the clouds of Goldau. But that any should yet think the clouds brightened by Man's Immortality instead of dulled by his death,—and, gazing on the sky, look for the day when every eye must gaze also—for behold, He cometh with the clouds—this it is no more possible for Christian England to apprehend, however exorted by her gifted and guid.

'But Byron was not thinking of such things!'—He, the reprobate! how should such as he think of Christ?

Perhaps not wholly as you or I think of Him. Take, at chance, another line or two, to try:

'Carnage (so Wordsworth tells you) is God's daughter;'
If he speak truth, she is Christ's sister, and
Just now, behaved as in the Holy Land.'

Blasphemy, cry you, good reader? Are you sure you understand it? The first line I gave you was easy Byron—almost shallow Byron—these are of the man in his depth, and you will not fathom them, like a tarn,—nor in a hurry.

'Just now behaved as in the Holy Land.' How did Carnage behave in the Holy Land then? You have all been greatly questioning, of late, whether the sun, which you find to be now going out, ever stood still. Did you in any lagging minute, on those scientific occasions, chance to reflect what he

1 Island, ii. 16, where see context.
2 Juan, viii. 5; but, by your Lordship's quotation, Wordsworth says 'instrument'—not 'daughter.' Your Lordship had better have said 'Infant' and taken the Woolwich authorities to witness: only Infant would not have rymed.
was bid stand still for? or if not—will you please look—and what, also, going forth again as a strong man to run his course, he saw, rejoicing?

'Then Joshua passed from Makkedah unto Libnah—and fought against Libnah. And the Lord delivered it and the king thereof into the hand of Israel, and he smote it with the edge of the sword, and all the souls that were therein.' And from Lachish to Eglon, and from Eglon to Kirjath-Arba, and Sarah's grave in the Amorites' land, 'and Joshua smote all the country of the hills and of the south—and of the vale and of the springs, and all their kings; he left none remaining, but utterly destroyed all that breathed—as the Lord God of Israel commanded.'

Thus 'it is written:' though you perhaps do not so often hear these texts preached from, as certain others about taking away the sins of the world. I wonder how the world would like to part with them! hitherto it has always preferred parting first with its Life—and God has taken it at its word. But Death is not His Begotten Son, for all that; nor is the death of the innocent in battle carnage His 'instrument for working out a pure intent' as Mr. Wordsworth puts it; but Man's instrument for working out an impure one, as Byron would have you to know. Theology perhaps less orthodox, but certainly more reverent;—neither is the Woolwich Infant a Child of God; neither does the iron-clad 'Thunderer' utter thunders of God—which facts, if you had had the grace or sense to learn from Byron, instead of accusing him of blasphemy, it had been better at this day for you, and for many a savage soul also, by Euxine shore, and in Zulu and Afghan lands.

It was neither, however, for the theology, nor the use, of these lines that I quoted them; but to note this main point of Byron's own character. He was the first great Englishman who felt the cruelty of war, and, in its cruelty, the shame. Its guilt had been known to George Fox—its folly shown practically by Penn. But the compassion of the pious world had r= liable for the most part been shown only in keeping its stock = of Barabbases unhanged if possible: and, till Byron
came, neither Kunersdorf, Eylau, nor Waterloo, had taught the pity and the pride of men that

'The drying up a single tear has more Of honest fame than shedding seas of gore.'

Such pacific verse would not indeed have been acceptable to the Edinburgh volunteers on Portobello sands. But Byron can write a battle song too, when it is his cue to fight. If you look at the introduction to the *Isles of Greece*, namely the 85th and 86th stanzas of the 3rd canto of *Don Juan*,—you will find—what will you not find, if only you understand them! 'He' in the first line, remember, means the typical modern poet.

'Thus usually, when he was asked to sing,
He gave the different nations something national.
'Twas all the same to him—"God save the King"
Or "Ça ira" according to the fashion all;
His muse made increment of anything
From the high lyric down to the low rational:
If Pindar sang horse-races, what should hinder
Himself from being as pliable as Pindar?

'In France, for instance, he would write a chanson;
In England a six-canto quarto tale;
In Spain, he'd make a ballad or romance on
The last war—much the same in Portugal;
In Germany, the Pegasus he'd prance on
Would be old Goethe's—(see what says de Staël)
In Italy he'd ape the 'Trecentisti';
In Greece, he'd sing some sort of hymn like this t' ye.

Note first here, as we did in Scott, the concentrating and foretelling power. The 'God Save the Queen' in England, fallen hollow now, as the 'Ça ira' in France—not a man in

*Juan*, viii. 3; compare 14 and 63, with all its lovely context 61—68: then 82, and afterwards slowly and with thorough attention, the Devil's speech, beginning, 'Yes, Sir, you forget' in scene 2 of *The Deformed Transformed*: then Sardanapalus's, act i. scene 2, beginning 'he is gone, and on his finger bears my signet,' and finally, the *Vision of Judgment*, stanzas 3 to 5.
France knowing where either France or 'that' (whatever 'that' may be) is going to; nor the Queen of England daring, for her life, to ask the tiniest Englishman to do a single thing he doesn't like;—nor any salvation, either of Queen or Realm, being any more possible to God, unless under the direction of the Royal Society: then, note the estimate of height and depth in poetry, swept in an instant, 'high lyric to low rational.' Pindar to Pope (knowing Pope's height, too, all the while, no man better); then, the poetic power of France—resumed in a word—Béranger; then the cut at Marmion, entirely deserved, as we shall see, yet kindly given, for everything he names in these two stanzas is the best of its kind; then Romance in Spain on—the last war, (present war not being to Spanish poetical taste), then, Goethe the real heart of all Germany, and last, the aping of the Trecentisti which has since consummated itself in Pre-Raphaelitism! that also being the best thing Italy has done through England, whether in Rossetti's 'blessed damozels' or Burne Jones's 'days of creation.' Lastly comes the mock at himself—the modern English Greek—(followed up' by the 'degenerate into hands like mine' in the song itself); and then—to amazement, forth he thunders in his Achilles voice. We have had one line of him in his clearness—five of him in his depth—sixteen of him in his play. Hear now but these, out of his whole heart:

'What,—silent yet? and silent all?
Ah no, the voices of the dead
Sound like a distant torrent's fall,
And answer, 'Let one living head,
But one, arise—we come—we come:"
—'Tis but the living who are dumb.'

Resurrection, this, you see like Bürger's; but not of death unto death.
'Sound like a distant torrent's fall.' I said the whole heart of Byron was in this passage. First its compassion, then its indignation, and the third element, not yet examined, that love of the beauty of this world in which the three—unholy
—children, of its Fiery Furnace were like to each other; but Byron the widest-hearted. Scott and Burns love Scotland more than Nature itself: for Burns the moon must rise over Cumnock Hills,—for Scott, the Rymer's glen divide the Eildons; but, for Byron, Loch-na-Gar with Ida, looks o'er Troy, and the soft murmurs of the Dee and the Bruar change into voices of the dead on distant Marathon.

Yet take the parallel from Scott, by a field of homelier rest:—

'And silence aids—though the steep hills
Send to the lake a thousand rills;
In summer tide, so soft they weep,
The sound but lulls the ear asleep;
Your horse's hoof-tread sounds too rude,
So stilly is the solitude.

Naught living meets the eye or ear,
But well I ween the dead are near;
For though, in feudal strife, a foe
Hath laid our Lady's Chapel low,
Yet still beneath the hallowed soil,
The peasant rests him from his toil,
And, dying, bids his bones be laid
Where erst his simple fathers prayed.'

And last take the same note of sorrow—with Burns's finger on the fall of it:

'Mourn, ilka grove the cushat kens,
Ye hazly shaws and briery dens,
Ye burnies, wimplin' down your glens
Wi' toddlin' din,
Or foamin' strang wi' hasty stens
Frae lin to lin.'

As you read, one after another, these fragments of chant by the great masters, does not a sense come upon you of some element in their passion, no less than in their sound, different, specifically, from that of 'Parching summer hath no warrant'? Is it more profane, think you—or more tender—nay, perhaps, in the core of it, more true?
For instance, when we are told that

‘Wharfe, as he moved along,
To matins joined a mournful voice,’

is this disposition of the river’s mind to pensive psalmody quite logically accounted for by the previous statement, (itself by no means rhythmically dulce,) that

‘The boy is in the arms of Wharfe,
And strangled by a merciless force?’

Or, when we are led into the improving reflection,

‘How sweet were leisure, could it yield no more
Then ‘mid this wave-washed churchyard to recline,
From pastoral graves extracting thoughts divine!’

—is the divinity of the extract assured to us by its being made at leisure, and in a reclining attitude—as compared with the meditations of otherwise active men, in an erect one? Or are we perchance, many of us, still erring somewhat in our notions alike of Divinity and Humanity,—poetical extraction, and moral position?

On the chance of its being so, might I ask hearing for just a few words more of the school of Belial?

Their occasion, it must be confessed, is a quite unjustifiable one. Some very wicked people—mutineers, in fact—have retired, misanthropically, into an unfrequented part of the country, and there find themselves safe, indeed, but extremely thirsty. Whereupon Byron thus gives them to drink:

‘A little stream came tumbling from the height
And straggling into ocean as it might.
Its bounding crystal frolicked in the ray
And gushed from cliff to crag with saltless spray,
Close on the wild wide ocean,—yet as pure
And fresh as Innocence; and more secure.
Its silver torrent glittered o’er the deep
As the shy chamois’ eye o’erlooks the steep,
While, far below, the vast and sullen swell
Of ocean’s Alpine azure rose and fell.’

1 Island, iii. 3, and compare, of shore surf, the ‘slings its high flakes, shivered into sleet’ of stanza 7.
Now, I beg, with such authority as an old workman may take concerning his trade, having also looked at a waterfall or two in my time, and not unfrequently at a wave, to assure the reader that here is entirely first-rate literary work. Though Lucifer himself had written it, the thing is itself good, and not only so, but unsurpassably good, the closing line being probably the best concerning the sea yet written by the race of the sea-kings.

But Lucifer himself could not have written it; neither any servant of Lucifer. I do not doubt but that most readers were surprised at my saying, in the close of my first paper, that Byron's 'style' depended in any wise on his views respecting the Ten Commandments. That so all-important a thing as 'style' should depend in the least upon so ridiculous a thing as moral sense: or that Allegra's father, watching her drive by in Count G.'s coach and six, had any remnant of so ridiculous a thing to guide,—or check,—his poetical passion, may alike seem more than questionable to the liberal and chaste philosophy of the existing British public. But, first of all, putting the question of who writes, or speaks, aside, do you, good reader, know good 'style' when you get it? Can you say, of half-a-dozen given lines taken anywhere out of a novel, or poem, or play, That is good, essentially, in style, or bad, essentially? and can you say why such half-dozen lines are good, or bad?

I imagine that in most cases, the reply would be given with hesitation, yet if you will give me a little patience, and take some accurate pains, I can show you the main tests of style in the space of a couple of pages.

I take two examples of absolutely perfect, and in manner highest, i. e. kingly, and heroic, style: the first example in expression of anger, the second of love.

(1) 'We are glad the Dauphin is so pleasant with us,
   His present, and your pains, we thank you for.
When we have match'd our rackets to these balls,
We will in France, by God's grace, play a set,
   Shall strike his father's crown into the hazard.'
(2) 'My gracious Silence, hail!
Would'st thou have laughed, had I come coffin'd home
That weep'st to see me triumph? Ah, my dear,
Such eyes the widows in Corioli wear,
And mothers that lack sons.'

Let us note, point by point, the conditions of greatness common to both these passages, so opposite in temper.

A. Absolute command over all passion, however intense; this the first-of-first conditions, (see the King's own sentence just before, 'We are no tyrant, but a Christian King, Unto whose grace our passion is as subject As are our wretches fettered in our prisons'); and with this self-command, the supremely surveying grasp of every thought that is to be uttered, before its utterance; so that each may come in its exact place, time, and connection. The slightest hurry, the misplacing of a word, or the unnecessary accent on a syllable, would destroy the 'style' in an instant.

B. Choice of the fewest and simplest words that can be found in the compass of the language, to express the thing meant: these few words being also arranged in the most straightforward and intelligible way; allowing inversion only when the subject can be made primary without obscurity: (thus, 'his present, and your pains, we thank you for' is better than 'we thank you for his present and your pains,' because the Dauphin's gift is by courtesy put before the Ambassador's pains; but 'when to these balls our rackets we have matched' would have spoiled the style in a moment, because—

I was going to have said, ball and racket are of equal rank, and therefore only the natural order proper; but also here the natural order is the desired one, the English racket to have precedence of the French ball. In the fourth line the 'in France' comes first, as announcing the most important resolution of action; the 'by God's grace' next, as the only condition rendering resolution possible; the detail of issue follows with the strictest limit in the final word. The King does not say 'danger,' far less 'dishonour,' but 'hazard' only; of that he is, humanly speaking, sure.

C. Perfectly emphatic and clear utterance of the chosen
words; slowly in the degree of their importance, with omission however of every word not absolutely required; and natural use of the familiar contractions of final disyllable. Thus, 'play a set shall strike' is better than 'play a set that shall strike,' and 'match'd' is kingly short—no necessity could have excused 'matched' instead. On the contrary, the three first words, 'We are glad,' would have been spoken by the king more slowly and fully than any other syllables in the whole passage, first pronouncing the kingly 'we' at its proudest, and then the 'are' as a continuous state, and then the 'glad,' as the exact contrary of what the ambassadors expected him to be.'

D. Absolute spontaneity in doing all this, easily and necessarily as the heart beats. The king cannot speak otherwise than he does—nor the hero. The words not merely come to them, but are compelled to them. Even lisping numbers 'come,' but mighty numbers are ordained, and inspired.

E. Melody in the words, changeable with their passion fitted to it exactly and the utmost of which the language is capable—the melody in prose being Eolian and variable—in verse, nobler by submitting itself to stricter law. I will enlarge upon this point presently.

F. Utmost spiritual contents in the words; so that each carries not only its instant meaning, but a cloudy companionship of higher or darker meaning according to the passion—nearly always indicated by metaphor: 'play a set'—sometimes by abstraction—(thus in the second passage 'silence' for silent one) sometimes by description instead of direct epithet ('coffined' for dead) but always indicative of there being more in the speaker's mind than he has said, or than he can say, full though his saying be. On the quantity of this attendant fulness depends the majesty of style; that is to

1A modern editor—of whom I will not use the expressions which occur to me—finding the 'we' a redundant syllable in the iambic line, prints 'we're.' It is a little thing—but I do not recollect, in the forty years of my literary experience, any piece of editor's retouch quite so base. But I don't read the new editions much; that must be allowed for.
say, virtually, on the quantity of contained thought in briefest words, such thought being primarily loving and true: and this the sum of all—that nothing can be well said, but with truth, nor beautifully, but by love.

These are the essential conditions of noble speech in prose and verse alike, but the adoption of the form of verse, and especially rymed verse, means the addition to all these qualities of one more; of music, that is to say, not Eolian merely, but Apolline; a construction or architecture of words fitted and befitting, under external laws of time and harmony.

When Byron says 'rhyme is of the rude,'¹ he means that Burns needs it,—while Henry the Fifth does not, nor Plato, nor Isaiah—yet in this need of it by the simple, it becomes all the more religious: and thus the loveliest pieces of Christian language are all in ryme—the best of Dante, Chaucer, Douglas, Shakespeare, Spenser, and Sidney.

I am not now able to keep abreast with the tide of modern scholarship; (nor, to say the truth, do I make the effort, the

¹ Island, ii. 5. I was going to say, 'Look to the context,' but am fain to give it here; for the stanza, learned by heart, ought to be our school-introduction to the literature of the world.

¹ Such was this ditty of Tradition's days,
Which to the dead a lingering fame conveys
In song, where fame as yet hath left no sign
Beyond the sound whose charm is half divine;
Which leaves no record to the sceptic eye,
But yields young history all to harmony;
A boy Achilles, with the centaur's lyre
In hand, to teach him to surpass his sire,
For one long-cherish'd ballad's simple stave
Rung from the rock, or mingled with the wave,
Or from the bubbling streamlet's grassy side,
Or gathering mountain echoes as they glide,
Hath greater power o'er each true heart and ear,
Than all the columns Conquest's minions rear;
Invites, when hieroglyphics are a theme
For sages' labours or the student's dream;
Attracts, when History's volumes are a toil—
The first, the freshest bud of Feeling's soil.
Such was this rude rhyme—rhyme is of the rude,
But such inspired the Norseman's solitude,
Who came and conquer'd; such, wherever rise
Lands which no foes destroy or civilise,
Exist; and what can our accomplish'd art
Of verse do more than reach the awaken'd heart?
first edge of its waves being mostly muddy, and apt to make a shallow sweep of the shore refuse :) so that I have no better book of reference by me than the confused essay on the antiquity of ryme at the end of Turner’s Anglo-Saxons. I cannot however conceive a more interesting piece of work, if not yet done, than the collection of sifted earliest fragments known of rymed song in European languages. Of Eastern I know nothing; but, this side Hellespont, the substance of the matter is all given in King Canute’s impromptu

‘Gaily (or is it sweetly?—I forget which, and it’s no matter) sang the monks of Ely, As Knut the king came sailing by;’

much to be noted by any who make their religion lugubrious, and their Sunday the eclipse of the week. And observe further, that if Milton does not ryme, it is because his faculty of Song was concerning Loss, chiefly; and he has little more than faculty of Croak, concerning Gain; while Dante, though modern readers never go further with him than into the Pit, is stayed only by Casella in the ascent to the Rose of Heaven. So, Gibbon can write in his manner the Fall of Rome; but Virgil, in his manner, the rise of it; and finally Douglas, in his manner, bursts into such rymed passion of praise both of Rome and Virgil, as befits a Christian Bishop, and a good subject of the Holy See.

‘Master of Masters—sweet source, and springing well, Wide where over all ringes thy heavenly bell; . . . . . . Why should I then with dull forehead and vain, With rude ingene, and barane, emptive brain, With bad harsh speech, and lewit barbare tongue Presume to write, where thy sweet bell is rung, Or counterfeit thy precious wordis dear? Na, na—not so; but kneel when I them hear. But farther more—and lower to descend Forgive me, Virgil, if I thee offend Pardon thy scolar, suffer him to ryme Since thou wast but ane mortal man sometime.’
'Before honour is humility.' Does not clearer light come for you on that law after reading these nobly pious words? And note you whose humility? How is it that the sound of the bell comes so instinctively into his chiming verse? This gentle singer is the son of—Archibald Bell-the-Cat! And now perhaps you can read with right sympathy the scene in Marmion between his father and King James.

'His hand the monarch sudden took—
Now, by the Bruce's soul,
Angus, my hasty speech forgive,
For sure as doth his spirit live
As he said of the Douglas old
I well may say of you,—
That never king did subject hold,
In speech more free, in war more bold,
More tender and more true:
And while the king his hand did strain
The old man's tears fell down like rain.'

I believe the most infidel of scholastic readers can scarcely but perceive the relation between the sweetness, simplicity, and melody of expression in these passages, and the gentleness of the passions they express, while men who are not scholastic, and yet are true scholars, will recognise further in them that the simplicity of the educated is lovelier than the simplicity of the rude. Hear next a piece of Spenser's teaching how rudeness itself may become more beautiful even by its mistakes, if the mistakes are made lovingly.

'Ye shepherds' daughters that dwell on the green,
Hye you there apace;
Let none come there but that virgins been
To adorn her grace:
And when you come, whereas she in place,
See that your rudeness do not you disgrace;
Bind your fillets fast,
And gird in your waste,
For more fineness, with a taudry lace.'
Bring hither the pink and purple cullumbine
With gylliflowers;
Bring coronatiōns, and sops in wine,
Worn of paramours;
Strow me the ground with daffadowndillies
And cowslips, and kingcups, and loved lilies;
The pretty paunce
And the chevisaunce
Shall match with the fair flowre-delice.'

Two short pieces more only of master song, and we have enough to test all by.

(2) 'No more, no more, since thou art dead,
   Shall we e'er bring coy brides to bed,
   No more, at yearly festivals,
       We cowslip balls
   Or chains of columbines shall make,
   For this or that occasion's sake.
   No, no! our maiden pleasures be
       Wrapt in thy winding-sheet with thee.'

(3) 'Death is now the phœnix rest,
   And the turtle's loyal breast
   To eternity doth rest.
   Truth may seem, but cannot be;
   Beauty brag, but 'tis not she:
   Truth and beauty buried be.'

If now, with the echo of these perfect verses in your mind, you turn to Byron, and glance over, or recall to memory, enough of him to give means of exact comparison, you will, or should, recognise these following kinds of mischief in him. First, if any one offends him—as for instance Mr. Southey, or Lord Elgin—'his manners have not that repose that marks the caste,' &c. *This defect in his Lordship's style, being my-

1 *Shepherd's Calendar.* 'Coronatiōn,' loyal-pastoral for Carnation;
'sops in wine,' jolly-pastoral for double pink; 'paunce,' thoughtless pastoral for pansy; 'chevisaunce' I don't know, (not in Gerarde);
'flowre-delice'—pronounce dellice—half made up of 'delicate' and 'delicious.'

2 Herrick, *Dirge for Jephthah's Daughter.*

3 *Passionate Pilgrim.*
self scrupulously and even painfully reserved in the use of vituperative language, I need not say how deeply I deplore.¹

Secondly. In the best and most violet-bedded bits of his work there is yet, as compared with Elizabethan and earlier verse, a strange taint; and indefinable — evening flavour of Covent Garden, as it were; — not to say, escape of gas in the Strand. That is simply what it proclaims itself—London air. If he had lived all his life in Green-head Ghyll, things would of course have been different. But it was his fate to come to town—modern town—like Michael's son; and modern London (and Venice) are answerable for the state of their drains, not Byron.

Thirdly. His melancholy is without any relief whatsoever; his jest sadder than his earnest; while, in Elizabethan work, all lament is full of hope, and all pain of balsam.

Of this evil he has himself told you the cause in a single line, prophetic of all things since and now. 'Where he gazed, a gloom pervaded space.'²

So that, for instance, while Mr. Wordsworth, on a visit to town, being an exemplary early riser, could walk, felicitous, on Westminster Bridge, remarking how the city now did like a garment wear the beauty of the morning; Byron, rising somewhat later, contemplated only the garment which the beauty of the morning had by that time received for wear from the city: and again, while Mr. Wordsworth, in irrepressible religious rapture, calls God to witness that the houses seem asleep, Byron, lame demon as he was, flying smoke-drifted, unroofs the houses at a glance, and sees what the

¹ In this point, compare the Curse of Minerva with the Tears of the Muses.
² 'He,'—Lucifer; (Vision of Judgment, 24). It is precisely because Byron was not his servant, that he could see the gloom. To the Devil's true servants, their Master's presence brings both cheerfulness and prosperity; — with a delightful sense of their own wisdom and virtue; and of the 'progress' of things in general: — in smooth sea and fair weather, — and with no need either of helm touch, or oar toil: as when once one is well within the edge of Maelstrom.
mighty cockney heart of them contains in the still lying of it, and will stir up to purpose in the waking business of it,

'The sordor of civilisation, mixed
With all the passions which Man's fall hath fixed.'

Fourthly, with this steadiness of bitter melancholy, there is joined a sense of the material beauty, both of inanimate nature, the lower animals, and human beings, which in the iridescence, colour-depth, and morbid (I use the word deliberately) mystery and softness of it,—with other qualities indescribable by any single words, and only to be analysed by extreme care,—is found, to the full, only in five men that I know of in modern times; namely Rousseau, Shelley, Byron, Turner, and myself,—differing totally and throughout the entire group of us, from the delight in clear-struck beauty of Angelico and the Trecentisti; and separated, much more singularly, from the cheerful joys of Chaucer, Shakespeare, and Scott, by its unaccountable affection for 'Rokkes blak' and other forms of terror and power, such as those of the ice-oceans, which to Shakespeare were only Alpine rheum; and the Via Malas and Diabolic Bridges which Dante would have condemned none but lost souls to climb, or cross;—all this love of impending mountains, coiled thunder-clouds, and dangerous sea, being joined in us with a sulky, almost ferine, love of retreat in valleys of Charmettes, gulphs of Spezzia, ravines of Olympus, low lodgings in Chelsea, and close brushwood at Coniston.

And, lastly, also in the whole group of us, glows volcanic instinct of Astræan justice returning not to, but up out of, the earth, which will not at all suffer us to rest any more in Pope's serene 'whatever is, is right;' but holds, on the contrary, profound conviction that about ninety-nine hundredths of whatever at present is, is wrong: conviction making four of us,

1 Island, ii. 4; perfectly orthodox theology, you observe; no denial of the fall.—nor substitution of Bacterian birth for it. Nay, nearly Evangelical theology, in contempt for the human heart; but with deeper than Evangelical humility, acknowledging also what is sordid in its civilisation.
according to our several manners, leaders of revolution for
the poor; and declavers of political doctrine monstrous to the
ears of mercenary mankind; and driving the fifth, less san-
guine, into mere painted-melody of lament over the fallacy of
Hope and the implacableness of Fate.

In Byron the indignation, the sorrow, and the effort are
joined to the death: and they are the parts of his nature (as
of mine also in its feebler terms), which the selfishly comforta-
ble public have, literally, no conception of whatever: and from
which the piously sentimental public, offering up daily the
pure emotion of divine tranquillity, shrink with anathema not
unembittered by alarm.

Concerning which matters I hope to speak further and with
more precise illustration in my next paper; but, seeing that this
present one has been hitherto somewhat sombre, and perhaps,
to gentle readers, not a little discomposing, I will conclude it
with a piece of light biographic study, necessary to my plan,
and as conveniently admissible in this place as afterwards;—
namely, the account of the manner in which Scott—whom we
shall always find, as aforesaid, to be in salient and palpable
elements of character, of the World, worldly, as Burns is of the
Flesh, fleshly, and Byron of the Deuce, damnable,—spent his
Sunday.

As usual, from Lockhart's farrago we cannot find out the
first thing we want to know,—whether Scott worked after his
week-day custom, on the Sunday morning. But, I gather,
not; at all events his household and his cattle rested (L. iii.
108). I imagine he walked out into his woods, or read quietly
in his study. Immediately after breakfast, whoever was in
the house, 'Ladies and gentlemen, I shall read prayers at
eleven, when I expect you all to attend' (vii. 306). Question
of college and other externally unanimous prayers settled for
us very briefly: 'if you have no faith, have at least manners.'
He read the Church of England service, lessons and all, the
latter, if interesting, eloquently (ibid.). After the service, one
of Jeremy Taylor's sermons (vi. 188). After the sermon, if the
weather was fine, walk with his family, dogs included and
guests, to cold picnic (iii. 109), followed by short extempore
biblical novelettes; for he had his Bible, the Old Testament especially, by heart, it having been his mother's last gift to him (vi. 174). These lessons to his children in Bible history were always given, whether there was picnic or not. For the rest of the afternoon he took his pleasure in the woods with Tom Purdie, who also always appeared at his master's elbow on Sunday after dinner was over, and drank long life to the laird and his lady and all the good company, in a quaigh of whiskey or a tumbler of wine, according to his fancy (vi. 195). Whatever might happen on the other evenings of the week, Scott always dined at home on Sunday; and with old friends: never, unless inevitably, receiving any person with whom he stood on ceremony (v. 335). He came into the room rubbing his hands like a boy arriving at home for the holidays, his Peppers and Mustards gambolling about him, 'and even the stately Maida grinning and wagging his tail with sympathy.' For the usquebaugh of the less honoured week-days, at the Sunday board he circulated the champagne briskly during dinner, and considered a pint of claret each man's fair share afterwards (v. 339). In the evening, music being to the Scottish worldly mind indecorous, he read aloud some favourite author, for the amusement or edification of his little circle. Shakespeare it might be, or Dryden,—Johnson, or Joanna Baillie,—Crabbe, or Wordsworth. But in those days 'Byron was pouring out his spirit fresh and full, and if a new piece from his hand had appeared, it was sure to be read by Scott the Sunday evening afterwards;' and that with such delighted emphasis as showed how completely the elder bard had kept up his enthusiasm for poetry at pitch of youth, and all his admiration of genius, free, pure, and unstained by the least drop of literary jealousy' (v. 341).

With such necessary and easily imaginable varieties as chanced in having Dandy Dinmont or Captain Brown for guests at Abbotsford, or Colonel Mannering, Counsellor Pleydell, and Dr. Robertson in Castle Street, such was Scott's habitual Sabbath: a day, we perceive, of eating the fat, (dinner, presumably not cold, being a work of necessity and mercy—thou also, even thou, Saint Thomas of Trumbull, hast
thine!) and drinking the sweet, abundant in the manner of Mr. Southey's cataract of Lodore,—'Here it comes, sparkling.' A day bestrewn with coronations and sops in wine; deep in libations to good hope and fond memory; a day of rest to beast, and mirth to man, (as also to sympathetic beasts that can be merry,) and concluding itself in an Orphic hour of delight, signifying peace on Tweedside, and goodwill to men, there or far away;—always excepting the French, and Boney.

'Yes, and see what it all came to in the end.'

Not so, dark-virulent Minos-Mucklewrath; the end came of quite other things: of these, came such length of days and peace as Scott had in his Fatherland, and such immortality as he has in all lands.

Nathless, firm, though deeply courteous, rebuke, for his sometimes overmuch light-mindedness, was administered to him by the more grave and thoughtful Byron. For the Lord Abbot of Newstead knew his Bible by heart as well as Scott, though it had never been given him by his mother as her dearest possession. Knew it, and, what was more, had thought of it, and sought in it what Scott had never cared to think, nor been fain to seek.

And loving Scott well, and always doing him every possible pleasure in the way he sees to be most agreeable to him—as, for instance, remembering with precision, and writing down the very next morning, every blessed word that the Prince Regent had been pleased to say of him before courtly audience,—he yet conceived that such cheap ryming as his own Bride of Abydos, for instance, which he had written from beginning to end in four days, or even the travelling reflections of Harold and Juan on men and women, were scarcely steady enough Sunday afternoon's reading for a patriarch-Merlin like Scott. So he dedicates to him a work of a truly religious tendency, on which for his own part he has done his best,—the drama of Cain. Of which dedication the virtual significance to Sir Walter might be translated thus. Dearest and last of Border soothsayers, thou hast indeed told us of Black Dwarfs, and of White Maidens, also of Grey Friars, and Green Fairies; also of sacred hollies by the well, and haunted crooks in the
Fiction—Fair and Foul.

Glen. But of the bushes that the black dogs rend in the woods of Phlegethon; and of the crooks in the glen, and the bickerings of the burnie where ghosts meet the mightiest of us; and of the black misanthrope, who is by no means yet a dwarfed one, and concerning whom wiser creatures than Hobbie Elliot may tremulously ask 'Gude guide us, what's yon?' hast thou yet known, seeing that thou hast yet told, nothing.

Scott may perhaps have his answer. We shall in good time hear.

John Ruskin.
THE

ELEMENTS OF DRAWING

IN

THREE LETTERS TO BEGINNERS

WITH ILLUSTRATIONS DRAWN BY THE AUTHOR
PREFACE.

It may perhaps be thought, that in prefacing a Manual of Drawing, I ought to expatiate on the reasons why drawing should be learned; but those reasons appear to me so many and so weighty, that I cannot quickly state or enforce them. With the reader's permission, as this volume is too large already, I will waive all discussion respecting the importance of the subject, and touch only on those points which may appear questionable in the method of its treatment.

In the first place, the book is not calculated for the use of children under the age of twelve or fourteen. I do not think it advisable to engage a child in any but the most voluntary practice of art. If it has talent for drawing, it will be continually scrawling on what paper it can get; and should be allowed to scrawl at its own free will, due praise being given for every appearance of care, or truth, in its efforts. It should be allowed to amuse itself with cheap colours almost as soon as it has sense enough to wish for them. If it merely daubs the paper with shapeless stains, the colour-box may be taken away till it knows better: but as soon as it begins painting red coats on soldiers, striped flags to ships, etc., it should have colours at command; and, without restraining its choice of subject in that imaginative and historical art, of a military tendency, which children delight in, (generally quite as valuable, by the way, as any historical art delighted in by their elders,) it should be gently led by the parents to try to draw, in such childish fashion as may be, the things it can see and
likes,—birds, or butterflies, or flowers, or fruit. In later years, the indulgence of using the colour should only be granted as a reward, after it has shown care and progress in its drawings with pencil. A limited number of good and amusing prints should always be within a boy's reach: in these days of cheap illustration he can hardly possess a volume of nursery tales without good woodcuts in it, and should be encouraged to copy what he likes best of this kind; but should be firmly restricted to a few prints and to a few books. If a child has many toys, it will get tired of them and break them; if a boy has many prints he will merely dawdle and scrawl over them; it is by the limitation of the number of his possessions that his pleasure in them is perfected, and his attention concentrated. The parents need give themselves no trouble in instructing him, as far as drawing is concerned, beyond insisting upon economical and neat habits with his colours and paper, showing him the best way of holding pencil and rule, and, so far as they take notice of his work, pointing out where a line is too short or too long, or too crooked, when compared with the copy; accuracy being the first and last thing they look for. If the child shows talent for inventing or grouping figures, the parents should neither check, nor praise it. They may laugh with it frankly, or show pleasure in what it has done, just as they show pleasure in seeing it well, or cheerful; but they must not praise it for being clever, any more than they would praise it for being stout. They should praise it only for what costs it self-denial, namely attention and hard work; otherwise they will make it work for vanity's sake, and always badly. The best books to put into its hands are those illustrated by George Cruikshank or by Richter. (See Appendix.) At about the age of twelve or fourteen, it is quite time enough to set youth or girl to serious work; and then this book will, I think, be useful to them; and I have good hope it may be so, likewise, to persons of more advanced age wishing to know something of the first principles of art.

Yet observe, that the method of study recommended is not brought forward as absolutely the best, but only as the best which I can at present devise for an isolated student. It is
very likely that farther experience in teaching may enable me to modify it with advantage in several important respects; but I am sure the main principles of it are sound, and most of the exercises as useful as they can be rendered without a master's superintendence. The method differs, however, so materially from that generally adopted by drawing-masters, that a word or two of explanation may be needed to justify what might otherwise be thought wilful eccentricity.

The manuals at present published on the subject of drawing are all directed, as far as I know, to one or other of two objects. Either they propose to give the student a power of dexterous sketching with pencil or water-colour, so as to emulate (at considerable distance) the slighter work of our second-rate artists; or they propose to give him such accurate command of mathematical forms as may afterwards enable him to design rapidly and cheaply for manufactures. When drawing is taught as an accomplishment, the first is the aim usually proposed; while the second is the object kept chiefly in view at Marlborough House, and in the branch Government Schools of Design.

Of the fitness of the modes of study adopted in those schools, to the end specially intended, judgment is hardly yet possible; only, it seems to me, that we are all too much in the habit of confusing art as applied to manufacture, with manufacture itself. For instance, the skill by which an inventive workman designs and moulds a beautiful cup, is skill of true art; but the skill by which that cup is copied and afterwards multiplied a thousandfold, is skill of manufacture: and the faculties which enable one workman to design and elaborate his original piece, are not to be developed by the same system of instruction as those which enable another to produce a maximum number of approximate copies of it in a given time. Farther: it is surely inexpedient that any reference to purposes of manufacture should interfere with the education of the artist himself. Try first to manufacture a Raphael; then let Raphael direct your manufacture. He will design you a plate, or cup, or a house, or a palace, whenever you want it, and design them in the most convenient and rational way; but do
not let your anxiety to reach the platter and the cup interfere with your education of the Raphael. Obtain first the best work you can, and the ablest hands, irrespective of any consideration of economy or facility of production. Then leave your trained artist to determine how far art can be popularised, or manufacture ennobled.

Now, I believe that (irrespective of differences in individual temper and character) the excellence of an artist, as such, depends wholly on refinement of perception, and that it is this, mainly, which a master or a school can teach; so that while powers of invention distinguish man from man, powers of perception distinguish school from school. All great schools enforce delicacy of drawing and subtlety of sight: and the only rule which I have, as yet, found to be without exception respecting art, is that all great art is delicate.

Therefore, the chief aim and bent of the following system is to obtain, first, a perfectly patient, and, to the utmost of the pupil’s power, a delicate method of work, such as may ensure his seeing truly. For I am nearly convinced, that when once we see keenly enough, there is very little difficulty in drawing what we see; but, even supposing that this difficulty be still great, I believe that the sight is a more important thing than the drawing; and I would rather teach drawing that my pupils may learn to love Nature, than teach the looking at Nature that they may learn to draw. It is surely also a more important thing for young people and unprofessional students, to know how to appreciate the art of others, than to gain much power in art themselves. Now the modes of sketching ordinarily taught are inconsistent with this power of judgment. No person trained to the superficial execution of modern water-colour painting, can understand the work of Titian or Leonardo; they must for ever remain blind to the refinement of such men’s pencilling, and the precision of their thinking. But, however slight a degree of manipulative power the student may reach by pursuing the mode recommended to him in these letters, I will answer for it that he cannot go once through the advised exercises without
beginning to understand what masterly work means; and, by
the time he has gained some proficiency in them, he will have
a pleasure in looking at the painting of the great schools, and
a new perception of the exquisiteness of natural scenery, such
as would repay him for much more labour than I have asked
him to undergo.

That labour is, nevertheless, sufficiently irksome, nor is it
possible that it should be otherwise, so long as the pupil
works unassisted by a master. For the smooth and straight
road which admits unembarrassed progress must, I fear, be
dull as well as smooth; and the hedges need to be close and
trim when there is no guide to warn or bring back the erring
traveller. The system followed in this work will, therefore,
at first, surprise somewhat sorrowfully those who are familiar
with the practice of our class at the Working Men's College;
for there, the pupil, having the master at his side to extricate
him from such embarrassments as his first efforts may lead
into, is at once set to draw from a solid object, and soon finds
entertainment in his efforts and interest in his difficulties.
Of course the simplest object which it is possible to set before
the eye is a sphere; and practically, I find a child's toy, a
white leather ball, better than anything else; as the gradations
on balls of plaster of Paris, which I use sometimes to try the
strength of pupils who have had previous practice, are a little
too delicate for a beginner to perceive. It has been objected
that a circle, or the outline of a sphere, is one of the most
difficult of all lines to draw. It is so; but I do not want it to
be drawn. All that his study of the ball is to teach the pupil,
is the way in which shade gives the appearance of projection.
This he learns most satisfactorily from a sphere; because any
solid form, terminated by straight lines or flat surfaces, owes
some of its appearance of projection to its perspective; but in
the sphere, what, without shade, was a flat circle, becomes,
merely by the added shade, the image of a solid ball; and this
fact is just as striking to the learner, whether his circular out-
line be true or false. He is, therefore, never allowed to
trouble himself about it; if he makes the ball look as oval as
an egg, the degree of error is simply pointed out to him, and
he does better next time, and better still the next. But his mind is always fixed on the gradation of shade, and the outline left to take, in due time, care of itself. I call it outline, for the sake of immediate intelligibility,—strictly speaking, it is merely the edge of the shade; no pupil in my class being ever allowed to draw an outline, in the ordinary sense. It is pointed out to him, from the first, that Nature relieves one mass, or one tint, against another; but outlines none. The outline exercise, the second suggested in this letter, is recommended, not to enable the pupil to draw outlines, but as the only means by which, unassisted, he can test his accuracy of eye, and discipline his hand. When the master is by, errors in the form and extent of shadows can be pointed out as easily as in outline, and the handling can be gradually corrected in details of the work. But the solitary student can only find out his own mistakes by help of the traced limit, and can only test the firmness of his hand by an exercise in which nothing but firmness is required; and during which all other considerations (as of softness, complexity, &c.) are entirely excluded.

Both the system adopted at the Working Men's College, and that recommended here, agree, however, in one principle, which I consider the most important and special of all that are involved in my teaching: namely, the attaching its full importance, from the first, to local colour. I believe that the endeavour to separate, in the course of instruction, the observation of light and shade from that of local colour, has always been, and must always be, destructive of the student's power of accurate sight, and that it corrupts his taste as much as it retards his progress. I will not occupy the reader's time by any discussion of the principle here, but I wish him to note it as the only distinctive one in my system, so far as it is a system. For the recommendation to the pupil to copy faithfully, and without alteration, whatever natural object he chooses to study, is serviceable, among other reasons, just because it gets rid of systematic rules altogether, and teaches people to draw, as country lads learn to ride, without saddle or stirrups; my main object being, at first, not to get my
pupils to hold their reins prettily, but to "sit like a jack-
anapes, never off."

In these written instructions, therefore, it has always been
with regret that I have seen myself forced to advise anything
like monotonous or formal discipline. But, to the unassisted
student, such formalities are indispensable, and I am not with-
out hope that the sense of secure advancement, and the pleas-
ure of independent effort, may render the following out of
even the more tedious exercises here proposed, possible to the
solitary learner, without weariness. But if it should be other-
wise, and he finds the first steps painfully irksome, I can only
desire him to consider whether the acquirement of so great a
power as that of pictorial expression of thought be not worth
some toil; or whether it is likely, in the natural order of
matters in this working world, that so great a gift should be
attainable by those who will give no price for it.

One task, however, of some difficulty, the student will find
I have not imposed upon him: namely, learning the laws of
perspective. It would be worth while to learn them, if he
could do so easily; but without a master's help, and in the
way perspective is at present explained in treatises, the diffi-
culty is greater than the gain. For perspective is not of the
slightest use, except in rudimentary work. You can draw the
rounding line of a table in perspective, but you cannot draw
the sweep of a sea bay; you can foreshorten a log of wood
by it, but you cannot foreshorten an arm. Its laws are too
gross and few to be applied to any subtle form; therefore, as
you must learn to draw the subtle forms by the eye, certainly
you may draw the simple ones. No great painters ever
trouble themselves about perspective, and very few of them
know its laws; they draw everything by the eye, and, nat-
urally enough, disdain in the easy parts of their work rules
which cannot help them in difficult ones. It would take
about a month's labour to draw imperfectly, by laws of per-
spective, what any great Venetian will draw perfectly in five
minutes, when he is throwing a wreath of leaves round a
head, or bending the curves of a pattern in and out among
the folds of drapery. It is true that when perspective was
first discovered, everybody amused themselves with it; and all the great painters put fine saloons and arcades behind their madonnas, merely to show that they could draw in perspective: but even this was generally done by them only to catch the public eye, and they disdained the perspective so much, that though they took the greatest pains with the circle of a crown, or the rim of a crystal cup, in the heart of their picture, they would twist their capitals of columns and towers of churches about in the background in the most wanton way, wherever they liked the lines to go, provided only they left just perspective enough to please the public. In modern days, I doubt if any artist among us, except David Roberts, knows so much perspective as would enable him to draw a Gothic arch to scale, at a given angle and distance. Turner, though he was professor of perspective to the Royal Academy, did not know what he professed, and never, as far as I remember, drew a single building in true perspective in his life; he drew them only with as much perspective as suited him. Prout also knew nothing of perspective, and twisted his buildings, as Turner did, into whatever shapes he liked. I do not justify this; and would recommend the student at least to treat perspective with common civility, but to pay no court to it. The best way he can learn it, by himself, is by taking a pane of glass, fixed in a frame, so that it can be set upright before the eye, at the distance at which the proposed sketch is intended to be seen. Let the eye be placed at some fixed point, opposite the middle of the pane of glass, but as high or as low as the student likes; then with a brush at the end of a stick, and a little body-colour that will adhere to the glass, the lines of the landscape may be traced on the glass, as you see them through it. When so traced they are all in true perspective. If the glass be sloped in any direction, the lines are still in true perspective, only it is perspective calculated for a sloping plane, while common perspective always supposes the plane of the picture to be vertical. It is good, in early practice, to accustom yourself to enclose your subject, before sketching it, with a light frame of wood held upright before you; it will show you what you may legitimately take
into your picture, and what choice there is between a narrow foreground near you, and a wide one farther off; also, what height of tree or building you can properly take in, &c.*

Of figure drawing, nothing is said in the following pages, because I do not think figures, as chief subjects, can be drawn to any good purpose by an amateur. As accessories in landscape, they are just to be drawn on the same principles as anything else.

Lastly: If any of the directions given subsequently to the student should be found obscure by him, or if at any stage of the recommended practice he finds himself in difficulties which I have not provided enough against, he may apply by letter to Mr. Ward, who is my under drawing-master at the Working Men's College (45 Great Ormond Street), and who will give any required assistance, on the lowest terms that can renumerate him for the occupation of his time. I have not leisure myself in general to answer letters of inquiry, however much I may desire to do so; but Mr. Ward has always the power of referring any question to me when he thinks it necessary. I have good hope, however, that enough guidance is given in this work to prevent the occurrence of any serious embarrassment; and I believe that the student who obeys its directions will find, on the whole, that the best answer of questions is perseverance; and the best drawing-masters are the woods and hills.

* If the student is fond of architecture, and wishes to know more of perspective than he can learn in this rough way, Mr. Runciman (of 49 Accacia Road, St. John's Wood), who was my first drawing-master, and to whom I owe many happy hours, can teach it him quickly, easily, and rightly.
THE

ELEMENTS OF DRAWING.

LETTER I.

ON FIRST PRACTICE.

My Dear Reader:

Whether this book is to be of use to you or not, depends wholly on your reason for wishing to learn to draw. If you desire only to possess a graceful accomplishment, to be able to converse in a fluent manner about drawing, or to amuse yourself listlessly in listless hours, I cannot help you: but if you wish to learn drawing that you may be able to set down clearly, and usefully, records of such things as cannot be described in words, either to assist your own memory of them, or to convey distinct ideas of them to other people; if you wish to obtain quicker perceptions of the beauty of the natural world, and to preserve something like a true image of beautiful things that pass away, or which you must yourself leave; if, also, you wish to understand the minds of great painters, and to be able to appreciate their work sincerely, seeing it for yourself, and loving it, not merely taking up the thoughts of other people about it; then I can help you, or, which is better, show you how to help yourself.

Only you must understand, first of all, that these powers which indeed are noble and desirable, cannot be got without work. It is much easier to learn to draw well, than it is to learn to play well on any musical instrument; but you know that it takes three or four years of practice, giving three or
four hours a day, to acquire even ordinary command over the
eyes of a piano; and you must not think that a masterly com-
mand of your pencil, and the knowledge of what may be done
with it, can be acquired without painstaking, or in a very
short time. The kind of drawing which is taught, or sup-
posed to be taught, in our schools, in a term or two, perhaps
at the rate of an hour's practice a week, is not drawing at all.
It is only the performance of a few dexterous (not always even
that) evolutions on paper with a black-lead pencil; profitless
alike to performer and beholder, unless as a matter of vanity,
and that the smallest possible vanity. If any young person,
after being taught what is, in polite circles, called "drawing,"
will try to copy the commonest piece of real work—suppose
a lithograph on the titlepage of a new opera air, or a woodcut
in the cheapest illustrated newspaper of the day—they will
find themselves entirely beaten. And yet that common litho-
graph was drawn with coarse chalk, much more difficult to
manage than the pencil of which an accomplished young lady
is supposed to have command; and that woodcut was drawn
in urgent haste, and half spoiled in the cutting afterwards;
and both were done by people whom nobody thinks of as ar-
istts, or praises for their power; both were done for daily
bread, with no more artist's pride than any simple handicrafts-
men feel in the work they live by.

Do not, therefore, think that you can learn drawing, any more
than a new language, without some hard and disagreeable la-
bour. But do not, on the other hand, if you are ready and
willing to pay this price, fear that you may be unable to get
on for want of special talent. It is indeed true that the per-
sons who have peculiar talent for art, draw instinctively and
get on almost without teaching; though never without toil.
It is true, also, that of inferior talent for drawing there are
many degrees; it will take one person a much longer time
than another to attain the same results, and the results thus
painfully attained are never quite so satisfactory as those got
with greater ease when the faculties are naturally adapted to
the study. But I have never yet, in the experiments I have
made, met with a person who could not learn to draw at all;
and, in general, there is a satisfactory and available power in every one to learn drawing if he wishes, just as nearly all persons have the power of learning French, Latin, or arithmetic, in a decent and useful degree, if their lot in life requires them to possess such knowledge.

Supposing then that you are ready to take a certain amount of pains, and to bear a little irksomeness and a few disappointment bravely, I can promise you that an hour's practice a day for six months, or an hour's practice every other day for twelve months, or, disposed in whatever way you find convenient, some hundred and fifty hours' practice, will give you sufficient power of drawing faithfully whatever you want to draw, and a good judgment, up to a certain point, of other people's work: of which hours, if you have one to spare at present, we may as well begin at once.

**EXERCISE I.**

**EVERYTHING** that you can see, in the world around you, presents itself to your eyes only as an arrangement of patches of different colours variously shaded.* Some of these patches of

* (N. B. This note is only for the satisfaction of incredulous or curious readers. You may miss it if you are in a hurry, or are willing to take the statement in the text on trust.)

The perception of solid Form is entirely a matter of experience. We see nothing but flat colours; and it is only by a series of experiments that we find out that a stain of black or grey indicates the dark side of a solid substance, or that a faint hue indicates that the object in which it appears is far away. The whole technical power of painting depends on our recovery of what may be called the *innocence of the eye*; that is to say, a sort of childish perception of these flat stains of colour, merely as such, without consciousness of what they signify, as a blind man would see them if suddenly gifted with sight.

For instance; when grass is lighted strongly by the sun in certain directions, it is turned from green into a peculiar and somewhat dusty-looking yellow. If we had been born blind, and were suddenly endowed with sight on a piece of grass thus lighted in some parts by the sun, it would appear to us that part of the grass was green, and part a dusty yellow (very nearly of the colour of primroses); and, if there were primroses near, we should think that the sunlighted grass was another mass of plants of the same sulphur-yellow colour. We should try
colour have an appearance of lines or texture within them, as
a piece of cloth or silk has of threads, or an animal's skin
shows texture of hairs; but whether this be the case or not,
the first broad aspect of the thing is that of a patch of some
definite colour; and the first thing to be learned is, how to
produce extents of smooth colour, without texture.

This can only be done properly with a brush; but a brush,
being soft at the point, causes so much uncertainty in the
touch of an unpractised hand, that it is hardly possible to
learn to draw first with it, and it is better to take, in early
practice, some instrument with a hard and fine point, both
that we may give some support to the hand, and that by work-
ing over the subject with so delicate a point, the attention may
be properly directed to all the most minute parts of it. Even
to gather some of them, and then find that the colour went away from
the grass when we stood between it and the sun, but not from the prim-
roses; and by a series of experiments we should find out that the sun
was really the cause of the colour in the one,—not in the other. We
go through such processes of experiment unconsciously in childhood;
and having once come to conclusions touching the signification of certain
colours, we always suppose that we see what we only know, and have
hardly any consciousness of the real aspect of the signs we have learned
to interpret. Very few people have any idea that sunlighted grass is
yellow.

Now, a highly accomplished artist has always reduced himself as
nearly as possible to this condition of infantine sight. He sees the col-
ours of nature exactly as they are, and therefore perceives at once in
the sunlighted grass the precise relation between the two colours that
form its shade and light. To him it does not seem shade and light, but
bluish green barred with gold.

Strive, therefore, first of all, to convince yourself of this great fact
about sight. This, in your hand, which you know by experience and
touch to be a book, is to your eye nothing but a patch of white, vari-
ously gradated and spotted; this other thing near you, which by expe-
rience you know to be a table, is to your eye only a patch of brown,
variously darkened and veined; and so on: and the whole art of Paint-
ing consists merely in perceiving the shape and depth of these patches
of colour, and putting patches of the same size, depth, and shape on can-
vas. The only obstacle to the success of painting is, that many of the
real colours are brighter and paler than it is possible to put on canvas: we
must put darker ones to represent them.
the best artists need occasionally to study subjects with a pointed instrument, in order thus to discipline their attention: and a beginner must be content to do so for a considerable period.

Also, observe that before we trouble ourselves about differences of colour, we must be able to lay on one colour properly, in whatever gradations of depth and whatever shapes we want. We will try, therefore, first to lay on tints or patches of grey, of whatever depth we want, with a pointed instrument. Take any finely-pointed steel pen (one of Gillott's lithographic crow-quills is best), and a piece of quite smooth, but not shining, note-paper, cream-laid, and get some ink that has stood already some time in the inkstand, so as to be quite black, and as thick as it can be without clogging the pen. Take a rule, and draw four straight lines, so as to enclose a square or nearly a square, about as large as $a$, Fig. 1. I say nearly a square, because it does not in the least matter whether it is quite square or not, the object being merely to get a space enclosed by straight lines.

![Fig. 1](image)

Now, try to fill in that square space with crossed lines, so completely and evenly that it shall look like a square patch of grey silk or cloth, cut out and laid on the white paper, as at $b$. Cover it quickly, first with straightish lines, in any direction you like, not troubling yourself to draw them much closer or neater than those in the square $a$. Let them quite dry before retouching them. (If you draw three or four squares side by side, you may always be going on with one while the others are drying). Then cover these lines with others in a different direction, and let those dry; then in another direction still, and let those dry. Always wait long enough to run no risk of blotting, and then draw the lines as quickly as you can.
Each ought to be laid on as swiftly as the dash of the pen of a good writer; but if you try to reach this great speed at first you will go over the edge of the square, which is a fault in this exercise. Yet it is better to do so now and then than to draw the lines very slowly; for if you do, the pen leaves a little dot of ink at the end of each line, and these dots spoil your work. So draw each line quickly, stopping always as nearly as you can at the edge of the square. The ends of lines which go over the edge are afterwards to be removed with the penknife, but not till you have done the whole work, otherwise you roughen the paper, and the next line that goes over the edge makes a blot.

When you have gone over the whole three or four times, you will find some parts of the square look darker than other parts. Now try to make the lighter parts as dark as the rest, so that the whole may be of equal depth or darkness. You will find, on examining the work, that where it looks darkest the lines are closest, or there are some much darker lines, than elsewhere; therefore you must put in other lines, or little scratches and dots, between the lines in the paler parts; and where there are very conspicuous dark lines, scratch them out lightly with the penknife, for the eye must not be attracted by any line in particular. The more carefully and delicately you fill in the little gaps and holes the better; you will get on faster by doing two or three squares perfectly than a great many badly. As the tint gets closer and begins to look even, work with very little ink in your pen, so as hardly to make any mark on the paper; and at last, where it is too dark, use the edge of your penknife very lightly, and for some time, to wear it softly into an even tone. You will find that the greatest difficulty consists in getting evenness: one bit will always look darker than another bit of your square; or there will be a granulated and sandy look over the whole. When you find your paper quite rough and in a mess, give it up and begin another square, but do not rest satisfied till you have done your best with every square. The tint at last ought at least to be as close and even as that in b, Fig. 1. You will find, however, that it is very difficult to get a pale tint; because,
naturally, the ink lines necessary to produce a close tint at all, blacken the paper more than you want. You must get over this difficulty not so much by leaving the lines wide apart as by trying to draw them excessively fine, lightly and swiftly; being very cautious in filling in; and, at last, passing the pen-knife over the whole. By keeping several squares in progress at one time, and reserving your pen for the light one just when the ink is nearly exhausted, you may get on better. The paper ought, at last, to look lightly and evenly toned all over, with no lines distinctly visible.

EXERCISE II.

As this exercise in shading is very tiresome, it will be well to vary it by proceeding with another at the same time. The power of shading rightly depends mainly on lightness of hand and keenness of sight; but there are other qualities required in drawing, dependent not merely on lightness, but steadiness of hand; and the eye, to be perfect in its power, must be made accurate as well as keen, and not only see shrewdly, but measure justly.

Possess yourself, therefore, of any cheap work on botany containing outline plates of leaves and flowers, it does not matter whether bad or good: "Baxter's British Flowering Plants" is quite good enough. Copy any of the simplest outlines, first with a soft pencil, following it, by the eye, as nearly as you can; if it does not look right in proportions, rub out and correct it, always by the eye, till you think it is right: when you have got it to your mind, lay tracing-paper on the book, on this paper trace the outline you have been copying, and apply it to your own; and having thus ascertained the faults, correct them all patiently, till you have got it as nearly accurate as may be. Work with a very soft pencil, and do not rub out so hard* as to spoil the surface of your paper; never

* Stale crumb of bread is better, if you are making a delicate drawing, than India-rubber, for it disturbs the surface of the paper less: but it crumbles about the room and makes a mess; and, besides, you waste the good bread, which is wrong; and your drawing will not for a long
mind how dirty the paper gets, but do not roughen it; and let the false outlines alone where they do not really interfere with the true one. It is a good thing to accustom yourself to hew and shape your drawing out of a dirty piece of paper. When you have got it as right as you can, take a quill pen, not very fine at the point; rest your hand on a book about an inch and a half thick, so as to hold the pen long; and go over your pencil outline with ink, raising your pen point as seldom as possible, and never leaning more heavily on one part of the line than on another. In most outline drawings of the present day, parts of the curves are thickened to give an effect of shade; all such outlines are bad, but they will serve well enough for your exercises, provided you do not imitate this character: it is better, however, if you can, to choose a book of pure outlines. It does not in the least matter whether your pen outline be thin or thick; but it matters greatly that it should be equal, not heavier in one place than in another. The power to be obtained is that of drawing an even line slowly and in any direction; all dashing lines, or approximations to penmanship, are bad. The pen should, as it were, walk slowly over the ground, and you should be able at any moment to stop it, or to turn it in any other direction, like a well-managed horse.

As soon as you can copy every curve slowly and accurately, you have made satisfactory progress; but you will find the difficulty is in the slowness. It is easy to draw what appears to be a good line with a sweep of the hand, or with what is called freedom;* the real difficulty and masterliness is in while be worth the crumbs. So use India-rubber very lightly; or, if heavily pressing it only, not passing it over the paper, and leave what pencil marks that will not come away so, without minding them. In a finished drawing the uneffaced penciling is often serviceable, helping the general tone, and enabling you to take out little bright lights.

* What is usually so much sought after under the term "freedom" is the character of the drawing of a great master in a hurry, whose hand is so thoroughly disciplined, that when pressed for time he can let it fly as it will, and it will not go far wrong. But the hand of a great master at real cork is never free: its swiftest dash is under perfect government. Paul Veronese or Tintoret could pause within a hair's breadth of any
ON FIRST PRACTICE.

never letting the hand be free, but keeping it under entire control at every part of the line.

EXERCISE III.

Meantime, you are always to be going on with your shaded squares, and chiefly with these, the outline exercises being taken up only for rest.

As soon as you find you have some command of the pen as a shading instrument, and can lay a pale or dark tint as you choose, try to produce gradated spaces like Fig. 2., the dark tint passing gradually into the lighter ones. Nearly all expression of form, in drawing, depends on your power of grading delicately; and the gradation is always most skilful which passes from one tint into another very little paler. Draw, therefore, two parallel lines for limits to your work, as in Fig. 2., and try to gradate the shade evenly from white to black, passing over the greatest possible distance, yet so that every appointed mark, in their fastest touches; and follow, within a hair's breadth, the previously intended curve. You must never, therefore, aim at freedom. It is not required of your drawing that it should be free, but that it should be right: in time you will be able to do right easily, and then your work will be free in the best sense; but there is no merit in doing wrong easily.

These remarks, however, do not apply to the lines used in shading, which, it will be remembered, are to be made as quickly as possible. The reason of this is, that the quicker a line is drawn, the lighter it is at the ends, and therefore the more easily joined with other lines, and concealed by them; the object in perfect shading being to conceal the lines as much as possible.

And observe, in this exercise, the object is more to get firmness of hand than accuracy of eye for outline; for there are no outlines in Nature, and the ordinary student is sure to draw them falsely if he draws them at all. Do not, therefore, be discouraged if you find mistakes continue to occur in your outlines; be content at present if you find your hand gaining command over the curves.
part of the band may have visible change in it. The perception of gradation is very deficient in all beginners (not to say, in many artists), and you will probably, for some time, think your gradation skilful enough when it is quite patchy and imperfect. By getting a piece of grey shaded riband, and comparing it with your drawing, you may arrive, in early stages of your work, at a wholesome dissatisfaction with it. Widen your band little by little as you get more skilful, so as to give the gradation more lateral space, and accustom yourself at the same time to look for gradated spaces in Nature. The sky is the largest and the most beautiful; watch it at twilight, after the sun is down, and try to consider each pane of glass in the window you look through as a piece of paper coloured blue, or grey, or purple, as it happens to be, and observe how quietly and continuously the gradation extends over the space in the window, of one or two feet square. Observe the shades on the outside and inside of a common white cup or bowl, which make it look round and hollow;* and then on folds of white drapery; and thus gradually you will be led to observe the more subtle transitions of the light as it increases or declines on flat surfaces. At last, when your eye gets keen and true, you will see gradation on everything in Nature.

But it will not be in your power yet awhile to draw from any objects in which the gradations are varied and complicated; nor will it be a bad omen for your future progress, and for the use that art is to be made of by you, if the first thing at which you aim should be a little bit of sky. So take any narrow space of evening sky, that you can usually see, between the boughs of a tree, or between two chimneys, or through the corner of a pane in the window you like best to sit at, and try to gradate a little space of white paper as evenly as that is gradated—as tenderly you cannot gradate it without colour, no, nor with colour either; but you may do it as evenly; or, if you get impatient with your spots and lines of ink, when you look at the beauty of the sky, the sense you will have gained of that beauty is something to be thankful for. But

* If you can get any pieces of dead white porcelain, not glazed, they will be useful models.
you ought not to be impatient with your pen and ink; for all great painters, however delicate their perception of colour, are fond of the peculiar effect of light which may be got in a pen-and-ink sketch, and in a woodcut, by the gleaming of the white paper between the black lines; and if you cannot gradate well with pure black lines, you will never gradate well with pale ones. By looking at any common woodcuts, in the cheap publications of the day, you may see how gradation is given to the sky by leaving the lines farther and farther apart; but you must make your lines as fine as you can, as well as far apart, towards the light; and do not try to make them long or straight, but let them cross irregularly in any direction easy to your hand, depending on nothing but their gradation for your effect. On this point of direction of lines, however, I shall have to tell you more presently; in the meantime, do not trouble yourself about it.

EXERCISE IV.

As soon as you find you can gradate tolerably with the pen, take an H. or HH. pencil, using its point to produce shade, from the darkest possible to the palest, in exactly the same manner as the pen, lightening, however, now with India-rubber instead of the penknife. You will find that all pale tints of shade are thus easily producible with great precision and tenderness, but that you cannot get the same dark power as with the pen and ink, and that the surface of the shade is apt to become glossy and metallic, or dirty-looking, or sandy. Persevere, however, in trying to bring it to evenness with the fine point, removing any single speck or line that may be too black, with the point of the knife: you must not scratch the whole with the knife as you do the ink. If you find the texture very speckled-looking, lighten it all over with India-rubber, and recover it again with sharp, and excessively fine touches of the pencil point, bringing the parts that are too pale to perfect evenness with the darker spots.

You cannot use the point too delicately or cunningly in doing this; work with it as if you were drawing the down on a butterfly's wing.
At this stage of your progress, if not before, you may be assured that some clever friend will come in, and hold up his hands in mocking amazement, and ask you who could set you to that "niggling;" and if you persevere in it, you will have to sustain considerable persecution from your artistical acquaintances generally, who will tell you that all good drawing depends on "boldness." But never mind them. You do not hear them tell a child, beginning music, to lay its little hand with a crash among the keys, in imitation of the great masters; yet they might, as reasonably as they may tell you to be bold in the present state of your knowledge. Bold, in the sense of being undaunted, yes; but bold in the sense of being careless, confident, or exhibitory,—no,—no, and a thousand times no; for, even if you were not a beginner, it would be bad advice that made you bold. Mischief may easily be done quickly, but good and beautiful work is generally done slowly; you will find no boldness in the way a flower or a bird's wing is painted; and if Nature is not bold at her work, do you think you ought to be at yours? So never mind what people say, but work with your pencil point very patiently; and if you can trust me in anything, trust me when I tell you, that though there are all kinds and ways of art,—large work for large places, small work for narrow places, slow work for people who can wait, and quick work for people who cannot,—there is one quality, and, I think, only one, in which all great and good art agrees;—it is all delicate art. Coarse art is always bad art. You cannot understand this at present, because you do not know yet how much tender thought, and subtle care, the great painters put into touches that at first look coarse; but, believe me, it is true, and you will find it is so in due time.

You will be perhaps also troubled, in these first essays at pencil drawing, by noticing that more delicate gradations are got in an instant by a chance touch of the India-rubber, than by an hour's labour with the point; and you may wonder why I tell you to produce tints so painfully, which might, it appears, be obtained with ease. But there are two reasons: the first, that when you come to draw forms, you must be
able to gradate with absolute precision, in whatever place and
direction you wish; not in any wise vaguely, as the India-rub-
ber does it; and, secondly, that all natural shadows are more
or less mingled with gleams of light. In the darkness of
ground there is the light of the little pebbles or dust; in the
darkness of foliage, the glitter of the leaves; in the darkness
of flesh, transparency; in that of a stone, granulation: in
every case there is some mingling of light, which cannot be
represented by the leaden tone which you get by rubbing, or
by an instrument known to artists as the "stump." When
you can manage the point properly, you will indeed be able
to do much also with this instrument, or with your fingers;
but then you will have to retouch the flat tints afterwards, so
as to put life and light into them, and that can only be done
with the point. Labour on, therefore, courageously, with that
only.

EXERCISE V.

When you can manage to tint and gradate tenderly with
the pencil point, get a good large alphabet, and try to tint the
letters into shape with the pencil point. Do not outline them
first, but measure their height and extreme breadth with the

![Fig. 3.](image)

compasses, as a b, a c, Fig. 3., and then scratch in their shapes
gradually; the letter A, enclosed within the lines, being in
what Turner would have called a "state of forwardness.”
Then, when you are satisfied with the shape of the letter,
draw pen and ink lines firmly round the tint, as at d, and re-
move any touches outside the limit, first with the India-rubber, and then with the penknife, so that all may look clear and right. If you rub out any of the pencil inside the outline of the letter, retouch it, closing it up to the inked line. The straight lines of the outline are all to be ruled,* but the curved lines are to be drawn by the eye and hand; and you will soon find what good practice there is in getting the curved letters, such as Bs, Cs, &c., to stand quite straight, and come into accurate form.

All these exercises are very irksome, and they are not to be persisted in alone; neither is it necessary to acquire perfect power in any of them. An entire master of the pencil or brush ought, indeed, to be able to draw any form at once, as Giotto his circle; but such skill as this is only to be expected of the consummate master, having pencil in hand all his life, and all day long; hence the force of Giotto’s proof of his skill; and it is quite possible to draw very beautifully, without attaining even an approximation to such a power; the main point being, not that every line should be precisely what we intend or wish, but that the line which we intended or wished to draw should be right. If we always see rightly and mean rightly, we shall get on, though the hand may stagger a little; but if we mean wrongly, or mean nothing, it does not matter how firm the hand is. Do not, therefore, torment yourself because you cannot do as well as you would like; but work patiently, sure that every square and letter will give you a certain increase of power; and as soon as you can draw your letters pretty well, here is a more amusing exercise for you.

* Artists who glance at this book may be surprised at this permission. My chief reason is, that I think it more necessary that the pupil’s eye should be trained to accurate perception of the relations of curve and right lines, by having the latter absolutely true, than that he should practice drawing straight lines. But also, I believe, though I am not quite sure of this, that he never ought to be able to draw a straight line. I do not believe a perfectly trained hand ever can draw a line without some curvature in it, or some variety of direction. Prout could draw a straight line, but I do not believe Raphael could, nor Tintoret. A great draughtsman can, as far as I have observed, draw every line but a straight one.
EXERCISE VI.

Choose any tree that you think pretty, which is nearly bare of leaves, and which you can see against the sky, or against a pale wall, or other light ground: it must not be against strong light, or you will find the looking at it hurts your eyes; nor must it be in sunshine, or you will be puzzled by the lights on the boughs. But the tree must be in shade; and the sky blue, or grey, or dull white. A wholly grey or rainy day is the best for this practice.

You will see that all the boughs of the tree are dark against the sky. Consider them as so many dark rivers, to be laid down in a map with absolute accuracy; and, without the least thought about the roundness of the stems, map them all out in flat shade, scrawling them in with pencil, just as you did the limbs of your letters; then correct and alter them, rubbing out and out again, never minding how much your paper is dirtied (only not destroying its surface), until every bough is exactly, or as near as your utmost power can bring it, right in curvature and in thickness. Look at the white interstices between them with as much scrupulousness as if they were little estates which you had to survey, and draw maps of, for some important lawsuit, involving heavy penalties if you cut the least bit of a corner off any of them, or gave the hedge anywhere too deep a curve; and try continually to fancy the whole tree nothing but a flat ramification on a white ground. Do not take any trouble about the little twigs, which look like a confused network or mist; leave them all out,* drawing only the main branches as far as you can see them distinctly, your object at present being not to draw a tree, but to learn how to do so. When you have got the thing as nearly right as you can—and it is better to make one good study than twenty left unnecessarily inaccurate—take your pen, and put a fine outline to all the boughs, as you did to your letter, taking

* Or, if you feel able to do so, scratch them in with confused quick touches, indicating the general shape of the cloud or mist of twigs round the main branches; but do not take much trouble about them.
care, as far as possible, to put the outline within the edge of the shade, so as not to make the boughs thicker: the main use of the outline is to *affirm* the whole more clearly; to do away with little accidental roughnesses and excrescences, and especially to mark where boughs cross, or come in front of each other, as at such points their arrangement in this kind of sketch is unintelligible without the outline. It may perfectly well happen that in Nature it should be less distinct than your outline will make it; but it is better in this kind of sketch to mark the facts clearly. The temptation is always to be slovenly and careless, and the outline is like a bridle, and forces our indolence into attention and precision. The outline should be about the thickness of that in Fig. 4., which represents the ramification of a small stone pine, only I have not endeavoured to represent the pencil shading within the outline, as I could not easily express it in a woodcut; and you have nothing to do at present with the indication of the foliage above, of which in another place. You may also draw
your trees as much larger than this figure as you like; only, however large they may be, keep the outline as delicate, and draw the branches far enough into their outer sprays to give quite as slender ramification as you have in this figure, otherwise you do not get good enough practice out of them.

You cannot do too many studies of this kind: every one will give you some new notion about trees: but when you are tired of tree boughs, take any forms whatever which are drawn in flat colour, one upon another; as patterns on any kind of cloth, or flat china (tiles, for instance), executed in two colours only; and practice drawing them of the right shape and size by the eye, and filling them in with shade of the depth required.

In doing this, you will first have to meet the difficulty of representing depth of colour by depth of shade. Thus a pattern of ultramarine blue will have to be represented by a darker tint of grey than a pattern of yellow.

And now it is both time for you to begin to learn the mechanical use of the brush, and necessary for you to do so in order to provide yourself with the gradated scale of colour which you will want. If you can, by any means, get acquainted with any ordinarily skilful water-colour painter, and prevail on him to show you how to lay on tints with a brush, by all means do so; not that you are yet, nor for a long while yet, to begin to colour, but because the brush is often more convenient than the pencil for laying on masses or tints of shade, and the sooner you know how to manage it as an instrument the better. If, however, you have no opportunity of seeing how water-colour is laid on by a workman of any kind, the following directions will help you:—

EXERCISE VII.

Get a shilling cake of Prussian blue. Dip the end of it in water so as to take up a drop, and rub it in a white saucer till you cannot rub much more, and the colour gets dark, thick, and oily-looking. Put two teaspoonfuls of water to the colour you have rubbed down, and mix it well up with a camel's-hair brush about three quarters of an inch long.
Then take a piece of smooth, but not glossy, Bristol board or pasteboard; divide it, with your pencil and rule, into squares as large as those of the very largest chess-board: they need not be perfect squares, only as nearly so as you can quickly guess. Rest the pasteboard on something sloping as much as an ordinary desk; then, dipping your brush into the colour you have mixed, and taking up as much of the liquid as it will carry, begin at the top of one of the squares, and lay a pond or runlet of colour along the top edge. Lead this pond of colour gradually downwards, not faster at one place than another, but as if you were adding a row of bricks to a building, all along (only building down instead of up), dipping the brush frequently so as to keep the colour as full in that, and in as great quantity on the paper, as you can, so only that it does not run down anywhere in a little stream. But if it should, never mind; go on quietly with your square till you have covered it all in. When you get to the bottom, the colour will lodge there in a great wave. Have ready a piece of blotting-paper; dry your brush on it, and with the dry brush take up the superfluous colour as you would with a sponge, till it all looks even.

In leading the colour down, you will find your brush continually go over the edge of the square, or leave little gaps within it. Do not endeavour to retouch these, nor take much care about them; the great thing is to get the colour to lie smoothly where it reaches, not in alternate blots and pale patches; try, therefore, to lead it over the square as fast as possible, with such attention to your limit as you are able to give. The use of the exercise is, indeed, to enable you finally to strike the colour up to the limit with perfect accuracy; but the first thing is to get it even, the power of rightly striking the edge comes only by time and practice; even the greatest artists rarely can do this quite perfectly.

When you have done one square, proceed to do another which does not communicate with it. When you have thus done all the alternate squares, as on a chess-board, turn the pasteboard upside down, begin again with the first, and put another coat over it, and so on over all the others. The use
of turning the paper upside down is to neutralise the increase of darkness towards the bottom of the squares, which would otherwise take place from the ponding of the colour.

Be resolved to use blotting-paper, or a piece of rag, instead of your lips, to dry the brush. The habit of doing so, once acquired, will save you from much partial poisoning. Take care, however, always to draw the brush from root to point, otherwise you will spoil it. You may even wipe it as you would a pen when you want it very dry, without doing harm, provided you do not crush it upwards. Get a good brush at first, and cherish it; it will serve you longer and better than many bad ones.

When you have done the squares all over again, do them a third time, always trying to keep your edges as neat as possible. When your colour is exhausted, mix more in the same proportions, two teaspoonfuls to as much as you can grind with a drop; and when you have done the alternate squares three times over, as the paper will be getting very damp, and dry more slowly, begin on the white squares, and bring them up to the same tint in the same way. The amount of jagged dark line which then will mark the limits of the squares will be the exact measure of your unskilfulness.

As soon as you tire of squares draw circles (with compasses); and then draw straight lines irregularly across circles, and fill up the spaces so produced between the straight line and the circumference; and then draw any simple shapes of leaves, according to the exercise No. 2., and fill up those, until you can lay on colour quite evenly in any shape you want.

You will find in the course of this practice, as you cannot always put exactly the same quantity of water to the colour, that the darker the colour is, the more difficult it becomes to lay it on evenly. Therefore, when you have gained some definite degree of power, try to fill in the forms required with a full brush, and a dark tint, at once, instead of laying several coats one over another; always taking care that the tint, however dark, be quite liquid; and that, after being laid on, so much of it is absorbed as to prevent its forming a black line
at the edge as it dries. A little experience will teach you how apt the colour is to do this, and how to prevent it; not that it needs always to be prevented, for a great master in water-colours will sometimes draw a firm outline, when he wants one, simply by letting the colour dry in this way at the edge.

When, however, you begin to cover complicated forms with the darker colour, no rapidity will prevent the tint from drying irregularly as it is led on from part to part. You will then find the following method useful. Lay in the colour very pale and liquid; so pale, indeed, that you can only just see where it is on the paper. Lead it up to all the outlines, and make it precise in form, keeping it thoroughly wet everywhere. Then, when it is all in shape, take the darker colour, and lay some of it into the middle of the liquid colour. It will spread gradually in a branchy kind of way, and you may now lead it up to the outlines already determined, and play it with the brush till it fills its place well; then let it dry, and it will be as flat and pure as a single dash, yet defining all the complicated forms accurately.

Having thus obtained the power of laying on a tolerably flat tint, you must try to lay on a gradated one. Prepare the colour with three or four teaspoonfuls of water; then, when it is mixed, pour away about two-thirds of it, keeping a teaspoonful of pale colour. Sloping your paper as before, draw two pencil lines all the way down, leaving a space between them of the width of a square on your chess-board. Begin at the top of your paper, between the lines; and having struck on the first brushful of colour, and led it down a little, dip your brush deep in water, and mix up the colour on the plate quickly with as much more water as the brush takes up at that one dip: then, with this paler colour, lead the tint farther down. Dip in water again, mix the colour again, and thus lead down the tint, always dipping in water once between each replenishing of the brush, and stirring the colour on the plate well, but as quickly as you can. Go on until the colour has become so pale that you cannot see it; then wash your brush thoroughly in water, and carry the wave down a little
farther with that, and then absorb it with the dry brush, and leave it to dry.

If you get to the bottom of your paper before your colour gets pale, you may either take longer paper, or begin, with the tint as it was when you left off, on another sheet; but be sure to exhaust it to pure whiteness at last. When all is quite dry, recommence at the top with another similar mixture of colour, and go down in the same way. Then again, and then again, and so continually until the colour at the top of the paper is as dark as your cake of Prussian blue, and passes down into pure white paper at the end of your column, with a perfectly smooth gradation from one into the other.

You will find at first that the paper gets mottled or wavy, instead of evenly gradated; this is because at some places you have taken up more water in your brush than at others, or not mixed it thoroughly on the plate, or led one tint too far before replenishing with the next. Practice only will enable you to do it well; the best artists cannot always get gradations of this kind quite to their minds; nor do they ever leave them on their pictures without after touching.

As you get more power, and can strike the colour more quickly down, you will be able to gradate in less compass;* beginning with a small quantity of colour, and adding a drop of water, instead of a brushful; with finer brushes, also, you may gradate to a less scale. But slight skill will enable you to test the relations of colour to shade as far as is necessary for your immediate progress, which is to be done thus:—

Take cakes of lake, of gamboge, of sepia, of blue-black, of cobalt, and vermilion; and prepare gradated columns (exactly as you have done with the Prussian blue) of the lake and blue-black.† Cut a narrow slip all the way down, of each gradated colour, and set the three slips side by side; fasten them down, and rule lines at equal distances across all the three, so as to divide them into fifty degrees, and number the degrees

* It is more difficult, at first, to get, in colour, a narrow gradation than an extended one; but the ultimate difficulty is, as with the pen, to make the gradation go far.
† Of course, all the columns of colour are to be of equal length.
of each, from light to dark, 1, 2, 3, &c. If you have gradated them rightly, the darkest part either of the red or blue will be nearly equal in power to the darkest part of the blue-black, and any degree of the black slip will also, accurately enough for our purpose, balance in weight the degree similarly numbered in the red or the blue slip. Then, when you are drawing from objects of a crimson or blue colour, if you can match their colour by any compartment of the crimson or blue in your scales, the grey in the compartment of the grey scale marked with the same number is the grey which must represent that crimson or blue in your light and shade drawing.

Next, prepare scales with gamboge, cobalt, and vermilion. You will find that you cannot darken these beyond a certain point;* for yellow and scarlet, so long as they remain yellow and scarlet, cannot approach to black; we cannot have, properly speaking, a dark yellow or dark scarlet. Make your scales of full yellow, blue, and scarlet, half-way down; passing then gradually to white. Afterwards uselake to darken the upper half of the vermilion and gamboge; and Prussian blue to darken the cobalt. You will thus have three more scales, passing from white nearly to black, through yellow and orange, through sky-blue, and through scarlet. By mixing the gamboge and Prussian blue you may make another with green; mixing the cobalt and lake, another with violet; the sepia alone will make a forcible brown one; and so on, until you have as many scales as you like, passing from black to white through different colours. Then, supposing your scales properly gradated and equally divided, the compartment or degree No. 1. of the grey will represent in chiaroscuro the No. 1. of all the other colours; No. 2. of grey the No. 2. of the other colours, and so on.

It is only necessary, however, in this matter that you should understand the principle; for it would never be possible for you to gradate your scales so truly as to make them practically accurate and serviceable; and even if you could, unless you had about ten thousand scales, and were able to change

* The degree of darkness you can reach with the given colour is always indicated by the colour of the solid cake in the box.
them faster than ever juggler changed cards, you could not in a day measure the tints on so much as one side of a frost-bitten apple: but when once you fully understand the principle, and see how all colours contain as it were a certain quantity of darkness, or power of dark relief from white—some more, some less; and how this pitch or power of each may be represented by equivalent values of grey, you will soon be able to arrive shrewdly at an approximation by a glance of the eye, without any measuring scale at all.

You must now go on, again with the pen, drawing patterns, and any shapes of shade that you think pretty, as veiningings in marble, or tortoiseshell, spots in surfaces of shells, &c., as tenderly as you can, in the darknesses that correspond to their colours; and when you find you can do this successfully, it is time to begin rounding.

**EXERCISE VIII.**

Go out into your garden, or into the road, and pick up the first round or oval stone you can find, not very white, nor very dark; and the smoother it is the better, only it must not shine. Draw your table near the window, and put the stone, which I will suppose is about the size of a in Fig. 5. (it had better not be much larger), on a piece of not very white paper, on the table in front of you. Sit so that the light may come from your left, else the shadow of the pencil point interferes with your sight of your work. You must not let the sun fall on the stone, but only ordinary light: therefore choose a window which the sun does not come in at. If you can shut the shutters of the other windows in the room it will be all the better; but this is not of much consequence.

Now, if you can draw that stone, you can draw anything: I mean, anything that is drawable. Many things (sea foam, for instance) cannot be drawn at all, only the idea of them more or less suggested; but if you can draw the stone rightly, every thing within reach of art is also within yours.

For all drawing depends, primarily, on your power of representing Roundness. If you can once do that, all the rest is easy and straightforward; if you cannot do that, nothing
else that you may be able to do will be of any use. For Nature is all made up of roundnesses; not the roundness of perfect globes, but of variously curved surfaces. Boughs are rounded, leaves are rounded, stones are rounded, clouds are rounded, cheeks are rounded, and curls are rounded: there is no more flatness in the natural world than there is vacancy. The world itself is round, and so is all that is in it, more or less, except human work, which is often very flat indeed.

Therefore, set yourself steadily to conquer that round stone, and you have won the battle.

Look your stone antagonist boldly in the face. You will see that the side of it next the window is lighter than most of the paper: that the side of it farthest from the window is darker than the paper; and that the light passes into the dark gradually, while a shadow is thrown to the right on the paper itself by the stone: the general appearance of things being more or less as in a, Fig. 5., the spots on the stone excepted, of which more presently.

Now, remember always what was stated in the outset, that every thing you can see in Nature is seen only so far as it is lighter or darker than the things about it, or of a different colour from them. It is either seen as a patch of one colour on a ground of another; or as a pale thing relieved from a dark thing, or a dark thing from a pale thing. And if you can put on patches of colour or shade of exactly the same size, shape, and gradations as those on the object and its ground, you will produce the appearance of the object and its ground. The best draughtsman—Titian and Paul Veronese themselves—could do no more than this; and you will soon be able to get some power of doing it in an inferior way, if you once understand the exceeding simplicity of what is to be done. Suppose you have a brown book on a white sheet of paper, on a red tablecloth. You have nothing to do but to put on spaces of red, white, and brown, in the same shape, and gradated from dark to light in the same degrees, and your drawing is done. If you will not look at what you see, if you try to put on brighter or duller colours than are there, if you try to put them on with a dash or a blot, or to cover
your paper with "vigorous" lines, or to produce anything, in fact, but the plain, unaffected, and finished tranquillity of the thing before you, you need not hope to get on. Nature will show you nothing if you set yourself up for her master. But forget yourself, and try to obey her, and you will find obedience easier and happier than you think.

The real difficulties are to get the refinement of the forms and the evenness of the gradations. You may depend upon it, when you are dissatisfied with your work, it is always too coarse or too uneven. It may not be wrong—in all probability is not wrong, in any (so-called) great point. But its edges are not true enough in outline; and its shades are in blotches, or scratches, or full of white holes. Get it more tender and more true, and you will find it is more powerful.

Do not, therefore, think your drawing must be weak because you have a finely pointed pen in your hand. Till you can draw with that, you can draw with nothing; when you can draw with that, you can draw with a log of wood charred at the end. True boldness and power are only to be gained by care. Even in fencing and dancing, all ultimate ease depends on early precision in the commencement; much more in singing or drawing.
Now, I do not want you to copy Fig. 5., but to copy the stone before you in the way that Fig. 5. is done. To which end, first measure the extreme length of the stone with compasses, and mark that length on your paper; then, between the points marked, leave something like the form of the stone in light, scrawling the paper all over, round it, as at b, Fig. 5. You cannot rightly see what the form of the stone really is till you begin finishing, so sketch it in quite rudely; only rather leave too much room for the high light, than too little: and then more cautiously fill in the shade, shutting the light gradually up, and putting in the dark cautiously on the dark side. You need not plague yourself about accuracy of shape, because, till you have practised a great deal, it is impossible for you to draw that shape quite truly, and you must gradually gain correctness by means of these various exercises: what you have mainly to do at present is, to get the stone to look solid and round, not much minding what its exact contour is—only draw it as nearly right as you can without vexation; and you will get it more right by thus feeling your way to it in shade, than if you tried to draw the outline at first. For you can see no outline; what you see is only a certain space of gradated shade, with other such spaces about it; and those pieces of shade you are to imitate as nearly as you can, by scrawling the paper over till you get them to the right shape, with the same gradations which they have in Nature. And this is really more likely to be done well, if you have to fight your way through a little confusion in the sketch, than if you have an accurately traced outline. For instance, I was going to draw, beside a, another effect on the stone; reflected light bringing its dark side out from the background: but when I had laid on the first few touches, I thought it would be better to stop, and let you see how I had begun it, at b. In which beginning it will be observed that nothing is so determined but that I can more or less modify, and add to or diminish the contour as I work on, the lines which suggest the outline being blended with the others if I do not want them; and the having to fill up the vacancies and conquer the irregularities of such a sketch, will probably secure a higher
completion at last, than if half an hour had been spent in getting a true outline before beginning.

In doing this, however, take care not to get the drawing too dark. In order to ascertain what the shades of it really are, cut a round hole, about half the size of a pea, in a piece of white paper, the colour of that you use to draw on. Hold this bit of paper, with the hole in it, between you and your stone; and pass the paper backwards and forwards, so as to see the different portions of the stone (or other subject) through the hole. You will find that, thus, the circular hole looks like one of the patches of colour you have been accustomed to match, only changing in depth as it lets different pieces of the stone be seen through it. You will be able thus actually to match the colour of the stone, at any part of it, by tinting the paper beside the circular opening. And you will find that this opening never looks quite black, but that all the roundings of the stone are given by subdued greys.*

You will probably find, also, that some parts of the stone, or of the paper it lies on, look luminous through the opening, so that the little circle then tells as a light spot instead of a dark spot. When this is so, you cannot imitate it, for you have no means of getting light brighter than white paper: but by holding the paper more sloped towards the light, you will find that many parts of the stone, which before looked light through the hole, then look dark through it; and if you can place the paper in such a position that every part of the stone looks slightly dark, the little hole will tell always as a spot of shade, and if your drawing is put in the same light, you can imitate or match every gradation. You will be amazed to find, under these circumstances, how slight the differences of tint are, by which, through infinite delicacy of gradation, Nature can express form.

If any part of your subject will obstinately show itself as a light through the hole, that part you need not hope to imitate. Leave it white, you can do no more.

When you have done the best you can to get the general

* The figure a, Fig. 5., is very dark, but this is to give an example of all kinds of depth of tint, without repeated figures.
form, proceed to finish, by imitating the texture and all the cracks and stains of the stone as closely as you can; and note, in doing this, that cracks or fissures of any kind, whether between stones in walls, or in the grain of timber or rocks, or in any of the thousand other conditions they present, are never expressible by single black lines, or lines of simple shadow. A crack must always have its complete system of light and shade, however small its scale. It is in reality a little ravine, with a dark or shady side, and light or sunny side, and, usually, shadow in the bottom. This is one of the instances in which it may be as well to understand the reason of the appearance; it is not often so in drawing, for the aspects of things are so subtle and confused that they cannot in general be explained; and in the endeavour to explain some, we are sure to lose sight of others, while the natural overestimate of the importance of those on which the attention is fixed, causes us to exaggerate them, so that merely scientific draughtsmen caricature a third part of Nature, and miss two-thirds. The best scholar is he whose eye is so keen as to see at once how the thing looks, and who need not, therefore, trouble himself with any reasons why it looks so: but few people have this acuteness of perception; and to those who are destitute of it, a little pointing out of rule and reason will be a help, especially when a master is not near them. I never allow my own pupils to ask the reason of anything, because, as I watch their work, I can always show them how the thing is, and what appearance they are missing in it; but when a master is not by to direct the sight, science may, here and there, be allowed to do so in his stead.

Generally, then, every solid illumined object—for instance, the stone you are drawing—has a light side turned towards the light, a dark side turned away from the light, and a shadow, which is cast on something else (as by the stone on the paper it is set upon). You may sometimes be placed so as to see only the light side and shadow, and sometimes only the dark side and shadow, and sometimes both, or either, without the shadow; but in most positions solid objects will show all the three, as the stone does here.
ON FIRST PRACTICE.

261

Hold up your hand with the edge of it towards you, as you sit now with your side to the window, so that the flat of your hand is turned to the window. You will see one side of your hand distinctly lighted, the other distinctly in shade. Here are light side and dark side, with no seen shadow; the shadow being detached, perhaps on the table, perhaps on the other side of the room; you need not look for it at present.

Take a sheet of note-paper, and holding it edgeways, as you hold your hand, wave it up and down past the side of your hand which is turned from the light, the paper being, of course, farther from the window. You will see, as it passes a strong gleam of light strike on your hand, and light it considerably on its dark side. This light is reflected light. It is thrown back from the paper (on which it strikes first in coming from the window) to the surface of your hand, just as a ball would be if somebody threw it through the window at the wall and you caught it at the rebound.

Next, instead of the note-paper, take a red book, or a piece of scarlet cloth. You will see that the gleam of light falling on your hand, as you wave the book is now reddened. Take a blue book, and you will find the gleam is blue. Thus every object will cast some of its own colour back in the light that it reflects.

Now it is not only these books or papers that reflect light to your hand: every object in the room, on that side of it, reflects some, but more feebly, and the colours mixing all together form a neutral* light, which lets the colour of your hand itself be more distinctly seen than that of any object which reflects light to it; but if there were no reflected light, that side of your hand would look as black as a coal.

Objects are seen, therefore in general, partly by direct light, and partly by light reflected from the objects around them, or from the atmosphere and clouds. The colour of their light sides depends much on that of the direct light, and that of the dark sides on the colours of the objects near them. It is

* Nearly neutral in ordinary circumstances, but yet with quite different tones in its neutrality, according to the colours of the various reflected rays that compose it.
therefore impossible to say beforehand what colour an object will have at any point of its surface, that colour depending partly on its own tint, and partly on infinite combinations of rays reflected from other things. The only certain fact about dark sides is, that their colour will be changeful, and that a picture which gives them merely darker shades of the colour of the light sides must assuredly be bad.

Now, lay your hand flat on the white paper you are drawing on. You will see one side of each finger lighted, one side dark, and the shadow of your hand on the paper. Here, therefore, are the three divisions of shade seen at once. And although the paper is white, and your hand of a rosy colour somewhat darker than white, yet you will see that the shadow all along, just under the finger which casts it, is darker than the flesh, and is of a very deep grey. The reason of this is, that much light is reflected from the paper to the dark side of your finger, but very little is reflected from other things to the paper itself in that chink under your finger.

In general, for this reason, a shadow, or, at any rate, the part of the shadow nearest the object, is darker than the dark side of the object. I say in general, because a thousand accidents may interfere to prevent its being so. Take a little bit of glass, as a wine-glass, or the ink-bottle, and play it about a little on the side of your hand farthest from the window; you will presently find you are throwing gleams of light all over the dark side of your hand, and in some positions of the glass the reflection from it will annihilate the shadow altogether, and you will see your hand dark on the white paper. Now a stupid painter would represent, for instance, a drinking-glass beside the hand of one of his figures, and because he had been taught by rule that "shadow was darker than the dark side," he would never think of the reflection from the glass, but paint a dark grey under the hand, just as if no glass were there. But a great painter would be sure to think of the true effect, and paint it; and then comes the stupid critic, and wonders why the hand is so light on its dark side.

Thus it is always dangerous to assert anything as a rule in matters of art; yet it is useful for you to remember that, in
ON FIRST PRACTICE.

263

a general way, a shadow is darker than the dark side of the thing that casts it, supposing the colours otherwise the same; that is to say, when a white object casts a shadow on a white surface, or a dark object on a dark surface: the rule will not hold if the colours are different, the shadow of a black object on a white surface being, of course, not so dark, usually, as the black thing casting it. The only way to ascertain the ultimate truth in such matters is to look for it; but, in the meantime, you will be helped by noticing that the cracks in the stone are little ravines, on one side of which the light strikes sharply, while the other is in shade. This dark side usually casts a little darker shadow at the bottom of the crack; and the general tone of the stone surface is not so bright as the light bank of the ravine. And, therefore, if you get the surface of the object of a uniform tint, more or less indicative of shade, and then scratch out a white spot or streak in it of any shape; by putting a dark touch beside this white one, you may turn it, as you choose, into either a ridge or an incision, into either a boss or a cavity. If you put the dark touch on the side of it nearest the sun, or rather, nearest the place that the light comes from, you will make it a cut or cavity; if you put it on the opposite side, you will make it a ridge or mound: and the complete success of the effect depends less on depth of shade than on the rightness of the drawing; that is to say, on the evident correspondence of the form of the shadow with the form that casts it. In drawing rocks, or wood, or anything irregularly shaped, you will gain far more by a little patience in following the forms carefully, though with slight touches, than by laboured finishing of textures of surface and transparencies of shadow.

When you have got the whole well into shape, proceed to lay on the stains and spots with great care, quite as much as you gave to the forms. Very often, spots or bars of local colour do more to express form than even the light and shade, and they are always interesting as the means by which Nature carries light into her shadows, and shade into her lights, an art of which we shall have more to say hereafter, in speaking of composition. Fig. 5. is a rough sketch of a fossil sea-urchin,
in which the projections of the shell are of black flint, coming through a chalky surface. These projections form dark spots in the light; and their sides, rising out of the shadow, form smaller whitish spots in the dark. You may take such scattered lights as these out with the penknife, provided you are just as careful to place them rightly, as if you got them by a more laborious process.

When you have once got the feeling of the way in which gradation expresses roundness and projection, you may try your strength on anything natural or artificial that happens to take your fancy, provided it be not too complicated in form. I have asked you to draw a stone first, because any irregularities and failures in your shading will be less offensive to you, as being partly characteristic of the rough stone surface, than they would be in a more delicate subject; and you may as well go on drawing rounded stones of different shapes for a little while, till you find you can really shade delicately. You may then take up folds of thick white drapery, a napkin or towel thrown carelessly on the table is as good as anything, and try to express them in the same way; only now you will find that your shades must be wrought with perfect unity and tenderness, or you will lose the flow of the folds. Always remember that a little bit perfected is worth more than many scrawls; whenever you feel yourself inclined to scrawl, give up work resolutely, and do not go back to it till next day. Of course your towel or napkin must be put on something that may be locked up, so that its folds shall not be disturbed till you have finished. If you find that the folds will not look right, get a photograph of a piece of drapery (there are plenty now to be bought, taken from the sculpture of the cathedrals of Rheims, Amiens, and Chartres, which will at once educate your hand and your taste), and copy some piece of that; you will then ascertain what it is that is wanting in your studies from nature, whether more gradation, or greater watchfulness of the disposition of the folds. Probably for some time you will find yourself failing painfully in both, for drapery is very difficult to follow in its sweeps; but do not lose courage, for the greater the difficulty, the greater the gain in the effort. If
your eye is more just in measurement of form than delicate in perception of tint, a pattern on the folded surface will help you. Try whether it does or not; and if the patterned drapery confuses you, keep for a time to the simple white one; but if it helps you, continue to choose patterned stuffs (tartans, and simple chequered designs are better at first than flowered ones), and even though it should confuse you, begin pretty soon to use a pattern occasionally, copying all the distortions and perspective modifications of it among the folds with scrupulous care.

Neither must you suppose yourself condescending in doing this. The greatest masters are always fond of drawing patterns; and the greater they are, the more pains they take to do it truly.* Nor can there be better practice at any time, as introductory to the nobler complication of natural detail. For when you can draw the spots which follow the folds of a printed stuff, you will have some chance of following the spots which fall into the folds of the skin of a leopard as he leaps; but if you cannot draw the manufacture, assuredly you will never be able to draw the creature. So the cloudings on a piece of wood, carefully drawn, will be the best introduction to the drawing of the clouds of the sky, or the waves of the sea; and the dead leaf-patterns on a damask drapery, well rendered, will enable you to disentangle masterfully the living leaf-patterns of a thorn thicket, or a violet bank.

Observe, however, in drawing any stuffs, or bindings of books, or other finely textured substances, do not trouble yourself, as yet, much about the woolliness or gauziness of the thing; but get it right in shade and fold, and true in pattern. We shall see, in the course of after-practice, how the penned

* If we had any business with the reasons of this, I might, perhaps, be able to show you some metaphysical ones for the enjoyment, by truly artistical minds, of the changes wrought by light, and shade, and perspective in patterned surfaces; but this is at present not to the point; and all that you need to know is that the drawing of such things is good exercise, and moreover a kind of exercise which Titian, Veronese, Tintoret, Giorgione, and Turner, all enjoyed, and strove to excel in.
lines may be made indicative of texture; but at present attend only to the light, and shade, and pattern. You will be puzzled at first by lustrous surfaces, but a little attention will show you that the expression of these depends merely on the right drawing of their light, and shade, and reflections. Put a small black japanned tray on the table in front of some books; and you will see it reflects the objects beyond it as in a little black rippled pond; its own colour mingling always with that of the reflected objects. Draw these reflections of the books properly, making them dark and distorted, as you will see that they are, and you will find that this gives the lustre to your tray. It is not well, however, to draw polished objects in general practice; only you should do one or two in order to understand the aspect of any lustrous portion of other things, such as you cannot avoid; the gold, for instance, on the edges of books, or the shining of silk and damask, in which lies a great part of the expression of their folds. Observe, also, that there are very few things which are totally without lustre: you will frequently find a light which puzzles you, on some apparently dull surface, to be the dim image of another object.

And now, as soon as you can conscientiously assure me that with the point of the pen or pencil you can lay on any form and shade you like, I give you leave to use the brush with one colour,—sepia, or blue-black, or mixed cobalt and blue-black, or neutral tint; and this will much facilitate your study, and refresh you. But, preliminarily, you must do one or two more exercises in tinting.

EXERCISE IX.

Prepare your colour as before directed. Take a brush full of it, and strike it on the paper in any irregular shape; as the brush gets dry sweep the surface of the paper with it as if you were dusting the paper very lightly; every such sweep of the brush will leave a number of more or less minute interstices in the colour. The lighter and faster every dash the better. Then leave the whole to dry, and as soon as it is dry, with lit-
ON FIRST PRACTICE.

The colour in your brush, so that you can bring it to a fine point, fill up all the little interstices one by one, so as to make the whole as even as you can, and fill in the larger gaps with more colour, always trying to let the edges of the first and of the newly applied colour exactly meet, and not lap over each other. When your new colour dries, you will find it in places a little paler than the first. Retouch it, therefore, trying to get the whole to look quite one piece. A very small bit of colour thus filled up with your very best care, and brought to look as if it had been quite even from the first, will give you better practice and more skill than a great deal filled in carelessly; so do it with your best patience, not leaving the most minute spot of white; and do not fill in the large pieces first and then go to the small, but quietly and steadily cover in the whole up to a marked limit; then advance a little farther, and so on; thus always seeing distinctly what is done and what undone.

EXERCISE X.

Lay a coat of the blue, prepared as usual, over a whole square of paper. Let it dry. Then another coat over four-fifths of the square, or thereabouts, leaving the edge rather irregular than straight, and let it dry. Then another coat over three-fifths; another over two-fifths; and the last over one-fifth; so that the square may present the appearance of gradual increase in darkness in five bands, each darker than the one beyond it. Then, with the brush rather dry (as in the former exercise, when filling up the interstices), try, with small touches, like those used in the pen etching, only a little broader, to add shade delicately beyond each edge, so as to lead the darker tints into the paler ones imperceptibly. By touching the paper very lightly, and putting a multitude of little touches, crossing and recrossing in every direction, you will gradually be able to work up to the darker tints, outside of each, so as quite to efface their edges, and unite them tenderly with the next tint. The whole square, when done, should look evenly shaded from dark to pale, with no bars;
only a crossing texture of touches, something like chopped straw, over the whole.*

Next, take your rounded pebble; arrange it in any light and shade you like; outline it very loosely with the pencil. Put on a wash of colour, prepared very pale, quite flat over all of it, except the highest light, leaving the edge of your colour quite sharp. Then another wash, extending only over the darker parts, leaving the edge of that sharp also, as in tinting the square. Then another wash over the still darker parts, and another over the darkest, leaving each edge to dry sharp. Then, with the small touches, efface the edges, reinforce the darks, and work the whole delicately together, as you would with the pen, till you have got it to the likeness of the true light and shade. You will find that the tint underneath is a great help, and that you can now get effects much more subtle and complete than with the pen merely.

The use of leaving the edges always sharp is that you may not trouble or vex the colour, but let it lie as it falls suddenly on the paper; colour looks much more lovely when it has been laid on with a dash of the brush, and left to dry in its own way, than when it has been dragged about and disturbed; so that it is always better to let the edges and forms be a little wrong, even if one cannot correct them afterwards, than to lose this fresh quality of the tint. Very great masters in water-colour can lay on the true forms at once with a dash, and bad masters in water-colour lay on grossly false forms with a dash, and leave them false; for people in general, not knowing false from true, are as much pleased with the appearance of power in the irregular blot as with the presence of power in the determined one; but we, in our beginnings, must do as much as we can with the broad dash, and then correct with the point, till we are quite right. We must take care to be right, at whatever cost of pains; and then gradually we shall find we can be right with freedom.

I have hitherto limited you to colour mixed with two or

* The use of acquiring this habit of execution is that you may be able, when you begin to colour, to let one hue be seen in minute portions, gleaming between the touches of another.
three teaspoonfuls of water; but in finishing your light and shade from the stone, you may, as you efface the edge of the palest coat towards the light, use the colour for the small touches with more and more water, till it is so pale as not to be perceptible. Thus you may obtain a perfect gradation to the light. And in reinforcing the darks, when they are very dark, you may use less and less water. If you take the colour tolerably dark on your brush, only always liquid (not pasty), and dash away the superfluous colour on blotting-paper, you will find that, touching the paper very lightly with the dry brush, you can, by repeated touches, produce a dusty kind of bloom, very valuable in giving depth to shadow; but it requires great patience and delicacy of hand to do this properly. You will find much of this kind of work in the grounds and shadows of William Hunt's drawings.*

As you get used to the brush and colour, you will gradually find out their ways for yourself, and get the management of them. Nothing but practice will do this perfectly; but you will often save yourself much discouragement by remembering what I have so often asserted,—that if anything goes wrong, it is nearly sure to be refinement that is wanting, not force; and connexion, not alteration. If you dislike the state your drawing is in, do not lose patience with it, nor dash at it, nor alter its plan, nor rub it desperately out, at the place you think wrong; but look if there are no shadows you can grade more perfectly; no little gaps and rents you can fill; no forms you can more delicately define: and do not rush at any of the errors or incompletions thus discerned, but efface or supply slowly, and you will soon find your drawing take another look. A very useful expedient in producing some effects, is to wet the paper, and then lay the colour on it, more or less wet, according to the effect you want. You will soon see how prettily it gradates itself as it dries; when dry, you can reinforce it with delicate stippling when you want it darker. Also, while the colour is still damp on the paper, by drying your brush thoroughly, and touching the colour with the brush so dried, you may take out soft lights with great

*William Hunt, of the Old Water-colour Society.
tenderness and precision. Try all sorts of experiments of this kind, noticing how the colour behaves; but remembering always that your final results must be obtained, and can only be obtained, by pure work with the point, as much as in the pen drawing.

You will find also, as you deal with more and more complicated subjects, that Nature's resources in light and shade are so much richer than yours, that you cannot possibly get all, or anything like all, the gradations of shadow in any given group. When this is the case, determine first to keep the broad masses of things distinct: if, for instance, there is a green book, and a white piece of paper, and a black inkstand in the group, be sure to keep the white paper as a light mass, the green book as a middle tint mass, the black inkstand as a dark mass; and do not shade the folds in the paper, or corners of the book, so as to equal in depth the darkness of the inkstand. The great difference between the masters of light and shade, and imperfect artists, is the power of the former to draw so delicately as to express form in a dark-coloured object with little light, and in a light-coloured object with little darkness; and it is better even to leave the forms here and there unsatisfactorily rendered than to lose the general relations of the great masses. And this observe, not because masses are grand or desirable things in your composition (for with composition at present you have nothing whatever to do), but because it is a fact that things do so present themselves to the eyes of men, and that we see paper, book, and inkstand as three separate things, before we see the wrinkles, or chinks, or corners of any of the three. Understand, therefore, at once, that no detail can be as strongly expressed in drawing as it is in the reality; and strive to keep all your shadows and marks and minor markings on the masses, lighter than they appear to be in Nature, you are sure otherwise to get them too dark. You will in doing this find that you cannot get the projection of things sufficiently shown; but never mind that; there is no need that they should appear to project, but great need that their relations of shade to each other should be preserved. All deceptive projection is obtained by partial exaggeration of
shadow; and whenever you see it, you may be sure the drawing is more or less bad; a thoroughly fine drawing or painting will always show a slight tendency towards flatness.

Observe, on the other hand, that however white an object may be, there is always some small point of it whiter than the rest. You must therefore have a slight tone of grey over everything in your picture except on the extreme high lights; even the piece of white paper, in your subject, must be toned slightly down, unless (and there are a thousand chances to one against its being so) it should all be turned so as fully to front the light. By examining the treatment of the white objects in any pictures accessible to you by Paul Veronese or Titian, you will soon understand this.*

As soon as you feel yourself capable of expressing with the brush the undulations of surfaces and the relations of masses, you may proceed to draw more complicated and beautiful things.† And first, the boughs of trees, now not in mere dark relief, but in full rounding. Take the first bit of branch or stump that comes to hand, with a fork in it; cut off the ends of the forking branches, so as to leave the whole only about a foot in length; get a piece of paper the same size, fix your bit of branch in some place where its position will not be altered, and draw it thoroughly, in all its light and shade, full size; striving, above all things, to get an accurate expression of its structure at the fork of the branch. When once you

* At Marlborough House, among the four principal examples of Turner's later water-colour drawing, perhaps the most neglected is that of fishing-boats and fish at sunset. It is one of his most wonderful works, though unfinished. If you examine the larger white fishing-boat sail, you will find it has a little spark of pure white in its right-hand upper corner, about as large as a minute pin's head, and that all the surface of the sail is gradated to that focus. Try to copy this sail once or twice, and you will begin to understand Turner's work. Similarly, the wing of the Cupid in Correggio's large picture in the National Gallery is focussed to two little grains of white at the top of it. The points of light on the white flower in the wreath round the head of the dancing child-faun, in Titian's Bacchus and Ariadne, exemplify the same thing.

† I shall not henceforward number the exercises recommended; as they are distinguished only by increasing difficulty of subject, not by difference of method.
have mastered the tree at its armpits, you will have little more trouble with it.

Always draw whatever the background happens to be, exactly as you see it. Wherever you have fastened the bough, you must draw whatever is behind it, ugly or not, else you will never know whether the light and shade are right; they may appear quite wrong to you, only for want of the background.

And this general law is to be observed in all your studies: whatever you draw, draw completely and unalteringly, else you never know if what you have done is right, or whether you could have done it rightly had you tried. There is nothing visible out of which you may not get useful practice.

Next, to put the leaves on your boughs. Gather a small twig with four or five leaves on it, put it into water, put a sheet of light-coloured or white paper behind it, so that all the leaves may be relieved in dark from the white field; then sketch in their dark shape carefully with pencil as you did the complicated boughs, in order to be sure that all their masses and interstices are right in shape before you begin shading, and complete as far as you can with pen and ink, in the manner of Fig. 6., which is a young shoot of lilac.

You will probably, in spite of all your pattern drawings, be at first puzzled by leaf foreshortening; especially because the look of retirement or projection depends not so much on the perspective of the leaves themselves as on the double sight of the two eyes. Now there are certain artifices by which good
ON FIRST PRACTICE. 273

painters can partly conquer this difficulty; as slight exaggerations of force or colour in the nearer parts, and of obscurity in the more distant ones; but you must not attempt anything of this kind. When you are first sketching the leaves, shut one of your eyes, fix a point in the background, to bring the point of one of the leaves against, and so sketch the whole bough as you see it in a fixed position, looking with one eye only. Your drawing never can be made to look like the object itself, as you see that object with both eyes,* but it can be made perfectly like the object seen with one, and you must be content when you have got a resemblance on these terms.

In order to get clearly at the notion of the thing to be done, take a single long leaf, hold it with its point towards you, and as flat as you can, so as to see nothing of it but its thinness, as if you wanted to know how thin it was; outline it so. Then slope it down gradually towards you, and watch it as it lengthens out to its full length, held perpendicularly down before you. Draw it in three or four different positions between these extremes, with its ribs as they appear in each position, and you will soon find out how it must be.

Draw first only two or three of the leaves; then larger clusters; and practise, in this way, more and more complicated pieces of bough and leafage, till you find you can master the most difficult arrangements, not consisting of more than ten or twelve leaves. You will find as you do this, if you have an opportunity of visiting any gallery of pictures, that you take a much more lively interest than before in the work of the great masters; you will see that very often their best backgrounds are composed of little more than a few sprays of leafage, carefully studied, brought against the distant sky; and that another wreath or two form the chief interest of their foregrounds. If you live in London you may test your progress accurately by the degree of admiration you feel for the leaves of vine round the head of the Bacchus, in Titian’s Bacchus

*If you understand the principle of the stereoscope you will know why; if not, it does not matter; trust me for the truth of the statement, as I cannot explain the principle without diagrams and much loss of time.
and Ariadne. All this, however, will not enable you to draw a mass of foliage. You will find, on looking at any rich piece of vegetation, that it is only one or two of the nearer clusters that you can by any possibility draw in this complete manner. The mass is too vast, and too intricate, to be thus dealt with.

You must now therefore have recourse to some confused mode of execution, capable of expressing the confusion of Nature. And, first, you must understand what the character of that confusion is. If you look carefully at the outer sprays of any tree at twenty or thirty yards’ distance, you will see them defined against the sky in masses, which, at first, look quite definite; but if you examine them, you will see, mingled with the real shapes of leaves, many indistinct lines, which are,

![Diagram of foliage elements](image)

Fig. 7.

some of them, stalks of leaves, and some, leaves seen with the edge turned towards you, and coming into sight in a broken way; for, supposing the real leaf shape to be as at \(a\), Fig. 7., this, when removed some yards from the eye, will appear dark against the sky, as at \(b\); then, when removed some yards farther still, the stalk and point disappear altogether, the middle of the leaf becomes little more than a line; and the result is the condition at \(c\), only with this farther subtlety in the look of it, inexpressible in the woodcut, that the stalk and point of the leaf, though they have disappeared to the eye, have yet some influence in checking the light at the places where they exist, and cause a slight dimness about the part of the leaf which remains visible, so that its perfect effect could only be rendered by two layers of colour, one subduing the sky tone.
a little, the next drawing the broken portions of the leaf, as at c, and carefully indicating the greater darkness of the spot in the middle, where the under side of the leaf is.

This is the perfect theory of the matter. In practice we cannot reach such accuracy; but we shall be able to render the general look of the foliage satisfactorily by the following mode of practice.

Gather a spray of any tree, about a foot or eighteen inches long. Fix it firmly by the stem in anything that will support it steadily; put it about eight feet away from you, or even if you are far-sighted. Put a sheet of not very white paper behind it, as usual. Then draw very carefully, first placing them with pencil, and then filling them up with ink, every leaf, mass and stalk of it in simple black profile, as you see them against the paper: Fig. 8. is a bough of Phillyrea so drawn. Do not be afraid of running the leaves into a black mass when they come together; this exercise is only to teach you what the actual shapes of such masses are when seen against the sky.

Make two careful studies of this kind of one bough of every common tree—oak, ash, elm, birch, beech, &c.; in fact, if you
are good, and industrious, you will make one such study carefully at least three times a week, until you have examples of every sort of tree and shrub you can get branches of. You are to make two studies of each bough, for this reason—all masses of foliage have an upper and under surface, and the side view of them, or profile, shows a wholly different organisation of branches from that seen in the view from above. They are generally seen more or less in profile, as you look at the whole tree, and Nature puts her best composition into the profile arrangement. But the view from above or below occurs not unfrequently, also, and it is quite necessary you should draw it if you wish to understand the anatomy of the tree. The difference between the two views is often far greater

![Diagram](image)

**Fig. 9.**

than you could easily conceive. For instance, in Fig. 9, a is the upper view, and b the profile, of a single spray of Phillyrea. Fig. 8. is an intermediate view of a larger bough; seen from beneath, but at some lateral distance also.

When you have done a few branches in this manner, take one of the drawings, and put it first a yard away from you, then a yard and a half, then two yards; observe how the thinner stalks and leaves gradually disappear, leaving only a vague and slight darkness where they were, and make another study of the effect at each distance, taking care to draw nothing more than you really see, for in this consists all the difference between what would be merely a miniature drawing of the leaves seen near, and a full-size drawing of the same leaves at a distance. By full size, I mean the size which they would really appear of if their outline were traced through a pane of
glass held at the same distance from the eye at which you mean to hold your drawing. You can always ascertain this full size of any object by holding your paper upright before you, at the distance from your eye at which you wish your drawing to be seen. Bring its edge across the object you have to draw, and mark upon this edge the points where the outline of the object crosses, or goes behind, the edge of the paper. You will always find it, thus measured, smaller than you supposed.

When you have made a few careful experiments of this kind on your own drawings, (which are better for practice, at first, than the real trees, because the black profile in the drawing is quite stable, and does not shake, and is not confused by sparkles of lustre on the leaves,) you may try the extremities of the real trees, only not doing much at a time, for the brightness of the sky will dazzle and perplex your sight. And this brightness causes, I believe, some loss of the outline itself; at least the chemical action of the light in a photograph extends much within the edges of the leaves, and, as it were, eats them away so that no tree extremity, stand it ever so still, nor any other form coming against bright sky, is truly drawn by a photograph; and if you once succeed in drawing a few sprays rightly, you will find the result much more lovely and interesting than any photograph can be.

All this difficulty, however, attaches to the rendering merely the dark form of the sprays as they come against the sky. Within those sprays, and in the heart of the tree, there is a complexity of a much more embarrassing kind; for nearly all leaves have some lustre, and all are more or less translucent (letting light through them); therefore, in any given leaf, besides the intricacies of its own proper shadows and foreshortenings, there are three series of circumstances which alter or hide its forms. First, shadows cast on it by other leaves—often very forcibly. Secondly, light reflected from its lustrous surface, sometimes the blue of the sky, sometimes the white of clouds, or the sun itself flashing like a star. Thirdly, forms and shadows of other leaves, seen as darkness through the translucent parts of the leaf; a most important
element of foliage effect, but wholly neglected by landscape artists in general.

The consequence of all this is, that except now and then by chance, the form of a complete leaf is never seen; but a marvellous and quaint confusion, very definite, indeed, in its evidence of direction of growth, and unity of action, but wholly indefinable and inextricable, part by part, by any amount of patience. You cannot possibly work it out in fac simile, though you took a twelvemonth's time to a tree; and you must therefore try to discover some mode of execution which will more or less imitate, by its own variety and mystery, the variety and mystery of Nature, without absolute delineation of detail.

Now I have led you to this conclusion by observation of tree form only, because in that the thing to be proved is clearest. But no natural object exists which does not involve in some part or parts of it this inimitableness, this mystery of quantity, which needs peculiarity of handling and trick of touch to express it completely. If leaves are intricate, so is moss, so is foam, so is rock cleavage, so are fur and hair, and texture of drapery, and of clouds. And although methods and dexterities of handling are wholly useless if you have not gained first the thorough knowledge of the form of the thing; so that if you cannot draw a branch perfectly, then much less a tree; and if not a wreath of mist perfectly, much less a flock of clouds; and if not a single grass blade perfectly, much less a grass bank; yet having once got this power over decisive form, you may safely—and must, in order to perfection of work—carry out your knowledge by every aid of method and dexterity of hand.

But, in order to find out what method can do, you must now look at Art as well as at Nature, and see what means painters and engravers have actually employed for the expression of these subtleties. Whereupon arises the question, what opportunity have you to obtain engravings? You ought, if it is at all in your power, to possess yourself of a certain number of good examples of Turner's engraved works: if this be not in your power, you must just make the best use you can
of the shop windows, or of any plates of which you can obtain
a loan. Very possibly, the difficulty of getting sight of them
may stimulate you to put them to better use. But, supposing
your means admit of your doing so, possess yourself, first, of
the illustrated edition either of Rogers's Italy or Rogers's
Poems, and then of about a dozen of the plates named in the
annexed lists. The prefixed letters indicate the particular
points deserving your study in each engraving.* Be sure,

* If you can, get first the plates marked with a star. The letters
mean as follows:—
a stands for architecture, including distant grouping of towns, cottages,
&c.
c clouds, including mist and aerial effects.
f foliage.
g ground, including low hills, when not rocky.
l effects of light.
m mountains, or bold rocky ground.
p power of general arrangement and effect.
q quiet water.
r running or rough water; or rivers, even if calm, when their line of
flow is beautifully marked.

From the England Series.

\[\text{afq. Arundel.} \quad \text{afq. Trematon.} \]
\[\text{afl. Ashby de la Zouche.} \quad \text{afp. Lancaster.} \]
\[\text{alq. Barnard Castle.} * \quad \text{clm. Lancaster Sands.} * \]
\[\text{fm. Bolton Abbey.} \quad \text{agfl. Leinster Abbey.} \]
\[\text{fg. Buckfastleigh.} * \quad \text{fr. Ludlow.} \]
\[\text{alp. Caernarvon.} \quad \text{af. Margate.} \]
\[\text{clq. Castle Upnor.} \quad \text{alq. Orford.} \]
\[\text{lq. Colchester.} \quad \text{cp. Plymouth.} \]
\[\text{cfp. Dartmouth Cove.} \quad \text{j. Powis Castle.} \]
\[\text{clq. Flint Castle.} * \quad \text{lmq. Prudhoe Castle.} \]
\[\text{afgl. Knaresborough.} * \quad \text{flm. Chain Bridge over Tees} * \]
\[\text{mr. High Force of Tees.} * \quad \text{mq. Ulleswater.} \]
\[\text{fm. Valle Crucis.} \]

From the Keepsake.

\[\text{mpq. Arona.} \quad \text{p. St. Germain en Laye.} \]
\[\text{m. Drachenfells.} \quad \text{lpq. Florence.} \]
\[\text{fl. Marley.} * \quad \text{lm. Ballyburgh Ness.} * \]
therefore, that your selection includes, at all events, one plate marked with each letter—of course the plates marked with two or three letters are, for the most part, the best. Do not get more than twelve of these plates, nor even all the twelve at first. For the more engravings you have, the less attention you will pay to them. It is a general truth, that the enjoyment derivable from art cannot be increased in quantity, beyond a certain point, by quantity of possession; it is only spread, as it were, over a larger surface, and very often dulled by finding ideas repeated in different works. Now, for a beginner, it is always better that his attention should be concentrated on one or two good things, and all his enjoyment founded on them, than that he should look at many, with divided thoughts. He has much to discover; and his best way of discovering it is to think long over few things, and watch them earnestly. It is one of the worst errors of this age to try to know and to see too much: the men who seem to know everything, never in reality know anything rightly. Beware of hand-book knowledge.

These engravings are, in general, more for you to look at

*From the Bible Series.*

<table>
<thead>
<tr>
<th>f m</th>
<th>Mount Lebanon.</th>
<th>a e g</th>
<th>Joppa.</th>
</tr>
</thead>
<tbody>
<tr>
<td>m</td>
<td>Rock of Moses at Sinai.</td>
<td>c l p q</td>
<td>Solomon's Pools.*</td>
</tr>
<tr>
<td>a l m</td>
<td>Jericho.</td>
<td>a l</td>
<td>Santa Saba.</td>
</tr>
<tr>
<td>a l</td>
<td>Pool of Bethesda.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*From Scott's Works.*

<table>
<thead>
<tr>
<th>p r</th>
<th>Melrose.</th>
<th>c m</th>
<th>Glencoe.</th>
</tr>
</thead>
<tbody>
<tr>
<td>f r</td>
<td>Dryburgh.*</td>
<td>c m</td>
<td>Loch Coriskin.</td>
</tr>
<tr>
<td>a l</td>
<td>Caerlaverock.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*From the "Rivers of France."*

<table>
<thead>
<tr>
<th>a q</th>
<th>Château of Amboise, with large bridge on right.</th>
<th>a p</th>
<th>Rouen Cathedral.</th>
</tr>
</thead>
<tbody>
<tr>
<td>l p r</td>
<td>Rouen, looking down the river, poplars on right.*</td>
<td>f p</td>
<td>Pont de l'Arche.</td>
</tr>
<tr>
<td>a l p</td>
<td>Rouen, with cathedral and rainbow, avenue on the left. c g p r</td>
<td>a e p</td>
<td>Bridge of Meulan.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Caudebec.*</td>
</tr>
</tbody>
</table>
than to copy; and they will be of more use to you when we come to talk of composition, than they are at present; still, it will do you a great deal of good, sometimes to try how far you can get their delicate texture, or gradations of tone; as your pen-and-ink drawing will be apt to incline too much to a scratchy and broken kind of shade. For instance, the texture of the white convent wall, and the drawing of its tiled roof, in the vignette at p. 227. of Rogers's Poems, is as exquisite as work can possibly be; and it will be a great and profitable achievement if you can at all approach it. In like manner, if you can at all imitate the dark distant country at p. 7., or the sky at p. 80., of the same volume, or the foliage at pp. 12. and 144., it will be good gain; and if you can once draw the rolling clouds and running river at p. 9. of the "Italy," or the city in the vignette of Aosta at p. 25., or the moonlight at p. 223., you will find that even Nature herself cannot afterwards very terribly puzzle you with her torrents, or towers, or moonlight.

You need not copy touch for touch, but try to get the same effect. And if you feel discouraged by the delicacy required, and begin to think that engraving is not drawing, and that copying it cannot help you to draw, remember that it differs from common drawing only by the difficulties it has to encounter. You perhaps have got into a careless habit of thinking that engraving is a mere business, easy enough when one has got into the knack of it. On the contrary, it is a form of drawing more difficult than common drawing, by exactly so much as it is more difficult to cut steel than to move the pencil over paper. It is true that there are certain mechanical aids and methods which reduce it at certain stages either to pure machine work, or to more or less a habit of hand and arm; but this is not so in the foliage you are trying to copy, of which the best and prettiest parts are always etched—that is, drawn with a fine steel point and free hand: only the line made is white instead of black, which renders it much more difficult to judge of what you are about. And the trying to copy these plates will be good for you, because it will awaken you to the real labour and skill of the engraver, and make you
understand a little how people must work, in this world, who have really to do anything in it.

Do not, however, suppose that I give you the engraving as a model—far from it; but it is necessary you should be able to do as well * before you think of doing better, and you will find many little helps and hints in the various work of it. Only remember that all engravers' foregrounds are bad; whenever you see the peculiar wriggling parallel lines of modern engravings become distinct, you must not copy; nor admire: it is only the softer masses, and distances; and portions of the foliage in the plates marked f, which you may copy. The best for this purpose, if you can get it, is the "Chain bridge over the Tees," of the England series; the thicket on the right is very beautiful and instructive, and very like Turner. The foliage in the "Ludlow" and "Powis" is also remarkably good.

Besides these line engravings, and to protect you from what harm there is in their influence, you are to provide yourself, if possible, with a Rembrandt etching, or a photograph of one (of figures, not landscape). It does not matter of what subject, or whether a sketchy or finished one, but the sketchy ones are generally cheapest, and will teach you most. Copy it as well as you can, noticing especially that Rembrandt's most rapid lines have steady purpose; and that they are laid with almost inconceivable precision when the object becomes at all interesting. The "Prodigal Son," "Death of the Virgin," "Abraham and Isaac," and such others, containing incident and character rather than chiaroscuro, will be the most instructive. You can buy one; copy it well; then exchange it, at little loss, for another; and so, gradually, obtain a good knowledge of his system. Whenever you have an opportunity of examining his work at museums, &c., do so with the greatest care, not looking at many things, but a long time at each. You must also provide yourself, if possible, with an engraving of Albert Durer's. This you will not be able to copy; but

* As well;—not as minutely: the diamond cuts finer lines on the steel than you can draw on paper with your pen; but you must be able to get tones as even, and touches as firm.
you must keep it beside you, and refer to it as a standard of precision in line. If you can get one with a wing in it, it will be best. The crest with the cock, that with the skull and satyr, and the "Melancholy," are the best you could have, but any will do. Perfection in chiaroscuro drawing lies between these two masters, Rembrandt and Durer. Rembrandt is often too loose and vague; and Durer has little or no effect of mist or uncertainty. If you can see anywhere a drawing by Leonardo, you will find it balanced between the two characters; but there are no engravings which present this perfection, and your style will be best formed, therefore, by alternate study of Rembrandt and Durer. Lean rather to Durer; it is better for amateurs to err on the side of precision than on that of vagueness: and though, as I have just said, you cannot copy a Durer, yet try every now and then a quarter of an inch square or so, and see how much nearer you can come; you cannot possibly try to draw the leafly crown of the "Melancholia" too often.

If you cannot get either a Rembrandt or a Durer, you may still learn much by carefully studying any of George Cruikshank's etchings, or Leech's woodcuts in Punch, on the free side; with Alfred Rethel's and Richter's * on the severe side. But in so doing you will need to notice the following points:

When either the material (as the copper or wood) or the time of an artist, does not permit him to make a perfect drawing,—that is to say, one in which no lines shall be prominently visible,—and he is reduced to show the black lines, either drawn by the pen, or on the wood, it is better to make these lines help, as far as may be, the expression of texture and form. You will thus find many textures, as of cloth or grass or flesh, and many subtle effects of light, expressed by Leech with zigzag or crossed or curiously broken lines; and you will see that Alfred Rethel and Richter constantly express the direction and rounding of surfaces by the direction of the lines which shade them. All these various means of expression will be useful to you, as far as you can learn them, provided

* See, for account of these plates, the Appendix on "Works to be studied."
you remember that they are merely a kind of shorthand; telling certain facts, not in quite the right way, but in the only possible way under the conditions: and provided in any after use of such means, you never try to show your own dexterity; but only to get as much record of the object as you can in a given time; and that you continually make efforts to go beyond shorthand, and draw portions of the objects rightly.

And touching this question of direction of lines as indicating that of surface, observe these few points:

If lines are to be distinctly shown, it is better that, so far as they can indicate any thing by their direction, they should explain rather than oppose the general character of the object.

Thus, in the piece of woodcut from Titian, Fig. 10., the lines are serviceable by expressing, not only the shade of the trunk, but partly also its roundness, and the flow of its grain. And Albert Durer, whose work was chiefly engraving, sets himself always thus to make his lines as valuable as possible; telling much by them, both of shade and direction of surface: and if you were always to be limited to engraving on copper (and did not want to express effects of mist or darkness, as well as delicate forms), Albert Durer's way of work would be the best example for you. But, inasmuch as the perfect way of drawing is by shade without lines, and the great painters always conceive their subject as complete, even when they are sketching.
it most rapidly, you will find that, when they are not limited in means, they do not much trust to direction of line, but will often scratch in the shade of a rounded surface with nearly straight lines, that is to say, with the easiest and quickest lines possible to themselves. When the hand is free, the easiest line for it to draw is one inclining from the left upward to the right, or vice versa, from the right downwards to the left; and when done very quickly, the line is hooked a little at the end by the effort at return to the next. Hence, you will always find the pencil, chalk, or pen sketch of a very great master full of these kind of lines; and even if he draws carefully, you will find him using simple straight lines from left to right, when an inferior master will have used curved ones. Fig. 11. is a fair facsimile of part of a sketch of Raphael's, which exhibits these characters very distinctly. Even the careful drawings of Leonardo da Vinci are shaded most commonly with straight lines; and you may always assume it as a point increasing the probability of a drawing being by a great master if you find rounded surfaces, such as those of cheeks or lips, shaded with straight lines.

But you will also now understand how easy it must be for
dishonest dealers to forge or imitate scrawled sketches like Figure 11., and pass them for the work of great masters; and how the power of determining the genuineness of a drawing depends entirely on your knowing the facts of the object drawn, and perceiving whether the hasty handling is all conducive to the expression of those truths. In a great man's work, at its fastest, no line is thrown away, and it is not by the rapidity, but the economy of the execution that you know him to be great. Now to judge of this economy, you must know exactly what he meant to do, otherwise you cannot of course discern how far he has done it; that is, you must know the beauty and nature of the thing he was drawing. All judgment of art thus finally founds itself on knowledge of Nature.

But farther observe, that this scrawled, or economic, or impetuous execution is never affectedly impetuous. If a great man is not in a hurry, he never pretends to be; if he has no eagerness in his heart, he puts none into his hand; if he thinks his effort would be better got with two lines, he never, to show his dexterity, tries to do it with one. Be assured, therefore (and this is a matter of great importance), that you will never produce a great drawing by imitating the execution of a great master. Acquire his knowledge and share his feelings, and the easy execution will fall from your hand as it did from his; but if you merely scrawl because he scrawled, or blot because he botted, you will not only never advance in power, but every able draughtsman, and every judge whose opinion is worth having, will know you for a cheat, and despise you accordingly.

Again, observe respecting the use of outline:

All merely outlined drawings are bad, for the simple reason, that an artist of any power can always do more, and tell more, by quitting his outlines occasionally, and scratching in a few lines for shade, than he can by restricting himself to outline only. Hence the fact of his so restricting himself, whatever may be the occasion, shows him to be a bad draughtsman, and not to know how to apply his power economically. This hard law, however, bears only on drawings meant to remain in the state in which you see them; not on those which were
meant to be proceeded with, or for some mechanical use. It is sometimes necessary to draw pure outlines, as an incipient arrangement of a composition, to be filled up afterwards with colour, or to be pricked through and used as patterns or tracings; but if, with no such ultimate object, making the drawing wholly for its own sake, and meaning it to remain in the state he leaves it, an artist restricts himself to outline, he is a bad draughtsman, and his work is bad. There is no exception to this law. A good artist habitually sees masses, not edges, and can in every case make his drawing more expressive (with any given quantity of work) by rapid shade than by contours; so that all good work whatever is more or less touched with shade, and more or less interrupted as outline.

Hence, the published works of Retsch, and all the English imitations of them, and all outline engravings from pictures, are bad work, and only serve to corrupt the public taste, and of such outlines, the worst are those which are darkened in some part of their course by way of expressing the dark side, as Flaxman's from Dante, and such others; because an outline can only be true so long as it accurately represents the form of the given object with one of its edges. Thus, the outline a and the outline b, Fig. 12, are both true outlines of a ball; because, however thick the line may be, whether we take the interior or exterior edge of it, that edge of it always draws a true circle. But c is a false outline of a ball, because either the inner or outer edge of the black line must be an untrue circle, else the line could not be thicker in one place than another. Hence all "force," as it is called, is gained by falsification of the contours; so that no artist whose eye is true and fine could endure to look at it. It does indeed often happen that a painter, sketching rapidly, and trying again and again for some line which he cannot quite strike, blackens or loads the first line by setting others beside and across it; and then a careless observer supposes it has been thickened on purpose; or, sometimes also, at a place where shade is afterwards to enclose the form, the painter will strike a broad dash of this shade beside his outline at once, looking as if he meant
to thicken the outline; whereas this broad line is only the first instalment of the future shadow, and the outline is really drawn with its inner edge. And thus, far from good draughtsmen darkening the lines which turn away from the light, the tendency with them is rather to darken them towards the light, for it is there in general that shade will ultimately enclose them. The best example of this treatment that I know is Raphael's sketch, in the Louvre, of the head of the angel pursuing Heliodorus, the one that shows part of the left eye; where the dark strong lines which terminate the nose and forehead towards the light are opposed to tender and light ones behind the ear, and in other places towards the shade. You will see in Fig. 11. the same principle variously exemplified; the principal dark lines, in the head and drapery of the arms, being on the side turned to the light.

All these refinements and ultimate principles, however, do not affect your drawing for the present. You must try to make your outlines as equal as possible; and employ pure outline only for the two following purposes: either (1.) to steady your hand, as in Exercise II., for if you cannot draw the line itself, you will never be able to terminate your shadow in the precise shape required, when the line is absent; or (2.) to give you shorthand memoranda of forms, when you are pressed for time. Thus the forms of distant trees in groups are defined, for the most part, by the light edge of the rounded mass of the nearer one being shown against the darker part of the rounded mass of a more distant one; and to draw this properly, nearly as much work is required to round each tree as to round the stone in Fig. 5. Of course you cannot often get time to do this; but if you mark the terminal line of each tree as is done by Durer in Fig. 13., you will get a most useful memorandum of their arrangement, and a very interesting drawing. Only observe in doing this, you must not, because the procedure is a quick one, hurry that procedure itself. You will find, on copying that bit of Durer, that every one of his lines is firm, deliberate, and accurately descriptive as far as it goes. It means a bush of such a size
and such a shape, definitely observed and set down; it contains a true "signalement" of every nut-tree, and apple-tree, and higher bit of hedge, all round that village. If you have not time to draw thus carefully, do not draw at all—you are merely wasting your work and spoiling your taste. When you have had four or five years' practice you may be able to make useful memoranda at a rapid rate, but not yet; except sometimes of light and shade, in a way of which I will tell you presently. And this use of outline, note farther, is wholly confined to objects which have edges or limits. You can outline a tree or a stone, when it rises against another tree or stone; but you cannot outline folds in drapery, or waves in water; if these are to be expressed at all it must be by some sort of shade, and therefore the rule that no good drawing can consist throughout of pure outline remains absolute. You see, in that woodcut of Durer's, his reason for even limiting himself so much to outline as he has, in those distant woods and plains, is that he may leave them in bright light, to be thrown out still more by the dark sky and the dark village spire; and the scene becomes real and sunny only by the addition of these shades.

Fig. 13.
Understanding, then, thus much of the use of outline, we will go back to our question about tree drawing left unanswered at page 60.

We were, you remember, in pursuit of mystery among the leaves. Now, it is quite easy to obtain mystery and disorder, to any extent; but the difficulty is to keep organisation in the midst of mystery. And you will never succeed in doing this unless you lean always to the definite side, and allow yourself rarely to become quite vague, at least through all your early practice. So, after your single groups of leaves, your first step must be to conditions like Figs. 14 and 15., which are careful facsimiles of two portions of a beautiful woodcut of Durer's, the Flight into Egypt. Copy these carefully,—never mind how little at a time, but thoroughly; then trace the Durer, and apply it to your drawing, and do not be content till the one fits the other, else your eye is not true enough to carry you safely through meshes of real leaves. And in the course of doing this, you will find that not a line nor dot of Durer's can be displaced without harm; that all add to
the effect, and either express something, or illumine something, or relieve something. If, afterwards, you copy any of the pieces of modern tree drawing, of which so many rich examples are given constantly in our cheap illustrated periodicals (any of the Christmas numbers of last year’s Illustrated News or Times are full of them), you will see that, though good and forcible general effect is produced, the lines are

![Diagram](image-url)

thrown in by thousands without special intention, and might just as well go one way as another, so only that there be enough of them to produce all together a well-shaped effect of intricacy: and you will find that a little careless scratching about with your pen will bring you very near the same result without an effort; but that no scratching of pen, nor any fortunate chance, nor anything but downright skill and thought, will imitate so much as one leaf of Durer’s. Yet
there is considerable intricacy and glittering confusion in the interstices of those vine leaves of his, as well as of the grass.

When you have got familiarised to this firm manner, you may draw from Nature as much as you like in the same way; and when you are tired of the intense care required for this, you may fall into a little more easy massing of the leaves, as in Fig. 10, p. 66.) This is facsimilied from an engraving after Titian, but an engraving not quite first-rate in manner, the leaves being a little too formal; still, it is a good enough model for your times of rest; and when you cannot carry the thing even so far as this, you may sketch the forms of the masses, as in Fig. 16,* taking care always to have thorough command over your hand; that is, not to let the mass take a free shape because your hand ran glibly over the paper, but because in nature it has actually a free and noble shape, and you have faithfully followed the same.

And now that we have come to questions of noble shape, as well as true shape, and that we are going to draw from nature at our pleasure, other considerations enter into the business, which are by no means confined to first practice, but extend to all practice; these (as this letter is long enough, I should think, to satisfy even the most exacting of correspondents) I will arrange in a second letter; praying you only to excuse the tiresomeness of this first one—tiresomeness inseparable from directions touching the beginning of any art,—and to believe me, even though I am trying to set you to dull and hard work.

Very faithfully yours,

J. Ruskin.

*This sketch is not of a tree standing on its head, though it looks like it. You will find it explained presently.
LETTER II.

SKETCHING FROM NATURE.

MY DEAR READER:—

The work we have already gone through together has, I hope, enabled you to draw with fair success, either rounded and simple masses, like stones, or complicated arrangements of form, like those of leaves; provided only these masses or complexities will stay quiet for you to copy, and do not extend into quantity so great as to baffle your patience. But if we are now to go out to the fields, and to draw anything like a complete landscape, neither of these conditions will any more be observed for us. The clouds will not wait while we copy their heaps or clefts; the shadows will escape from us as we try to shape them, each, in its stealthy minute march, still leaving light where its tremulous edge had rested the moment before, and involving in eclipse objects that had seemed safe from its influence; and instead of the small clusters of leaves which we could reckon point by point, embarrassing enough even though numerable, we have now leaves as little to be counted as the sands of the sea, and restless, perhaps, as its foam.

In all that we have to do now, therefore, direct imitation becomes more or less impossible. It is always to be aimed at so far as it is possible; and when you have time and opportunity, some portions of a landscape may, as you gain greater skill, be rendered with an approximation almost to mirrored portraiture. Still, whatever skill you may reach, there will always be need of judgment to choose, and of speed to seize, certain things that are principal or fugitive; and you must give more and more effort daily to the observance of characteristic points, and the attainment of concise methods.

I have directed your attention early to foliage for two reasons. First, that it is always accessible as a study; and secondly, that its modes of growth present simple examples
of the importance of leading or governing lines. It is by seizing these leading lines, when we cannot seize all, that likeness and expression are given to a portrait, and grace and a kind of vital truth to the rendering of every natural form. I call it vital truth, because these chief lines are always expressive of the past history and present action of the thing. They show in a mountain, first, how it was built or heaped up; and secondly, how it is now being worn away, and from what quarter the wildest storms strike it. In a tree, they show what kind of fortune it has had to endure from its childhood; how troublesome trees have come in its way, and pushed it aside, and tried to strangle or starve it; where and when kind trees have sheltered it, and grown up lovingly together with it, bending as it bent; what winds torment it most; what boughs of it behave best, and bear most fruit; and so on. In a wave or cloud, these leading lines show the run of the tide and of the wind, and the sort of change which the water or vapour is at any moment enduring in its form, as it meets shore, or counterwave, or melting sunshine. Now remember, nothing distinguishes great men from inferior men more than their always, whether in life or in art, knowing the way things are going. Your dunce thinks they are standing still, and draws them all fixed; your wise man sees the change or changing in them, and draws them so—the animal in its motion, the tree in its growth, the cloud in its course, the mountain in its wearing away. Try always, whenever you look at a form, to see the lines in it which have had power over its past fate, and will have power over its futurity. Those are its awful lines; see that you seize on those, whatever else you miss. Thus, the leafage in Fig. 16. (p. 291.) grew round the root of a stone pine, on the brow of a crag at Sestri, near Genoa, and all the sprays of it are thrust away in their first budding by the great rude root, and spring out in every direction round it, as water splashes when a heavy stone is thrown into it. Then, when they have got clear of the root, they begin to bend up again; some of them, being little stone pines themselves, have a great notion of growing upright, if they can; and this struggle of theirs to recover their straight
road towards the sky, after being obliged to grow sideways in their early years, is the effort that will mainly influence their future destiny, and determine if they are to be crabbed, forky pines, striking from that rock of Sestri, whose clefts nourish them, with bared red lightning of angry arms towards the sea; or if they are to be goodly and solemn pines, with trunks like pillars of temples, and the purple burning of their branches sheathed in deep globes of cloudy green. Those, then, are their fateful lines; see that you give that spring and resilience, whatever you leave ungiven: depend upon it, their chief beauty is in these.

So in trees in general and bushes, large or small, you will notice that, though the boughs spring irregularly and at various angles, there is a tendency in all to stoop less and less as they near the top of the tree. This structure, typified in the simplest possible terms at c, Fig. 17., is common to all trees, that I know of, and it gives them a certain plumy character, and aspect of unity in the hearts of their branches, which are essential to their beauty. The stem does not merely send off a wild branch here and there to take its own way, but all the branches share in one great fountain-like impulse; each has a curve and a path to take which fills a definite place, and each terminates all its minor branches at its outer extremity, so as to form a great outer curve, whose character and proportion are peculiar for each species; that is to say, the general type or idea of a tree is not as a, Fig. 17., but as b, in which, observe, the boughs all carry their minor divisions right out to the bounding curve; not but that smaller branches, by thousands, terminate in the heart of the tree, but the idea and main purpose in every branch are to carry all its child branches well out to the air and light, and let each of them, however small, take its part in filling the united flow of the bounding curve, so that the type of each separate lough is again not a,
but $b$, Fig. 18.; approximating, that is to say, so far to the structure of a plant of broccoli as to throw the great mass of spray and leafage out to a rounded surface; therefore, beware of getting into a careless habit of drawing boughs with successive sweeps of the pen or brush, one hanging to the other, as in Fig. 19. If you look at the tree-boughs in any painting of Wilson's, you will see this structure, and nearly every other that is to be avoided, in their intensest types. You will also notice that Wilson never conceives a tree as a round mass, but flat, as if it had been pressed and dried. Most people, in drawing pines, seem to fancy, in the same way, that the boughs come out only on two sides of the trunk, instead of all round it; always, therefore, take more pains in trying to draw the boughs of trees that grow towards you, than those that go off to the sides; anybody can draw the latter, but the foreshortened ones are not so easy. It will help you in drawing them to observe that in most trees the ramification of each branch, though not of the tree itself, is more or less flattened, and approximates, in its position, to the look of a hand held out to receive something, or shelter something. If you take a looking-glass, and hold your hand before it slightly hollowed, with the palm upwards, and the fingers open, as if you were going to support the base of some great bowl, larger than you could easily hold, and sketch your hand as you see it in the glass, with the points of the fingers towards you, it will materially help you in understanding the way trees generally hold out their hands; and if then you will turn yours with its palm downwards, as if you were going to try to hide something, but with the fingers expanded, you will get a good type
of the action of the lower boughs in cedars and such other spreading trees.

Fig. 20. will give you a good idea of the simplest way in which these and other such facts can be rapidly expressed; if you copy it carefully, you will be surprised to find how the touches all group together, in expressing the plummy toss of the tree branches, and the springing of the bushes out of the bank,
and the undulation of the ground: note the careful drawing of the footsteps made by the climbers of the little mound on the left.* It is facsimiled from an etching of Turner's, and is as good an example as you can have of the use of pure and firm lines; it will also show you how the particular action in foliage, or anything else to which you wish to direct attention, may be intensified by the adjuncts. The tall and upright trees are made to look more tall and upright still, because their line is continued below by the figure of the farmer with his stick; and the rounded bushes on the bank are made to look more rounded because their line is continued in one broad sweep by the black dog and the boy climbing the wall. These figures are placed entirely with this object, as we shall see more fully hereafter when we come to talk about composition; but, if you please, we will not talk about that yet awhile. What I have been telling you about the beautiful lines and action of foliage has nothing to do with composition, but only with fact, and the brief and expressive representation of fact. But there will be no harm in your looking forward, if you like to do so, to the account, in Letter III. of the "Law of Radiation," and reading what it said there about tree-growth: indeed it would in some respects have been better to have said it here than there, only it would have broken up the account of the principles of composition somewhat awkwardly.

Now, although the lines indicative of action are not always quite so manifest in other things as in trees, a little attention will soon enable you to see that there are such lines in everything. In an old house roof, a bad observer and bad draughtsman will only see and draw the spotty irregularity of tiles or slates all over; but a good draughtsman will see all the bends of the under timbers, where they are weakest and the weight is telling on them most, and the tracks of the run of the water in time of rain, where it runs off fastest, and where it lies long and feeds the moss; and he will be careful, however few slates he draws, to mark the way they bend together towards those hollows (which have the future fate of the roof in them), and crowd gradually together at the top of the gable.

* It is meant, I believe, for "Salt Hill."
partly diminishing in perspective, partly, perhaps, diminished on purpose (they are so in most English old houses) by the slate-layer. So in ground, there is always the direction of the run of the water to be noticed, which rounds the earth and cuts it into hollows; and, generally, in any bank, or height worth drawing, a trace of bedded or other internal structure besides. The figure 20. will give you some idea of the way in which such facts may be expressed by a few lines. Do you not feel the depression in the ground all down the hill where the footsteps are, and how the people always turn to the left at the top, losing breath a little, and then how the water runs down in that other hollow towards the valley, behind the roots of the trees?

Now, I want you in your first sketches from nature to aim exclusively at understanding and representing these vital facts of form; using the pen—not now the steel, but the quill—firmly and steadily, never scrawling with it, but saying to yourself before you lay on a single touch,—"That leaf is the main one, that bough is the guiding one, and this touch, so long, so broad, means that part of it,"—point or side or knot, as the case may be. Resolve always, as you look at the thing, what you will take, and what miss of it, and never let your hand run away with you, or get into any habit or method of touch. If you want a continuous line, your hand should pass calmly from one end of it to the other, without a tremor; if you want a shaking and broken line, your hand should shake, or break off, as easily as a musician's finger shakes or stops on a note: only remember this, that there is no general way of doing any thing; no recipe can be given you for so much as the drawing of a cluster of grass. The grass may be ragged and stiff, or tender and flowing; sunburnt and sheep-bitten, or rank and languid; fresh or dry; lustrous or dull: look at it, and try to draw it as it is, and don't think how somebody "told you to do grass." So a stone may be round and angular, polished or rough, cracked all over like an ill-glazed teacup, or as united and broad as the breast of Hercules. It may be as flaky as a wafer, as powdery as a field puff-ball; it may be knotted like a ship's hawser, or kneaded like hammered iron, or knit like a Damas-
cus sabre, or fused like a glass bottle, or crystallised like a hoarfrost, or veined like a forest leaf: look at it, and don't try to remember how anybody told you to "do a stone."

As soon as you find that your hand obeys you thoroughly, and that you can render any form with a firmness and truth approaching that of Turner's and Durer's work,* you must add a simple but equally careful light and shade to your pen drawing, so as to make each study as complete as possible: for which you must prepare yourself thus. Get, if you have the means, a good impression of one plate of Turner's Liber Studiorum; if possible, one of the subjects named in the note below.†

* I do not mean that you can approach Turner or Durer in their strength, that is to say, in their imagination or power of design. But you may approach them, by perseverance, in truth of manner.

† The following are the most desirable plates:

- Grande Chartreuse.
- Æsacus and Hesperie.
- Cephalus and Procris.
- Source of Arveron.
- Ben Arthur.
- Watermill.
- Hindhead Hill.
- Hedging and Ditching.
- Dumblane Abbey.
- Morpeth.
- Calais Pier.

If you cannot get one of these, any of the others will be serviceable, except only the twelve following, which are quite useless:

1. Scene in Italy, with goats on a walled road, and trees above.
2. Interior of church.
3. Scene with bridge, and trees above; figures on left, one playing a pipe.
4. Scene with figure playing on tambourine.
5. Scene on Thames with high trees, and a square tower of a church seen through them.
6. Fifth Plague of Egypt.
7. Tenth Plague of Egypt.
8. Rivaulx Abbey.
9. Wye and Severn.
10. Scene with castle in centre, cows under trees on the left.
11. Martello Towers.
12. Calm.

It is very unlikely that you should meet with one of the original etch-
SKETCHING FROM NATURE.

If you cannot obtain, or even borrow for a little while, any of these engravings, you must use a photograph instead (how, I will tell you presently); but, if you can get the Turner, it will be best. You will see that it is composed of a firm etching in line, with mezzotint shadow laid over it. You must first copy the etched part of it accurately; to which end put the print against the window, and trace slowly with the greatest care every black line; retrace this on smooth drawing-paper; and, finally, go over the whole with your pen, looking at the original plate always, so that if you err at all, it may be on the right side, not making a line which is too curved or too straight already in the tracing, more curved or more straight, as you go over it. And in doing this, never work after you are tired, nor to "get the thing done," for if it is badly done, it will be of no use to you. The true zeal and patience of a quarter of an hour are better than the sulky and inattentive labour of a whole day. If you have not made the touches right at the first going over with the pen, retouch them delicately, with little ink in your pen, thickening or rein-

ings; if you should, it will be a drawing-master in itself alone, for it is not only equivalent to a pen-and-ink drawing by Turner, but to a very careful one: only observe, the Source of Arveron, Raglan, and Dumblane were not etched by Turner; and the etchings of those three are not good for separate study, though it is deeply interesting to see how Turner, apparently provoked at the failure of the beginnings in the Arveron and Raglan, took the plates up himself, and either conquered or brought into use the bad etching by his marvellous engraving. The Dumblane was, however, well etched by Mr. Lupton, and beautifully engraved by him. The finest Turner etching is of an aqueduct with a stork standing in a mountain stream, not in the published series; and next to it, are the unpublished etchings of the Via Mala and Crowhurst. Turner seems to have been so fond of these plates that he kept retouching and finishing them, and never made up his mind to let them go. The Via Mala is certainly, in the state in which Turner left it, the finest of the whole series: its etching is, as I said, the best after that of the aqueduct. Figure 20., above, is part of another fine unpublished etching, "Windsor, from Salt Hill." Of the published etchings, the finest are the Ben Arthur, Æsacaus, Cephalus, and Stone Pines, with the Girl washing at a Cistern; the three latter are the more generally instructive. Hindhead Hill, Isis, Jason, and Morpeth, are also very desirable.
forcing them as they need: you cannot give too much care to the facsimile. Then keep this etched outline by you, in order to study at your ease the way in which Turner uses his line as preparatory for the subsequent shadow;* it is only in getting the two separate that you will be able to reason on this. Next, copy once more, though for the fourth time, any part of this etching which you like, and put on the light and shade with the brush, and any brown colour that matches that of the plate;† working it with the point of the brush as delicately as if you were drawing with pencil, and dotting and cross-hatching as lightly as you can touch the paper, till you get the gradations of Turner's engraving. In this exercise, as in the former one, a quarter of an inch worked to close resemblance of the copy is worth more than the whole subject carelessly done. Not that in drawing afterwards from nature, you are to be obliged to finish every gradation in this way, but that, once having fully accomplished the drawing something rightly, you will thenceforward feel and aim at a higher perfection than you could otherwise have conceived, and the brush will obey you, and bring out quickly and clearly the loveliest results, with a submissiveness which it would have wholly refused if you had not put it to severest work. Nothing is more strange in art than the way that chance and materials seem to favour you, when once you have thoroughly conquered them. Make yourself quite independent of chance, get your result in spite of it, and from that day forward all things will somehow fall as you would have them. Show the camel's-hair, and the colour in it, that no bending nor blotting are of any use to escape your will; that the touch and the shade shall finally be right, if it cost you a year's toil; and from that hour of corrective conviction, said camel's-hair will bend itself to all your wishes, and no blot will dare to transgress its appointed border. If you cannot obtain a print from the Liber Studiorum, get a photo-

* You will find more notice of this point in the account of Harding's tree-drawing, a little farther on.

† The impressions vary so much in colour that no brown can be specified.
graph * of some general landscape subject, with high hills and a village, or picturesque town, in the middle distance, and some calm water of varied character (a stream with stones in it, if possible), and copy any part of it you like, in this same brown colour, working, as I have just directed you to do from the Liber, a great deal with the point of the brush. You are under a twofold disadvantage here, however; first, there are portions in every photograph too delicately done for you at present to be at all able to copy; and secondly, there are portions always more obscure or dark than there would be in the real scene, and involved in a mystery which you will not be able, as yet, to decipher. Both these characters will be advantageous to you for future study, after you have gained experience, but they are a little against you in early attempts at tinting; still you must fight through the difficulty, and get the power of producing delicate gradations with brown or grey, like those of the photograph.

Now observe; the perfection of work would be tinted shadow, like photography, without any obscurity or exaggerated darkness; and as long as your effect depends in anywise on visible lines, your art is not perfect, though it may be first-rate of its kind. But to get complete results in tints merely, requires both long time and consummate skill; and you will find that a few well-put pen lines, with a tint dashed over or under them, get more expression of facts than you could reach in any other way, by the same expenditure of time. The use of the Liber Studiorum print to you is chiefly as an example of the simplest shorthand of this kind, a shorthand which is yet capable of dealing with the most subtle natural effects; for the firm etching gets at the expression of complicated details, as leaves, masonry, textures of ground, &c., while the overlaid tint enables you to express the most tender distances of sky, and forms of playing light, mist or cloud. Most of the best drawings by the old masters are executed on this principle, the touches of the pen being useful also to give a look of transparency to shadows, which could not otherwise be attained

* You had better get such a photograph, even if you have a Liber print as well.
but by great finish of tinting; and if you have access to any ordinarily good public gallery, or can make friends of any printsellers who have folios of old drawings, or facsimiles of them, you will not be at a loss to find some example of this unity of pen with tinting. Multitudes of photographs also are now taken from the best drawings by the old masters, and I hope that our Mechanics' Institutes, and other societies organized with a view to public instruction, will not fail to possess themselves of examples of these, and to make them accessible to students of drawing in the vicinity; a single print from Turner’s Liber, to show the unison of tint with pen etching, and the "St. Catherine," lately photographed by Thurston Thompson, from Raphael’s drawing in the Louvre, to show the unity of the soft tinting of the stump with chalk, would be all that is necessary, and would, I believe, be in many cases more serviceable than a larger collection, and certainly than a whole gallery of second-rate prints. Two such examples are peculiarly desirable, because all other modes of drawing, with pen separately, or chalk separately, or colour separately, may be seen by the poorest student in any cheap illustrated book, or in shop windows. But this unity of tinting with line he cannot generally see but by some especial enquiry, and in some out of the way places he could not find a single example of it. Supposing that this should be so in your own case, and that you cannot meet with any example of this kind, try to make the matter out alone, thus:

Take a small and simple photograph; allow yourself half an hour to express its subjects with the pen only, using some permanent liquid colour instead of ink, outlining its buildings or trees firmly, and laying in the deeper shadows, as you have been accustomed to do in your bolder pen drawings; then, when this etching is dry, take your sepia or grey, and tint it over, getting now the finer gradations of the photograph; and finally, taking out the higher lights with penknife or blotting-paper. You will soon find what can be done in this way; and by a series of experiments you may ascertain for yourself how far the pen may be made serviceable to reinforce shadows,
SKETCHING FROM NATURE.

mark characters of texture, outline unintelligible masses, and so on. The more time you have, the more delicate you may make the pen drawing, blending it with the tint; the less you have, the more distinct you must keep the two. Practice in this way from one photograph, allowing yourself sometimes only a quarter of an hour for the whole thing, sometimes an hour; sometimes two or three hours; in each case drawing the whole subject in full depth of light and shade, but with such degree of finish in the parts as is possible in the given time. And this exercise, observe, you will do well to repeat frequently whether you can get prints and drawings as well as photographs, or not.

And now at last, when you can copy a piece of Liber Studiorum, or its photographic substitute, faithfully, you have the complete means in your power of working from nature on all subjects that interest you, which you should do in four different ways.

First. When you have full time, and your subject is one that will stay quiet for you, make perfect light and shade studies, or as nearly perfect as you can, with grey or brown colour of any kind, reinforced and defined with the pen.

Secondly. When your time is short, or the subject is so rich in detail that you feel you cannot complete it intelligibly in light and shade, make a hasty study of the effect, and give the rest of the time to a Dureresque expression of the details. If the subject seems to you interesting, and there are points about it which you cannot understand, try to get five spare minutes to go close up to it, and make a nearer memorandum; not that you are ever to bring the details of this nearer sketch into the farther one, but that you may thus perfect your experience of the aspect of things, and know that such and such a look of a tower or cottage at five hundred yards off means that sort of tower or cottage near; while, also, this nearer sketch will be useful to prevent any future misinterpretation of your own work. If you have time, however far your light and shade study in the distance may have been carried, it is always well, for these reasons, to make also your Dureresque and your near memoranda; for if your light and shade draw-
ing be good, much of the interesting detail must be lost in it, or disguised.

Your hasty study of effect may be made most easily and quickly with a soft pencil, dashed over when done with one tolerably deep tone of grey, which will fix the pencil. While this fixing colour is wet, take out the higher lights with the dry brush; and, when it is quite dry, scratch out the highest lights with the penknife. Five minutes, carefully applied, will do much by these means. Of course the paper is to be white. I do not like studies on grey paper so well; for you can get more gradation by the taking off your wet tint, and laying it cunningly a little darker here and there, than you can with body-colour white, unless you are consummately skilful. There is no objection to your making your Dureresque memoranda on grey or yellow paper, and touching or relieving them with white; only, do not depend much on your white touches, nor make the sketch for their sake.

Thirdly. When you have neither time for careful study nor for Dureresque detail, sketch the outline with pencil, then dash in the shadows with the brush boldly, trying to do as much as you possibly can at once, and to get a habit of expedition and decision; laying more colour again and again into the tints as they dry, using every expedient which your practice has suggested to you of carrying out your chiaroscuro in the manageable and moist material, taking the colour off here with the dry brush, scratching out lights in it there with the wooden handle of the brush, rubbing it in with your fingers, drying it off with your sponge, &c. Then, when the colour is in, take your pen and mark the outline characters vigorously, in the manner of the Liber Studiorum. This kind of study is very convenient for carrying away pieces of effect which depend not so much on refinement as on complexity, strange shapes of involved shadows, sudden effects of sky, &c.; and it is most useful as a safeguard against any too servile or slow habits which the minute copying may induce in you; for although the endeavour to obtain velocity merely for velocity's sake, and dash for display's sake, is as baneful as it is despicable; there are a velocity and a dash which not only are com-
patible with perfect drawing, but obtain certain results which cannot be had otherwise. And it is perfectly safe for you to study occasionally for speed and decision, while your continual course of practice is such as to ensure your retaining an accurate judgment and a tender touch. Speed, under such circumstances, is rather fatiguing than tempting; and you will find yourself always beguiled rather into elaboration than negligence.

Fourthly. You will find it of great use, whatever kind of landscape scenery you are passing through, to get into the habit of making memoranda of the shapes of shadows. You will find that many objects of no essential interest in them-

![Fig. 21.](image)

selves, and neither deserving a finished study, nor a Dureresque one, may yet become of singular value in consequence of the fantastic shapes of their shadows; for it happens often, in distant effect, that the shadow is by much a more important element than the substance. Thus, in the Alpine bridge, Fig. 21., seen within a few yards of it, as in the figure, the arrangement of timbers to which the shadows are owing is perceptible; but at half a mile's distance, in bright sunlight, the timbers would not be seen; and a good painter's expression of the bridge would be merely the large spot, and the crossed bars, of pure grey; wholly without indication of their
THE ELEMENTS OF DRAWING.

cause, as in Fig. 22. a; and if we saw it at still greater distances, it would appear, as in Fig. 22. b and c, diminishing at last to a strange, unintelligible, spider-like spot of grey on the light hill-side. A perfectly great painter, throughout his distances, continually reduces his objects to these shadow abstracts; and the singular, and to many persons unaccountable, effect of the confused touches in Turner's distances, is owing chiefly to this thorough accuracy and intense meaning of the shadow abstracts.

Studies of this kind are easily made when you are in haste, with an F. or HB. pencil: it requires some hardness of the point to ensure your drawing delicately enough when the forms of the shadows are very subtle; they are sure to be so somewhere, and are generally so everywhere. The pencil is indeed a very precious instrument after you are master of the pen and brush, for the pencil, cunningly used, is both, and will draw a line with the precision of the one and the gradation of the other; nevertheless, it is so unsatisfactory to see the sharp touches, on which the best of the detail depends, getting gradually deadened by time, or to find the places where force was wanted look shiny, and like a fire-grate, that I should recommend rather the steady use of the pen, or brush, and colour, whenever time admits of it; keeping only a small memorandum-book in the breast-pocket, with its well-cut, sheathed pencil, ready for notes on passing opportunities: but never being without this.

Thus much, then, respecting the manner in which you are at first to draw from nature. But it may perhaps be serviceable to you, if I also note one or two points respecting your choice of subjects for study, and the best special methods of treating some of them; for one of by no means the least difficulties which you have at first to encounter is a peculiar instinct, common, as far as I have noticed, to all beginners, to
SKETCHING FROM NATURE.

fix on exactly the most unmanageable feature in the given scene. There are many things in every landscape which can be drawn, if at all, only by the most accomplished artists; and I have noticed that it is nearly always these which a beginner will dash at; or, if not these, it will be something which, though pleasing to him in itself, is unfit for a picture, and in which, when he has drawn it, he will have little pleasure. As some slight protection against this evil genius of beginners, the following general warnings may be useful:

1. Do not draw things that you love, on account of their associations; or at least do not draw them because you love them; but merely when you cannot get anything else to draw. If you try to draw places that you love, you are sure to be always entangled amongst neat brick walls, iron railings, gravel walks, greenhouses, and quickset hedges; besides that you will be continually led into some endeavour to make your drawing pretty, or complete, which will be fatal to your progress. You need never hope to get on, if you are the least anxious that the drawing you are actually at work upon should look nice when it is done. All you have to care about is to make it right, and to learn as much in doing it as possible. So then, though when you are sitting in your friend's parlour, or in your own, and have nothing else to do, you may draw anything that is there, for practice; even the fire-irons or the pattern on the carpet: be sure that it is for practice, and not because it is a beloved carpet, nor a friendly poker and tongs, nor because you wish to please your friend by drawing her room.

Also, never make presents of your drawings. Of course I am addressing you as a beginner—a time may come when your work will be precious to everybody; but be resolute not to give it away till you know that it is worth something (as soon as it is worth anything you will know that it is so). If any one asks you for a present of a drawing, send them a couple of cakes of colour and a piece of Bristol board: those materials are, for the present, of more value in that form than if you had spread the one over the other.

The main reason for this rule is, however, that its observ-
ance will much protect you from the great danger of trying to make your drawings pretty.

2. Never, by choice, draw anything polished; especially if complicated in form. Avoid all brass rods and curtain ornaments, chandeliers, plate, glass, and fine steel. A shining knob of a piece of furniture does not matter if it comes in your way; but do not fret yourself if it will not look right, and choose only things that do not shine.

3. Avoid all very neat things. They are exceedingly difficult to draw, and very ugly when drawn. Choose rough, worn, and clumsy-looking things as much as possible; for instance, you cannot have a more difficult or profitless study than a newly-painted Thames wherry, nor a better study than an old empty coal-barge, lying ashore at low-tide: in general, everything that you think very ugly will be good for you to draw.

4. Avoid, as much as possible, studies in which one thing is seen through another. You will constantly find a thin tree standing before your chosen cottage, or between you and the turn of the river; its near branches all entangled with the distance. It is intensely difficult to represent this; and though, when the tree is there, you must not imaginarily cut it down, but do it as well as you can, yet always look for subjects that fall into definite masses, not into network; that is, rather for a cottage with a dark tree beside it, than for one with a thin tree in front of it; rather for a mass of wood, soft, blue, and rounded, than for a ragged copse, or confusion of intricate stems.

5. Avoid, as far as possible, country divided by hedges. Perhaps nothing in the whole compass of landscape is so utterly unpicturesque and unmanageable as the ordinary English patchwork of field and hedge, with trees dotted over it in independent spots, gnawed straight at the cattle line.

Still, do not be discouraged if you find you have chosen ill, and that the subject overmasters you. It is much better that it should, than that you should think you had entirely mastered it. But at first, and even for some time, you must be pre-
pared for very discomfortable failure; which, nevertheless, will not be without some wholesome result.

As, however, I have told you what most definitely to avoid, I may, perhaps, help you a little by saying what to seek. In general, all banks are beautiful things, and will reward work better than large landscapes. If you live in a lowland country, you must look for places where the ground is broken to the river's edges, with decayed posts, or roots of trees; or, if by great good luck there should be such things within your reach, for remnants of stone quays or steps, mossy mill-dams, &c. Nearly every other mile of road in chalk country will present beautiful bits of broken bank at its sides; better in form and colour than high chalk cliffs. In woods, one or two trunks, with the flowery ground below, are at once the richest and easiest kind of study: a not very thick trunk, say nine inches or a foot in diameter, with ivy running up it sparingly, is an easy, and always a rewarding subject.

Large nests of buildings in the middle distance are always beautiful, when drawn carefully, provided they are not modern rows of pattern cottages, or villas with Ionic and Doric por- ticos. Any old English village, or cluster of farm-houses, drawn with all its ins and outs, and haystacks, and palings, is sure to be lovely; much more a French one. French landscape is generally as much superior to English as Swiss landscape is to French; in some respects, the French is incomparable. Such scenes as that avenue on the Seine, which I have recommended you to buy the engraving of, admit no rivalship in their expression of graceful rusticity and cheerful peace, and in the beauty of component lines.

In drawing villages, take great pains with the gardens; a rustic garden is in every way beautiful. If you have time, draw all the rows of cabbages, and hollyhocks, and broken fences, and wandering eglantines, and bossy roses: you cannot have better practice, nor be kept by anything in purer thoughts.

Make intimate friends of all the brooks in your neighbourhood, and study them ripple by ripple.

Village churches in England are not often good subjects;
there is a peculiar meanness about most of them, and awkwardness of line. Old manor-houses are often pretty. Ruins are usually, with us, too prim, and cathedrals too orderly. I do not think there is a single cathedral in England from which it is possible to obtain one subject for an impressive drawing. There is always some discordant civility, or jarring vergerism about them.

If you live in a mountain or hill country, your only danger is redundance of subject. Be resolved, in the first place, to draw a piece of rounded rock, with its variegated lichens, quite rightly, getting its complete roundings, and all the patterns of the lichen in true local colour. Till you can do this, it is of no use your thinking of sketching among hills; but when once you have done this, the forms of distant hills will be comparatively easy.

When you have practised for a little time from such of these subjects as may be accessible to you, you will certainly find difficulties arising which will make you wish more than ever for a master's help: these difficulties will vary according to the character of your own mind (one question occurring to one person, and one to another), so that it is impossible to anticipate them all; and it would make this too large a book if I answered all that I can anticipate; you must be content to work on, in good hope that nature will, in her own time, interpret to you much for herself; that farther experience on your own part will make some difficulties disappear; and that others will be removed by the occasional observation of such artists' work as may come in your way. Nevertheless, I will not close this letter without a few general remarks, such as may be useful to you after you are somewhat advanced in power; and these remarks may, I think, be conveniently arranged under three heads, having reference to the drawing of vegetation, water, and skies.

And, first, of vegetation. You may think, perhaps, we have said enough about trees already; yet if you have done as you were bid, and tried to draw them frequently enough, and carefully enough, you will be ready by this time to hear a little more of them. You will also recollect that we left our
question, respecting the mode of expressing intricacy of leafage, partly unsettled in the first letter. I left it so because I wanted you to learn the real structure of leaves, by drawing them for yourself, before I troubled you with the most subtle considerations as to method in drawing them. And by this time, I imagine, you must have found out two principal things, universal facts, about leaves; namely, that they always, in the main tendencies of their lines, indicate a beautiful divergence of growth, according to the law of radiation, already referred to;* and the second, that this divergence is never formal, but carried out with endless variety of individual line. I must now press both these facts on your attention a little farther.

You may perhaps have been surprised that I have not yet spoken of the works of J. D. Harding, especially if you happen to have met with the passages referring to them in "Modern Painters," in which they are highly praised. They are deservedly praised, for they are the only works by a modern draughtsman which express in any wise the energy of trees, and the laws of growth, of which we have been speaking. There are no lithographic sketches which, for truth of general character, obtained with little cost of time, at all rival Harding's. Calame, Robert, and the other lithographic landscape sketchers are altogether inferior in power, though sometimes a little deeper in meaning. But you must not take even Harding for a model, though you may use his works for occasional reference; and if you can afford to buy his "Lessons on Trees," † it will be serviceable to you in various ways, and will at present help me to explain the point under consideration. And it is well that I should illustrate this point by reference to Harding's works, because their great influence on young students renders it desirable that their real character should be thoroughly understood.

* See the closing letter in this volume.
† Bogue, Fleet Street. If you are not acquainted with Harding's works (an unlikely supposition, considering their popularity), and cannot meet with the one in question, the diagrams given here will enable you to understand all that is needful for our purposes.
You will find, first, in the title-page of the "Lessons on Trees," a pretty woodcut, in which the tree stems are drawn with great truth, and in a very interesting arrangement of lines. Plate 1. is not quite worthy of Mr. Harding, tending too much to make his pupil, at starting, think everything depends on black dots; still the main lines are good, and very characteristic of tree growth. Then, in Plate 2., we come to the point at issue. The first examples in that plate are given to the pupil that he may practise from them till his hand gets into the habit of arranging lines freely in a similar manner; and they are stated by Mr. Harding to be universal in application; "all outlines expressive of foliage," he says, "are but modifications of them." They consist of groups of lines, more or less resembling our Fig. 23.; and the characters especially insisted upon are, that they "tend at their inner ends to a common centre;" that "their ends terminate in [are enclosed by] ovoid curves;" and that "the outer ends are most emphatic."

Now, as thus expressive of the great laws of radiation and enclosure, the main principle of this method of execution confirms, in a very interesting way, our conclusions respecting foliage composition. The reason of the last rule, that the outer end of the line is to be most emphatic, does not indeed at first appear; for the line at one end of a natural leaf is not more emphatic than the line at the other: but ultimately, in Harding's method, this darker part of the touch stands more or less for the shade at the outer extremity of the leaf mass; and, as Harding uses these touches, they express as much of tree character as any mere habit of touch can express. But, unfortunately, there is another law of tree growth, quite as fixed as the law of radiation, which this and all other conventional modes of execution wholly lose sight of. This second law is, that the radiating tendency shall be carried out only as a ruling spirit in reconcilement with perpetual individual caprice on the part of the separate leaves. So that the moment a touch is monotonous, it must be also false, the liberty
of the leaf individually being just as essential a truth, as its unity of growth with its companions in the radiating group.

It does not matter how small or apparently symmetrical the cluster may be, nor how large or vague. You can hardly have a more formal one than b in Fig. 9. p. 276., nor a less formal one than this shoot of Spanish chestnut, shedding its leaves, Fig. 24.; but in either of them, even the general reader, unpractised in any of the previously recommended exercises, must see that there are wandering lines mixed with the radiating ones, and radiating lines with the wild ones: and if he takes the pen and tries to copy either of these examples, he will find that neither play of hand to left nor to right, neither a free touch nor a firm touch, nor any learnable or describable touch whatsoever, will enable him to produce, currently, a resemblance of it; but that he must either draw it slowly, or give it up. And (which makes the matter worse still) though gathering the bough, and putting it close to you, or seeing a piece of near foliage against the sky, you may draw the entire outline of the leaves, yet if the spray has light upon it, and is ever so little, a way off, you will miss, as we have seen, a point of a leaf here, and an edge there; some of the surfaces will be confused by glitter, and some spotted with shade; and if you look carefully through this confusion for the edges or dark stems which you really can see, and put only those down, the result will be neither like Fig. 9. nor Fig. 24., but such an interrupted and puzzling piece of work as Fig. 25.*

* I draw this figure (a young shoot of oak) in outline only, it being impossible to express the refinements of shade in distant foliage in a woodcut.
THE ELEMENTS OF DRAWING.

Now, it is in the perfect acknowledgment and expression of these three laws that all good drawing of landscape consists. There is, first, the organic unity; the law, whether of radiation, or parallelism, or concurrent action, which rules the masses of herbs and trees, of rocks, and clouds, and waves; secondly, the individual liberty of the members subjected to these laws of unity; and, lastly, the mystery under which the separate character of each is more or less concealed.

I say, first, there must be observance of the ruling organic law. This is the first distinction between good artists and bad artists. Your common sketcher or bad painter puts his leaves on the trees as if they were moss tied to sticks; he cannot see the lines of action or growth; he scatters the shapeless clouds over his sky, not perceiving the sweeps of associated curves which the real clouds are following as they fly; and he breaks his mountain side into rugged fragments, wholly unconscious of the lines of force with which the real rocks have risen, or of the lines of couch in which they repose. On the contrary, it is the main delight of the great draughtsman to trace these laws of government; and his tendency to error is always in the exaggeration of their authority rather than in its denial.

Secondly, I say, we have to show the individual character and liberty of the separate leaves, clouds, or rocks. And here-in the great masters separate themselves finally from the inferior ones; for if the men of inferior genius ever express law at all, it is by the sacrifice of individuality. Thus, Salvator Rosa has great perception of the sweep of foliage and rolling of clouds, but never draws a single leaflet or mist
wreath accurately. Similarly, Gainsborough, in his landscape, has great feeling for masses of form and harmony of colour; but in the detail gives nothing but meaningless touches; not even so much as the species of tree, much less the variety of its leafage, being ever discernable. Now, although both these expressions of government and individuality are essential to masterly work, the individuality is the more essential, and the more difficult of attainment; and, therefore, that attainment separates the great masters finally from the inferior ones. It is the more essential, because, in these matters of beautiful arrangement in visible things, the same rules hold that hold in moral things. It is a lamentable and unnatural thing to see a number of men subject to no government, actuated by no ruling principle, and associated by no common affection: but it would be a more lamentable thing still, were it possible to see a number of men so oppressed into assimilation as to have no more any individual hope or character, no differences in aim, no dissimilarities of passion, no irregularities of judgment; a society in which no man could help another, since none would be feebler than himself; no man admire another, since none would be stronger than himself; no man be grateful to another, since by none he could be relieved; no man reverence another, since by none he could be instructed; a society in which every soul would be as the syllable of a stammerer instead of the word of a speaker, in which every man would walk as in a frightful dream, seeing spectres of himself, in everlasting multiplication, gliding helplessly around him in a speechless darkness. Therefore it is that perpetual difference, play, and change in groups of form are more essential to them even than their being subdued by some great gathering law: the law is needful to them for their perfection and their power, but the difference is needful to them for their life.

And here it may be noted in passing, that if you enjoy the pursuit of analogies and types, and have any ingenuity of judgment in discerning them, you may always accurately ascertain what are the noble characters in a piece of painting, by merely considering what are the noble characters of man in his association with his fellows. What grace of
manner and refinement of habit are in society, grace of line and refinement of form are in the association of visible objects. What advantage or harm there may be in sharpness, ruggedness, or quaintness in the dealings or conversations of men; precisely that relative degree of advantage or harm there is in them as elements of pictorial composition. What power is in liberty or relaxation to strengthen or relieve human souls; that power, precisely in the same relative degree, play and laxity of line have to strengthen or refresh the expression of a picture. And what goodness or greatness we can conceive to arise in companies of men, from chastity of thought, regularity of life, simplicity of custom, and balance of authority; precisely that kind of goodness and greatness may be given to a picture by the purity of its colour, the severity of its forms, and the symmetry of its masses.

You need not be in the least afraid of pushing these analogies too far. They cannot be pushed too far; they are so precise and complete, that the farther you pursue them, the clearer, the more certain, the more useful you will find them. They will not fail you in one particular, or in any direction of enquiry. There is no moral vice, no moral virtue, which has not its precise prototype in the art of painting; so that you may at your will illustrate the moral habit by the art, or the art by the moral habit. Affection and discord, fretfulness and quietness, feebleness and firmness, luxury and purity, pride and modesty, and all other such habits, and every conceivable modification and mingling of them, may be illustrated, with mathematical exactness, by conditions of line and colour; and not merely these definable vices and virtues, but also every conceivable shade of human character and passion, from the righteous or unrighteous majesty of the king, to the innocent or faultful simplicity of the shepherd boy.

The pursuit of this subject belongs properly, however, to the investigation of the higher branches of composition, matters which it would be quite useless to treat of in this book; and I only allude to them here, in order that you may understand how the utmost nobleness of art are concerned in this minute work, to which I have set you in your beginning of it.
For it is only by the closest attention, and the most noble execution, that it is possible to express these varieties of individual character, on which all excellence of portraiture depends, whether of masses of mankind, or of groups of leaves.

Now you will be able to understand, among other matters, wherein consists the excellence, and wherein the shortcoming, of the tree-drawing of Harding. It is excellent in so far as it fondly observes, with more truth than any other work of the kind, the great laws of growth and action in trees: it fails—and observe, not in a minor, but in a principal point—because it cannot rightly render any one individual detail or incident of foliage. And in this it fails, not from mere carelessness or incompletion, but of necessity; the true drawing of detail being for evermore impossible to a hand which has contracted a habit of execution. The noble draughtsman draws a leaf, and stops, and says calmly—that leaf is of such and such a character; I will give him a friend who will entirely suit him: then he considers what his friend ought to be, and having determined, he draws his friend. This process may be as quick as lightning when the master is great—one of the sons of the giants; or it may be slow and timid: but the process is always gone through, no touch or form is ever added to another by a good painter without a mental determination and affirmation. But when the hand has got into a habit, leaf No. 1. necessitates leaf No. 2.; you cannot stop, your hand is as a horse with the bit in its teeth; or rather is, for the time, a machine, throwing out leaves to order and pattern, all alike. You must stop that hand of yours, however painfully; make it understand that it is not to have its own way any more, that it shall never more slip from one touch to another without orders; otherwise it is not you who are the master, but your fingers. You may therefore study Harding's drawing, and take pleasure in it;* and you may properly admire the dexterity which applies the habit of the hand so

* His lithographic sketches, those, for instance, in the Park and the Forest, and his various lessons on foliage, possess greater merit than the more ambitious engravings in his "Principles and Practice of Art." There are many useful remarks, however, dispersed through this latter work.
well, and produces results on the whole so satisfactory: but you must never copy it, otherwise your progress will be at once arrested. The utmost you can ever hope to do, would be a sketch in Harding's manner, but of far inferior dexterity; for he has given his life's toil to gain his dexterity, and you, I suppose, have other things to work at besides drawing. You would also incapacitate yourself from ever understanding what truly great work was, or what Nature was; but by the earnest and complete study of facts, you will gradually come to understand the one and love the other more and more, whether you can draw well yourself or not.

I have yet to say a few words respecting the third law above stated, that of mystery; the law, namely, that nothing is ever seen perfectly, but only by fragments, and under various conditions of obscurity.* This last fact renders the visible objects of Nature complete as a type of the human nature. We have, observe, first, Subordination; secondly, Individuality; lastly, and this not the least essential character, Incomprehensibility; a perpetual lesson in every serrated point and shining vein which escape or deceive our sight among the forest leaves, how little we may hope to discern clearly, or judge justly, the rents and veins of the human heart; how much of all that is round us, in men's actions or spirits, which we at first think we understand, a closer and more loving watchfulness would show to be full of mystery, never to be either fathomed or withdrawn.

The expression of this final character in landscape has never been completely reached by any except Turner; nor can you hope to reach it at all until you have given much time to the practice of art. Only try always when you are sketching any object with a view to completion in light and shade, to draw only those parts of it which you really see definitely; preparing for the after development of the forms by chiaroscuro. It is this preparation by isolated touches for a future arrangement of superimposed light and shade which renders the etchings of the Liber Studiorum so inestimable as examples and so

* On this law you will do well, if you can get access to it, to look at the fourth chapter of the fourth volume of "Modern Painters."
peculiar. The character exists more or less in them exactly in proportion to the pains that Turner has taken. Thus the Æsacus and Hespérie was wrought out with the greatest possible care; and the principal branch on the near tree is etched as in Fig. 26. The work looks at first like a scholar’s instead of a master’s; but when the light and shade are added, every touch falls into its place, and a perfect expression of grace and complexity results. Nay even before the light and shade are added, you ought to be able to see that these irregular and broken lines, especially where the expression is given of the way the stem loses itself in the leaves, are more true than the monotonous though graceful leaf-drawing which, before Turner’s time, had been employed, even by the best masters, in their distant masses. Fig. 27. is sufficiently characteristic of the manner of the old woodcuts after Titian; in which, you see, the leaves are too much of one shape, like bunches of fruit; and the boughs too completely seen, besides being somewhat soft and leathery in aspect, owing to the want of angles in their outline. By great men like Titian, this somewhat conventional structure was only given in haste to distant masses; and their exquisite delineation of the foreground, kept their conventionalism from degeneracy: but in the drawing of the Caracci and other derivative masters, the conventional
ism prevails everywhere, and sinks gradually into scrawled work, like Fig. 28., about the worst which it is possible to get into the habit of using, though an ignorant person might perhaps suppose it more "free," and therefore better than Fig. 26. Note, also, that in noble outline drawing, it does not follow that a bough is wrongly drawn, because it looks contracted unnaturally somewhere, as in Fig. 26., just above the foliage. Very often the muscular action which is to be expressed by the line, runs into the middle of the branch, and the actual outline of the branch at that place may be dimly seen, or not at all; and it is then only by the future shade that its actual shape, or the cause of its disappearance, will be indicated.

One point more remains to be noted about trees, and I have done. In the minds of our ordinary water-colour artists, a distant tree seems only to be conceived as a flat green blot, grouping pleasantly with other masses, and giving cool colour to the landscape, but differing nowise, in texture, from the blots of other shapes, which these painters use to express stones, or water, or figures. But as soon as you have drawn trees carefully a little while, you will be impressed, and impressed more strongly the better you draw them, with the idea of their softness of surface. A distant tree is not a flat and even piece of colour, but a more or less globular mass of a downy or bloomy texture, partly passing into a misty vagueness. I find, practically, this lovely softness of far-away trees the most difficult of all characters to reach, because it cannot be got by mere scratching or roughening the surface, but is always associated with such delicate expressions of form and growth as are only imitable by very careful drawing. The penknife
SKETCHING FROM NATURE.

323

passed lightly over this careful drawing, will do a good deal; but you must accustom yourself, from the beginning, to aim much at this softness in the lines of the drawing itself, by crossing them delicately, and more or less effacing and confusing the edges. You must invent, according to the character of tree, various modes of execution adapted to express its texture; but always keep this character of softness in your mind and in your scope of aim; for in most landscapes it is the intention of nature that the tenderness and transparent infinitude of her foliage should be felt, even at the far distance, in the most distinct opposition to the solid masses and flat surfaces of rocks or buildings.

II. We were, in the second place, to consider a little the modes of representing water, of which important feature of landscape I have hardly said anything yet.

Water is expressed, in common drawings, by conventional lines, whose horizontality is supposed to convey the idea of its surface. In paintings, white dashes or bars of light are used for the same purpose.

But these and all other such expedients are vain and absurd. A piece of calm water always contains a picture in itself, an exquisite reflection of the objects above it. If you give the time necessary to draw these reflections, disturbing them here and there as you see the breeze or current disturb them, you will get the effect of the water; but if you have not patience to draw the reflections, no expedient will give you a true effect. The picture in the pool needs nearly as much delicate drawing as the picture above the pool; except only that if there be the least motion on the water, the horizontal lines of the images will be diffused and broken, while the vertical ones will remain decisive, and the oblique ones decisive in proportion to their steepness.

A few close studies will soon teach you this: the only thing you need to be told is to watch carefully the lines of disturbance on the surface, as when a bird swims across it, or a fish rises, or the current plays round a stone, reed, or other obstacle. Take the greatest pains to get the curves of these
lines true; the whole value of your careful drawing of the reflections may be lost by your admitting a single false curve of ripple from a wild duck's breast. And (as in other subjects) if you are dissatisfied with your result, always try for more unity and delicacy: if your reflections are only soft and graded enough, they are nearly sure to give you a pleasant effect. When you are taking pains, work the softer reflections, where they are drawn out by motion in the water, with touches as nearly horizontal as may be; but when you are in a hurry, indicate the place and play of the images with vertical lines. The actual construction of a calm elongated reflection is with horizontal lines: but it is often impossible to draw the descending shades delicately enough with a horizontal touch; and it is best always when you are in a hurry, and sometimes when you are not, to use the vertical touch. When the ripples are large, the reflections become shaken, and must be drawn with bold undulatory descending lines.

I need not, I should think, tell you that it is of the greatest possible importance to draw the curves of the shore rightly. Their perspective is, if not more subtle, at least more stringent than that of any other lines in Nature. It will not be detected by the general observer, if you miss the curve of a branch, or the sweep of a cloud, or the perspective of a building;* but every intelligent spectator will feel the difference between a rightly drawn bend of shore or shingle, and a false one. Absolutely right, in difficult river perspectives seen from heights, I believe no one but Turner ever has been yet; and observe, there is no rule for them. To develope the curve mathematically would require a knowledge of the exact quantity of water in the river, the shape of its bed, and the hardness of the rock or shore; and even with these data, the problem would be one which no mathematician could solve but approximatively. The instinct of the eye can do it; nothing else.

If, after a little study from Nature, you get puzzled by the

* The student may hardly at first believe that the perspective of buildings is of little consequence: but he will find it so ultimately. See the remarks on this point in the Preface.
great differences between the aspect of the reflected image and that of the object casting it; and if you wish to know the law of reflection, it is simply this: Suppose all the objects above the water actually reversed (not in appearance, but in fact) beneath the water, and precisely the same in form and in relative position, only all topsy-turvy. Then, whatever you can see, from the place in which you stand, of the solid objects so reversed under the water, you will see in the reflection, always in the true perspective of the solid objects so reversed.

If you cannot quite understand this in looking at water, take a mirror, lay it horizontally on the table, put some books and papers upon it, and draw them and their reflections; moving them about, and watching how their reflections alter, and chiefly how their reflected colours and shades differ from their own colours and shades, by being brought into other oppositions. This difference in chiaroscuro is a more important character in water painting than mere difference in form.

When you are drawing shallow or muddy water, you will see shadows on the bottom, or on the surface, continually modifying the reflections; and in a clear mountain stream, the most wonderful complications of effect resulting from the shadows and reflections of the stones in it, mingling with the aspect of the stones themselves seen through the water. Do not be frightened at the complexity; but, on the other hand, do not hope to render it hastily. Look at it well, making out everything that you see, and distinguishing each component part of the effect. There will be, first, the stones seen through the water, distorted always by refraction, so that if the general structure of the stone shows straight parallel lines above the water, you may be sure they will be bent where they enter it; then the reflection of the part of the stone above the water crosses and interferes with the part that is seen through it, so that you can hardly tell which is which; and wherever the reflection is darkest, you will see through the water best, and vice versa. Then the real shadow of the stone crosses both these images, and where that shadow falls, it makes the water more reflective, and where the sunshine falls, you will
see more of the surface of the water, and of any dust or motes that may be floating on it: but whether you are to see, at the same spot, most of the bottom of the water, or of the reflection of the objects above, depends on the position of the eye. The more you look down into the water, the better you see objects through it; the more you look along it, the eye being low, the more you see the reflection of objects above it. Hence the colour of a given space of surface in a stream will entirely change while you stand still in the same spot, merely as you stoop or raise your head; and thus the colours with which water is painted are an indication of the position of the spectator, and connected inseparably with the perspective of the shores. The most beautiful of all results that I know in mountain streams is when the water is shallow, and the stones at the bottom are rich reddish-orange and black, and the water is seen at an angle which exactly divides the visible colours between those of the stones and that of the sky, and the sky is of clear, full blue. The resulting purple obtained by the blending of the blue and the orange-red, broken by the play of innumerable gradations in the stones, is indescribably lovely.

All this seems complicated enough already; but if there be a strong colour in the clear water itself, as of green or blue in the Swiss lakes, all these phenomena are doubly involved; for the darker reflections now become of the colour of the water. The reflection of a black gondola, for instance, at Venice, is never black, but pure dark green. And, farther, the colour of the water itself is of three kinds: one, seen on the surface, is a kind of milky bloom; the next is seen where the waves let light through them, at their edges; and the third, shown as a change of colour on the objects seen through the water. Thus, the same wave that makes a white object look of a clear blue, when seen through it, will take a red or violet-coloured bloom on its surface, and will be made pure emerald green by transmitted sunshine through its edges. With all this, however, you are not much concerned at present, but I tell it you partly as a preparation for what we have afterwards to say about colour, and partly that you may ap-
SKETCHING FROM NATURE.

327

proach lakes and streams with reverence, and study them as carefully as other things, not hoping to express them by a few horizontal dashes of white, or a few tremulous blots.* Not but that much may be done by tremulous blots, when you know precisely what you mean by them, as you will see by many of the Turner sketches, which are now framed at the National Gallery; but you must have painted water many and many a day—yes, and all day long—before you can hope to do anything like those.

III. Lastly. You may perhaps wonder why, before passing to the clouds, I say nothing special about ground.† But there is too much to be said about that to admit of my saying it here. You will find the principal laws of its structure examined at length in the fourth volume of "Modern Painters;" and if you can get that volume, and copy carefully Plate 21., which I have etched after Turner with great pains, it will give you as much help as you need in the linear expression of ground-surface. Strive to get the retirement and succession of masses in irregular ground: much may be done in this way by careful watching of the perspective diminutions of its herbage, as well as by contour; and much also by shadows. If you draw the shadows of leaves and tree trunks on any undulating ground with entire carefulness, you will be surprised to find how much they explain of the form and distance of the earth on which they fall.

Passing then to skies, note that there is this great peculiarity about sky subject, as distinguished from earth subject;—

* It is a useful piece of study to dissolve some Prussian blue in water, so as to make the liquid definitely blue: fill a large white basin with the solution, and put anything you like to float on it, or lie in it; walnut shells, bits of wood, leaves of flowers, &c. Then study the effects of the reflections, and of the stems of the flowers or submerged portions of the floating objects, as they appear through the blue liquid; noting especially how, as you lower your head and look along the surface, you see the reflections clearly; and how, as you raise your head, you lose the reflections, and see the submerged stems clearly.

† Respecting Architectural Drawing, see the notice of the works of Prout in the Appendix.
that the clouds, not being much liable to man's interference, are always beautifully arranged. You cannot be sure of this in any other features of landscape. The rock on which the effect of a mountain scene especially depends is always precisely that which the roadmaker blasts or the landlord quarries; and the spot of green which Nature left with a special purpose by her dark forest sides, and finished with her most delicate grasses, is always that which the farmer ploughs or builds upon. But the clouds, though we can hide them with smoke, and mix them with poison, cannot be quarried nor built over, and they are always therefore gloriously arranged; so gloriously, that unless you have notable powers of memory you need not hope to approach the effect of any sky that interests you. For both its grace and its glow depend upon the united influence of every cloud within its compass: they all move and burn together in a marvellous harmony; not a cloud of them is out of its appointed place, or fails of its part in the choir: and if you are not able to recollect (which in the case of a complicated sky it is impossible you should) precisely the form and position of all the clouds at a given moment, you cannot draw the sky at all; for the clouds will not fit if you draw one part of them three or four minutes before another. You must try therefore to help what memory you have, by sketching at the utmost possible speed the whole range of the clouds; marking, by any shorthand or symbolic work you can hit upon, the peculiar character of each, as transparent, or fleecy, or linear, or undulatory; giving afterwards such completion to the parts as your recollection will enable you to do. This, however, only when the sky is interesting from its general aspect; at other times, do not try to draw all the sky, but a single cloud: sometimes a round cumulus will stay five or six minutes quite steady enough to let you mark out his principal masses: and one or two white or crimson lines which cross the sunrise will often stay without serious change for as long. And in order to be the reader in drawing them, practise occasionally drawing lumps of cotton, which will teach you better than any other stable thing the kind of softness there is in clouds. For you will find when
you have made a few genuine studies of sky, and then look at any ancient or modern painting, that ordinary artists have always fallen into one of two faults: either, in rounding the clouds, they make them as solid and hard-edged as a heap of stones tied up in a sack, or they represent them not as rounded at all, but as vague wreaths of mist or flat lights in the sky; and think they have done enough in leaving a little white paper between dashes of blue, or in taking an irregular space out with the sponge. Now clouds are not as solid as flour-sacks; but, on the other hand, they are neither spongy nor flat. They are definite and very beautiful forms of sculptured mist; sculptured is a perfectly accurate word; they are not more drifed into form than they are carved into form, the warm air around them cutting them into shape by absorbing the visible vapour beyond certain limits; hence their angular and fantastic outlines, as different from a swollen, spherical, or globular formation, on the one hand, as from that of flat films or shapeless mists on the other. And the worst of all is, that while these forms are difficult enough to draw on any terms, especially considering that they never stay quiet, they must be drawn also at greater disadvantage of light and shade than any others, the force of light in clouds being wholly unattainable by art; so that if we put shade enough to express their form as positively as it is expressed in reality, we must make them painfully too dark on the dark sides. Nevertheless, they are so beautiful, if you in the least succeed with them, that you will hardly, I think, lose courage. Outline them often with the pen, as you can catch them here and there; one of the chief uses of doing this will be, not so much the memorandum so obtained as the lesson you will get respecting the softness of the cloud-outlines. You will always find yourself at a loss to see where the outline really is; and when drawn it will always look hard and false, and will assuredly be either too round or too square, however often you alter it, merely passing from the one fault to the other and back again, the real cloud striking an inexpressible mean between roundness and squareness in all its coils or battlements. I speak at present, of course, only of the cumulus cloud: the
lighter wreaths and flakes of the upper sky cannot be outlined;—they can only be sketched, like locks of hair, by many lines of the pen. Firmly developed bars of cloud on the horizon are in general easy enough, and may be drawn with decision. When you have thus accustomed yourself a little to the placing and action of clouds, try to work out their light and shade, just as carefully as you do that of other things, looking exclusively for examples of treatment to the vignettes in Rogers’s Italy and Poems, and to the Liber Studiorum, unless you have access to some examples of Turner’s own work. No other artist ever yet drew the sky: even Titian’s clouds, and Tintoret’s, are conventional. The clouds in the “Ben Arthur,” “Source of Arveron,” and “Calais Pier,” are among the best of Turner’s storm studies; and of the upper clouds, the vignettes to Rogers’s Poems furnish as many examples as you need.

And now, as our first lesson was taken from the sky, so, for the present, let our last be. I do not advise you to be in any haste to master the contents of my next letter. If you have any real talent for drawing, you will take delight in the discoveries of natural loveliness, which the studies I have already proposed will lead you into, among the fields and hills; and be assured that the more quietly and single-heartedly you take each step in the art, the quicker, on the whole, will your progress be. I would rather, indeed, have discussed the subjects of the following letter at greater length, and in a separate work addressed to more advanced students; but as there are one or two things to be said on composition which may set the young artist’s mind somewhat more at rest, or furnish him with defence from the urgency of ill-advisers, I will glance over the main heads of the matter here; trusting that my doing so may not beguile you, my dear reader, from your serious work, or lead you to think me, in occupying part of this book with talk not altogether relevant to it, less entirely or

Faithfully yours,

J. Ruskin.
LETTER III.

ON COLOUR AND COMPOSITION.

My Dear Reader:—

If you have been obedient, and have hitherto done all that I have told you, I trust it has not been without much subdued remonstrance, and some serious vexation. For I should be sorry if, when you were led by the course of your study to observe closely such things as are beautiful in colour, you had not longed to paint them, and felt considerable difficulty in complying with your restriction to the use of black, or blue, or grey. You ought to love colour, and to think nothing quite beautiful or perfect without it; and if you really do love it, for its own sake, and are not merely desirous to colour because you think painting a finer thing than drawing, there is some chance you may colour well. Nevertheless, you need not hope ever to produce anything more than pleasant helps to memory, or useful and suggestive sketches in colour, unless you mean to be wholly an artist. You may, in the time which other vocations leave at your disposal, produce finished, beautiful, and masterly drawings in light and shade. But to colour well, requires your life. It cannot be done cheaper. The difficulty of doing right is increased—not twofold nor threefold, but a thousandfold, and more—by the addition of colour to your work. For the chances are more than a thousand to one against your being right both in form and colour with a given touch: it is difficult enough to be right in form, if you attend to that only; but when you have to attend, at the same moment, to a much more subtle thing than the form, the difficulty is strangely increased—and multiplied almost to infinity by this great fact, that, while form is absolute, so that you can say at the moment you draw any line that it is either right or wrong, colour is wholly relative. Every hue throughout your work is altered by every touch that you add in other places; so that what was warm a minute ago, becomes cold
when you have put a hotter colour in another place, and what was in harmony when you left it, becomes discordant as you set other colours beside it; so that every touch must be laid, not with a view to its effect at the time, but with a view to its effect in futurity, the result upon it of all that is afterwards to be done being previously considered. You may easily understand that, this being so, nothing but the devotion of life, and great genius besides, can make a colourist.

But though you cannot produce finished coloured drawings of any value, you may give yourself much pleasure, and be of great use to other people, by occasionally sketching with a view to colour only; and preserving distinct statements of certain colour facts—as that the harvest-moon at rising was of such and such a red, and surrounded by clouds of such and such a rosy grey; that the mountains at evening were in truth so deep in purple; and the waves by the boat's side were indeed of that incredible green. This only, observe, if you have an eye for colour; but you may presume that you have this, if you enjoy colour.

And, though of course you should always give as much form to your subject as your attention to its colour will admit of, remember that the whole value of what you are about depends, in a coloured sketch, on the colour merely. If the colour is wrong, everything is wrong: just as, if you are singing, and sing false notes, it does not matter how true the words are. If you sing at all, you must sing sweetly; and if you colour at all, you must colour rightly. Give up all the form, rather than the slightest part of the colour: just as, if you felt yourself in danger of a false note, you would give up the word, and sing a meaningless sound, if you felt that so you could save the note. Never mind though your houses are all tumbling down—though your clouds are mere blots, and your trees mere knobs, and your sun and moon like crooked sixpences—so only that trees, clouds, houses, and sun or moon, are of the right colours. Of course, the discipline you have gone through will enable you to hint something of form, even in the fastest sweep of the brush; but do not let the thought of form hamper you in the least, when you begin to make coloured
ON COLOUR AND COMPOSITION.

memoranda. If you want the form of the subject, draw it in black and white. If you want its colour, take its colour, and be sure you have it, and not a spurious, treacherous, half-measured piece of mutual concession, with the colours all wrong, and the forms still anything but right. It is best to get into the habit of considering the coloured work merely as supplementary to your other studies; making your careful drawings of the subject first, and then a coloured memorandum separately, as shapeless as you like, but faithful in hue, and entirely minding its own business. This principle, however, bears chiefly on large and distant subjects; in foregrounds and near studies, the colour cannot be had without a good deal of definition of form. For if you do not map the mosses on the stones accurately, you will not have the right quantity of colour in each bit of moss pattern, and then none of the colours will look right; but it always simplifies the work much if you are clear as to your point of aim, and satisfied, when necessary, to fail of all but that.

Now, of course, if I were to enter into detail respecting colouring, which is the beginning and end of a painter's craft, I should need to make this a work in three volumes instead of three letters, and to illustrate it in the costliest way. I only hope at present to set you pleasantly and profitably to work, leaving you, within the tethering of certain leading-strings, to gather what advantages you can from the works of art of which every year brings a greater number within your reach;—and from the instruction which, every year, our rising artists will be more ready to give kindly, and better able to give wisely.

And, first, of materials. Use hard cake colours, not moist colours: grind a sufficient quantity of each on your palette every morning, keeping a separate plate, large and deep, for colours to be used in broad washes, and wash both plate and palette every evening, so as to be able always to get good and pure colour when you need it; and force yourself into cleanly and orderly habits about your colours. The two best colourists of modern times, Turner and Rossetti,* afford us, I

* I give Rossetti this preeminence, because, though the leading Pre-Raphaelites have all about equal power over colour in the abstract,
am sorry to say, no confirmation of this precept by their practice. Turner was, and Rossetti is, as slovenly in all their procedures as men can well be; but the result of this was, with Turner, that the colours have altered in all his pictures, and in many of his drawings; and the result of it with Rossetti is, that, though his colours are safe, he has sometimes to throw aside work that was half done, and begin over again. William Hunt, of the Old Water-colour, is very neat in his practice; so, I believe, is Mulready; so is John Lewis; and so are the leading Pre-Raphaelites, Rossetti only excepted. And there can be no doubt about the goodness of the advice, if it were only for this reason, that the more particular you are about your colours the more you will get into a deliberate and methodical habit in using them, and all true speed in colouring comes of this deliberation.

Use Chinese white, well ground, to mix with your colours in order to pale them, instead of a quantity of water. You will thus be able to shape your masses more quietly, and play the colours about with more ease; they will not damp your paper so much, and you will be able to go on continually, and lay forms of passing cloud and other fugitive or delicately shaped lights, otherwise unattainable except by time.

This mixing of white with the pigments, so as to render them opaque, constitutes body-colour drawing as opposed to transparent-colour drawing and you will, perhaps, have it often said to you that this body-colour is "illegitimate." It is just as legitimate as oil-painting, being, so far as handling is concerned, the same process, only without its uncleanliness, its unwholesomeness, or its inconvenience; for oil will not dry quickly, nor carry safely, nor give the same effects of atmosphere without tenfold labour. And if you hear it said that the body-colour looks chalky or opaque, and, as is very likely, think so yourself, be yet assured of this, that though certain

Rossetti and Holman Hunt are distinguished above the rest for rendering colour under effects of light; and of these two, Rossetti composes with richer fancy, and with a deeper sense of beauty. Hunt's stern realism leading him continually into harshness. Rossetti's carelessness, to do him justice, is only in water-colour, never in oil.
ON COLOUR AND COMPOSITION.

effects of glow and transparencies of gloom are not to be reached without transparent colour, those glows and glooms are not the noblest aim of art. After many years’ study of the various results of fresco and oil painting in Italy, and of body-colour and transparent colour in England, I am now entirely convinced that the greatest things that are to be done in art must be done in dead colour. The habit of depending on varnish or on lucid tints transparency, makes the painter comparatively lose sight of the nobler translucence which is obtained by breaking various colours amidst each other: and even when, as by Correggio, exquisite play of hue is joined with exquisite transparency, the delight in the depth almost always leads the painter into mean and false chiaroscuro; it leads him to like dark backgrounds instead of luminous ones,* and to enjoy, in general, quality of colour more than grandeur of composition, and confined light rather than open sunshine: so that the really greatest thoughts of the greatest men have always, so far as I remember, been reached in dead colour.

* All the degradation of art which was brought about, after the rise of the Dutch school, by asphaltum, yellow varnish, and brown trees, would have been prevented, if only painters had been forced to work in dead colour. Any colour will do for some people, if it is browned and shining; but fallacy in dead colour is detected on the instant. I even believe that whenever a painter begins to wish that he could touch any portion of his work with gum, he is going wrong.

It is necessary, however, in this matter, carefully to distinguish between translucency and lustre. Translucency, though, as I have said above, a dangerous temptation, is, in its place, beautiful; but lustre, or shininess, is always, in painting, a defect. Nay, one of my best painter-friends (the “best” being understood to attach to both divisions of that awkward compound word), tried the other day to persuade me that lustre was an ignobleness in anything; and it was only the fear of reason to ladies’ eyes, and to mountain streams, and to morning dew, which kept me from yielding the point to him. One is apt always to generalise too quickly in such matters; but there can be no question that lustre is destructive of loveliness in colour, as it is of intelligibility in form. Whatever may be the pride of a young beauty in the knowledge that her eyes shine (though perhaps even eyes are most beautiful in dimness), she would be sorry if her cheeks did; and which of us would wish to polish a rose?
and the noblest oil pictures of Tintoret and Veronese are those which are likest frescos.

Besides all this, the fact is, that though sometimes a little chalky and coarse-looking, body-colour is, in a sketch, infinitely liker nature than transparent colour: the bloom and mist of distance are accurately and instantly represented by the film of opaque blue (quite accurately, I think, by nothing else); and for ground, rocks, and buildings, the earthy and solid surface is, of course, always truer than the most finished and carefully wrought work in transparent tints can ever be.

Against one thing, however, I must steadily caution you. All kinds of colour are equally illegitimate, if you think they will allow you to alter at your pleasure, or blunder at your ease. There is no vehicle or method of colour which admits of alteration or repentance; you must be right at once, or never; and you might as well hope to catch a rifle bullet in your hand, and put it straight, when it was going wrong, as to recover a tint once spoiled. The secret of all good colour in oil, water, or anything else, lies primarily in that sentence spoken to me by Mulready: "Know what you have to do." The process may be a long one, perhaps: you may have to ground with one colour; to touch it with fragments of a second; to crumble a third into the interstices; a fourth into the interstices of the third; to glaze the whole with a fifth; and to reinforce in points with a sixth: but whether you have one, or ten, or twenty processes to go through, you must go straight through them, knowingly and foreseeingly all the way; and if you get the thing once wrong, there is no hope for you but in washing or scraping boldly down to the white ground, and beginning again.

The drawing in body-colour will tend to teach you all this, more than any other method, and above all it will prevent you from falling into the pestilent habit of sponging to get texture; a trick which has nearly ruined our modern water-colour school of art. There are sometimes places in which a skilful artist will roughen his paper a little to get certain conditions of dusty colour with more ease than he could otherwise; and sometimes a skilfully rased piece of paper will, in the midst
ON COLOUR AND COMPOSITION.

of transparent tints, answer nearly the purpose of chalky body-colour in representing the surfaces of rocks or buildings. But artifices of this kind are always treacherous in a tyro's hands, tempting him to trust in them; and you had better always work on white or grey paper as smooth as silk;* and never disturb the surface of your colour or paper, except finally to scratch out the very highest lights if you are using transparent colours.

I have said above that body-colour drawing will teach you the use of colour better than working with merely transparent tints; but this is not because the process is an easier one, but because it is a more complete one, and also because it involves some working with transparent tints in the best way. You are not to think that because you use body-colour you may make any kind of mess that you like, and yet get out of it. But you are to avail yourself of the characters of your material, which enable you most nearly to imitate the processes of Nature. Thus, suppose you have a red rocky cliff to sketch, with blue clouds floating over it. You paint your cliff first firmly, then take your blue, mixing it to such a tint (and here is a great part of the skill needed), that when it is laid over the red, in the thickness required for the effect of the mist, the warm rock-colour showing through the blue cloud-colour, may bring it to exactly the hue you want; (your upper tint, therefore, must be mixed colder than you want it;) then you lay it on, varying it as you strike it, getting the forms of the mist at once, and, if it be rightly done, with exquisite quality of colour, from the warm tint's showing through and between the particles of the other. When it is dry, you may add a little colour to retouch the edges where they want shape, or heighten the lights where they want roundness, or put another tone over the whole; but you can

*But not shiny or greasy. Bristol board, or hot-pressed imperial, or grey paper that feels slightly adhesive to the hand, is best. Coarse, gritty, and sandy papers are fit only for blotters and blunderers; no good draughtsman would lay a line on them. Turner worked much on a thin tough paper, dead in surface; rolling up his sketches in tight bundles that would go deep into his pockets.
take none away. If you touch or disturb the surface, or by any untoward accident mix the under and upper colours together, all is lost irrecoverably. Begin your drawing from the ground again if you like, or throw it into the fire if you like. But do not waste time in trying to mend it.*

This discussion of the relative merits of transparent and opaque colour has, however, led us a little beyond the point where we should have begun; we must go back to our palette, if you please. Get a cake of each of the hard colours named in the note below† and try experiments on their simple combinations, by mixing each colour with every other. If you like to do it in an orderly way, you may prepare a squared piece of pasteboard, and put the pure colours in columns at

* I insist upon this unalterability of colour the more because I address you as a beginner, or an amateur; a great artist can sometimes get out of a difficulty with credit, or repent without confession. Yet even Titian's alterations usually show as stains on his work.

† It is, I think, a piece of affectation to try to work with few colours; it saves time to have enough tints prepared without mixing, and you may at once allow yourself these twenty-four. If you arrange them in your colour-box in the order I have set them down, you will always easily put your finger on the one you want.

Mars orange. Ext't of vermilion. Carmine. Violet carmine.

Antwerp blue and Prussian blue are not very permanent colours, but you need not care much about permanence in your own work as yet, and they are both beautiful; while Indigo is marked by Field as more fugitive still, and is very ugly. Hooker's green is a mixed colour, put in the box merely to save you loss of time in mixing gamboge and Prussian blue. No. 1. is the best tint of it. Violet carmine is a noble colour for laying broken shadows with, to be worked into afterwards with other colours.

If you wish to take up colouring seriously, you had better get Field's "Chromatography" at once; only do not attend to anything it says about principles or harmonies of colour; but only to its statements of practical serviceableness in pigments, and of their operations on each other when mixed, &c.
ON COLOUR AND COMPOSITION.

the top and side; the mixed tints being given at the intersections, thus (the letters standing for colours):

<table>
<thead>
<tr>
<th></th>
<th>b</th>
<th>c</th>
<th>d</th>
<th>e</th>
<th>f</th>
<th>&amp;c</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>ab</td>
<td>ac</td>
<td>ad</td>
<td>ae</td>
<td>af</td>
<td>&amp;c</td>
</tr>
<tr>
<td>b</td>
<td></td>
<td>bc</td>
<td>bd</td>
<td>be</td>
<td>bf</td>
<td></td>
</tr>
<tr>
<td>c</td>
<td></td>
<td></td>
<td>cd</td>
<td>ce</td>
<td>cf</td>
<td></td>
</tr>
<tr>
<td>d</td>
<td></td>
<td></td>
<td></td>
<td>de</td>
<td>df</td>
<td></td>
</tr>
<tr>
<td>e</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ef</td>
<td></td>
</tr>
<tr>
<td>&amp;c</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This will give you some general notion of the characters of mixed tints of two colours only, and it is better in practice to confine yourself as much as possible to these, and to get more complicated colours, either by putting a third over the first blended tint, or by putting the third into its interstices. Nothing but watchful practice will teach you the effects that colours have on each other when thus put over, or beside, each other.

When you have got a little used to the principal combinations, place yourself at a window which the sun does not shine in at, commanding some simple piece of landscape; outline this landscape roughly; then take a piece of white cardboard, cut out a hole in it about the size of a large pea; and supposing $R$ is the room, $a$ $d$ the window, and you are sitting at $a$, Fig. 29., hold this cardboard a little outside of the window, upright, and in the direction $b$ $d$, parallel a little turned to the side of the window, or so as to catch more light, as at $a$ $d$, never turned as at $c$ $d$, or the paper will be dark. Then you will see the landscape, bit by bit, through the circular hole. Match the colours of each important bit as nearly as you can, mixing your tints with white, beside the aperture. When matched, put a touch of the same tint at the top of your paper, writing under it: "dark tree colour," "hill colour," "field colour," as the case may by. Then wash the tint
away from beside the opening, and the cardboard will be ready to match another piece of the landscape.* When you have got the colours of the principal masses thus indicated, lay on a piece of each in your sketch in its right place, and then proceed to complete the sketch in harmony with them, by your eye.

In the course of your early experiments, you will be much struck by two things: the first, the inimitable brilliancy of light in sky and in sun-lighted things; and the second, that among the tints which you can imitate, those which you thought the darkest will continually turn out to be in reality the lightest. Darkness of objects is estimated by us, under ordinary circumstances, much more by knowledge than by sight; thus, a cedar or Scotch fir, at 200 yards off, will be thought of darker green than an elm or oak near us; because we know by experience that the peculiar colour they exhibit, at that distance, is the sign of darkness of foliage. But when we try them through the cardboard, the near oak will be found, indeed, rather dark green, and the distant cedar, perhaps, pale gray-purple. The quantity of purple and grey in Nature is, by the way, another somewhat surprising subject of discovery.

Well, having ascertained thus your principal tints, you may proceed to fill up your sketch; in doing which observe these following particulars:

1. Many portions of your subject appeared through the aperture in the paper brighter than the paper, as sky, sun-lighted grass, &c. Leave these portions, for the present, white; and proceed with the parts of which you can match the tints.

* A more methodical, though, under general circumstances, uselessly prolix way, is to cut a square hole, some half an inch wide, in the sheet of cardboard, and a series of small circular holes in a slip of cardboard an inch wide. Pass the slip over the square opening, and match each colour beside one of the circular openings. You will thus have no occasion to wash any of the colours away. But the first rough method is generally all you want, as after a little practice, you only need to look at the hue through the opening in order to be able to transfer it to your drawing at once.
2. As you tried your subject with the cardboard, you must have observed how many changes of hue took place over small spaces. In filling up your work, try to educate your eye to perceive these differences of hue without the help of the cardboard, and lay them deliberately, like a mosaic-worker, as separate colours, preparing each carefully on your palatte, and laying it as if it were a patch of coloured cloth, cut out, to be fitted neatly by its edge to the next patch; so that the fault of your work may be, not a slurred or misty look, but a patched bed-cover look, as if it had all been cut out with scissors. For instance, in drawing the trunk of a birch tree, there will be probably white high lights, then a pale rosy grey round them on the light side, then a (probably greenish) deeper grey on the dark side, varied by reflected colours, and over all, rich black strips of bark and brown spots of moss. Lay first the rosy grey, leaving white for the high lights and for the spots of moss, and not touching the dark side. Then lay the grey for the dark side, fitting it well up to the rosy grey of the light, leaving also in this darker grey the white paper in the places for the black and brown moss; then prepare the moss colours separately for each spot, and lay each in the white place left for it. Not one grain of white, except that purposely left for the high lights, must be visible when the work is done, even through a magnifying-glass, so cunningly must you fit the edges to each other. Finally, take your background colours, and put them on each side of the tree-trunk, fitting them carefully to its edge.

Fine work you would make of this, wouldn't you, if you had not learned to draw first, and could not now draw a good outline for the stem, much less terminate a colour mass in the outline you wanted?

Your work will look very odd for some time, when you first begin to paint in this way, and before you can modify it, as I shall tell you presently how; but never mind; it is of the greatest possible importance that you should practice this separate laying on of the hues, for all good colouring finally depends on it. It is, indeed, often necessary, and sometimes desirable, to lay one colour and form boldly over another: thus,
in laying leaves on blue sky, it is impossible always in large pictures, or when pressed for time, to fill in the blue through the interstices of the leaves; and the great Venetians constantly lay their blue ground first, and then, having let it dry, strike the golden brown over it in the form of the leaf, leaving the under blue to shine through the gold, and subdue it to the olive green they want. But in the most precious and perfect work each leaf is inlaid, and the blue worked round it: and, whether you use one or other mode of getting your result, it is equally necessary to be absolute and decisive in your laying the colour. Either your ground must be laid firmly first, and then your upper colour struck upon it in perfect form, for ever, thenceforward, unalterable; or else the two colours must be individually put in their places, and led up to each other till they meet at their appointed border, equally, thenceforward, unchangeable. Either process, you see, involves absolute decision. If you once begin to slur, or change, or sketch, or try this way and that with your colour, it is all over with it and with you. You will continually see bad copyists trying to imitate the Venetians, by daubing their colours about, and retouching, and finishing, and softening; when every touch and every added hue only lead them farther into chaos. There is a dog between two children in a Veronese in the Louvre, which gives the copyist much employment. He has a dark ground behind him, which Veronese has painted first, and then when it was dry, or nearly so, struck the locks of the dog's white hair over it with some half-dozen curling sweeps of his brush, right at once, and forever. Had one line or hair of them gone wrong, it would have been wrong forever; no retouching could have mended it. The poor copyists daub in first some background, and then some dog's hair; then retouch the background, then the hair, work for hours at it, expecting it always to come right to-morrow—"when it is finished." They may work for centuries at it, and they will never do it. If they can do it with Veronese's allowance of work, half a dozen sweeps of the hand over the dark background, well; if not, they may ask the dog himself whether it will ever come right, and get true answer from him—on Launce's conditions: "If he say
"ay," it will; if he say 'no,' it will; if he shake his tail and say nothing, it will."

Whenever you lay on a mass of colour, be sure that however large it may be, or however small, it shall be gradated. No colour exists in Nature under ordinary circumstances without gradation. If you do not see this, it is the fault of your inexperience; you will see it in due time, if you practise enough. But in general you may see it at once. In the birch trunk, for instance, the rosy grey must be gradated by the roundness of the stem till it meets the shaded side; similarly the shaded side is gradated by reflected light. Accordingly, whether by adding water, or white paint, or by unequal force of touch (this you will do at pleasure, according to the texture you wish to produce), you must, in every tint you lay on, make it a little paler at one part than another, and get an even gradation between the two depths. This is very like laying down a formal law or recipe for you; but you will find it is merely the assertion of a natural fact. It is not indeed physically impossible to meet with an ungraded piece of colour, but it is so supremely improbable, that you had better get into the habit of asking yourself invariably, when you are going to copy a tint,—not "Is that gradated?" but "Which way is it gradated?" and at least in ninety-nine out of a hundred instances, you will be able to answer decisively after a careful glance, though the gradation may have been so subtle that you did not see it at first. And it does not matter how small the touch of colour may be, though not larger than the smallest pin's head, if one part of it is not darker than the rest, it is a bad touch; for it is not merely because the natural fact is so, that your colour should be gradated; the preciousness and pleasantness of the colour itself depends more on this than on any other of its qualities, for gradation is to colours just what curvature is to lines, both being felt to be beautiful by the pure instinct of every human mind, and both, considered as types, expressing the law of gradual change and progress in the human soul itself. What the difference is in mere beauty between a gradated and ungradated colour, may be seen easily by laying an even tint of rose-colour on paper, and putting a
rose leaf beside it. The victorious beauty of the rose as
compared with other flowers, depends wholly on the deli-
cacy and buantity of its colour gradations, all other flowers
being either less rich in gradation, not having so many folds
of leaf; or less tender, being patched and veined instead of
flushed.

4. But observe, it is not enough in general that colour
should be gradated by being made merely paler or darker at
one place than another. Generally colour changes as it dimin-
ishes, and is not merely darker at one spot, but also purer at
one spot than anywhere else. It does not in the least follow
that the darkest spot should be the purest; still less so that the
lightest should be the purest. Very often the two gradations
more or less cross each other, one passing in one direction
from paleness to darkness, another in another direction from
purity to dullness, but there will almost always be both of
them, however reconciled; and you must never be satisfied
with a piece of colour until you have got both: that is to say,
every piece of blue that you lay on must be quite blue only at
some given spot, nor that a large spot; and must be gradated
from that into less pure blue—greyish blue, or greenish blue,
or purplish blue, over all the rest of the space it occupies.
And this you must do in one of three ways: either, while the
colour is wet, mix it with the colour which is to subdue it,
adding gradually a little more and a little more; or else, when
the colour is quite dry, strike a gradated touch of another
colour over it, leaving only a point of the first tint visible:
or else, lay the subduing tints on in small touches, as in the ex-
ercise of tinting the chess-board. Of each of these methods
I have something to tell you separately: but that is distinct
from the subject of gradation, which I must not quit without
once more pressing upon you the preëminent necessity of in-
troducing it everywhere. I have profound dislike of anything
like habit of hand, and yet, in this one instance, I feel almost
tempted to encourage you to get into a habit of never touch-
ing paper with colour, without securing a gradation. You
will not in Turner's largest oil pictures, perhaps six or seven
feet long by four or five high, find one spot of colour as large
as a grain of wheat ungradated: and you will find in practice, that brilliancy of hue, and vigour of light, and even the aspect of transparency in shade, are essentially dependent on this character alone; hardness, coldness, and opacity resulting far more from equality of colour than from nature of colour. Give me some mud off a city crossing, some ochre out of a gravel pit, a little whitening, and some coal-dust, and I will paint you a luminous picture, if you give me time to gradate my mud, and subdue my dust: but though you had the red of the ruby, the blue of the gentian, snow for the light, and amber for the gold, you cannot paint a luminous picture, if you keep the masses of those colours unbroken in purity, and unvarying in depth.

5. Next note the three processes by which gradation and other characters are to be obtained:

A. Mixing while the colour is wet.

You may be confused by my first telling you to lay on the hues in separate patches, and then telling you to mix hues together as you lay them on: but the separate masses are to be laid, when colours distinctly oppose each other at a given limit; the hues to be mixed, when they palpitate one through the other, or fade one into the other. It is better to err a little on the distinct side. Thus I told you to paint the dark and light sides of the birch trunk separately, though in reality, the two tints change, as the trunk turns away from the light, gradually one into the other: and, after being laid separately on, will need some farther touching to harmonize them: but they do so in a very narrow space, marked distinctly all the way up the trunk; and it is easier and safer, therefore, to keep them separate at first. Whereas it often happens that the whole beauty of two colours will depend on the one being continued well through the other, and playing in the midst of it: blue and green often do so in water: blue and grey, or purple and scarlet, in sky; in hundreds of such instances the most beautiful and truthful results may be obtained by laying one colour into the other while wet; judging wisely how far it will spread, or blending it with the brush in somewhat thicker consistence of wet body-colour; only observe, never
mix in this way two mixtures; let the colour you lay into the other be always a simple, not a compound tint.

B. Laying one colour over another.

If you lay on a solid touch of vermilion, and, after it is quite dry, strike a little very wet carmine quickly over it, you will obtain a much more brilliant red than by mixing the carmine and vermilion. Similarly, if you lay a dark colour first, and strike a little blue or white body-colour lightly over it, you will get a more beautiful grey than by mixing the colour and the blue or white. In very perfect painting, artifices of this kind are continually used; but I would not have you trust much to them; they are apt to make you think too much of quality of colour. I should like you to depend on little more than the dead colours, simply laid on, only observe always this, that the less colour you do the work with, the better it will always be: so that if you have laid a red colour, and you want a purple one above, do not mix the purple on your palette and lay it on so thick as to overpower the red, but take a little thin blue from your palette, and lay it lightly over the red, so as to let the red be seen through, and thus produce the required purple; and if you want a green hue over a blue one, do not lay a quantity of green on the blue, but a little yellow, and so on, always bringing the under colour into service as far as you possibly can. If, however, the colour beneath is wholly opposed to the one you have to lay on, as, suppose, if green is to be laid over scarlet, you must either remove the required parts of the under colour daintily first with your knife, or with water; or else, lay solid white over it massively, and leave that to dry, and then glaze the white with the upper colour. This is better, in general, than laying the upper colour itself so thick as to conquer the ground, which, in fact, if it be a transparent colour, you cannot do.

* If colours were twenty times as costly as they are, we should have many more good painters. If I were Chancellor of the Exchequer I would lay a tax of twenty shillings a cake on all colours except black, Prussian blue, Vandyke brown, and Chinese white, which I would leave for students. I don't say this jestingly; I believe such a tax would do more to advance real art than a great many schools of design.
ON COLOUR AND COMPOSITION.

Thus, if you have to strike warm boughs and leaves of trees over blue sky, and they are too intricate to have their places left for them in laying the blue, it is better to lay them first in solid white, and then glaze with sienna and ochre, than to mix the sienna and white; though, of course, the process is longer and more troublesome. Nevertheless, if the forms of touches required are very delicate, the after glazing is impossible. You must then mix the warm colour thick at once, and so use it: and this is often necessary for delicate grasses, and such other fine threads of light in foreground work.

C. Breaking one colour in small points through or over another.

This is the most important of all processes in good modern* oil and water-colour painting, but you need not hope to attain very great skill in it. To do it well is very laborious, and requires such skill and delicacy of hand as can only be acquired by unceasing practice. But you will find advantage in noting the following points:

(a.) In distant effects of rich subjects, wood, or rippled water, or broken clouds, much may be done by touches or crumbling dashes of rather dry colour, with other colours afterwards put cunningly into the interstices. The more you practise this, when the subject evidently calls for it, the more your eye will enjoy the higher qualities of colour. The process is, in fact, the carrying out of the principle of separate colours to the utmost possible refinement; using atoms of colour in juxtaposition, instead of large spaces. And note, in filling up minute interstices of this kind, that if you want the colour you fill them with to show brightly, it is better to put a rather positive point of it, with a little white left beside or round it in the interstice, than to put a pale tint of the colour over the whole interstice. Yellow or orange will hardly show, if pale, in small spaces; but they show brightly in firm touches, however small, with white beside them.

(b.) If a colour is to be darkened by superimposed portions

* I say modern, because Titian's quiet way of blending colours, which is the perfectly right one, is not understood now by any artist. The best colour we reach is got by stippling; but this not quite right.
of another, it is, in many cases, better to lay the uppermost
colour in rather vigorous small touches, like finely chopped
straw, over the under one, than to lay it on as a tint, for two
reasons: the first, that the play of the two colours together is
pleasant to the eye; the second, that much expression of form
may be got by wise administration of the upper dark touches.
In distant mountains they may be made pines of, or broken
crags, or villages, or stones, or whatever you choose; in clouds
they may indicate the direction of the rain, the roll and out-
line of the cloud masses; and in water, the minor waves. All
noble effects of dark atmosphere are got in good water-colour
drawing by these two expedients, interlacing the colours, or
retouching the lower one with fine darker drawing in an
upper. Sponging and washing for dark atmospheric effect is
barbarous, and mere tyro's work, though it is often useful for
passages of delicate atmospheric light.

(c.) When you have time, practice the production of mixed
tints by interlaced touches of the pure colours out of which
they are formed, and use the process at the parts of your
sketches where you wish to get rich and luscious effects. Study
the works of William Hunt, of the Old Water-colour Society,
in this respect, continually, and make frequent memoranda
of the variegations in flowers; not painting the flower com-
pletely, but laying the ground colour of one petal, and paint-
ing the spots on it with studious precision: a series of single
petals of lilies, geraniums, tulips, &c., numbered with proper
reference to their position in the flower, will be interesting to
you on many grounds besides those of art. Be careful to get the
gradated distribution of the spots well followed in the calceo-
larias, foxgloves, and the like; and work out the odd, indefinite
hues of the spots themselves with minute grains of pure inter-
laced colour, otherwise you will never get their richness or
bloom. You will be surprised to find, as you do this, first
the universality of the law of gradation we have so much in-
sisted upon; secondly, that Nature is just as economical of
her fine colours as I have told you to be of yours. You would
think, by the way she paints, that her colours cost her some-
thing enormous: she will only give you a single pure touch,
ON COLOUR AND COMPOSITION.

just where the petal turns into light; but down in the bell all is subdued, and under the petal all is subdued, even in the showiest flower. What you thought was bright blue is, when you look close, only dusty grey, or green, or purple, or every colour in the world at once, only a single gleam or streak of pure blue in the centre of it. And so with all her colours. Sometimes I have really thought her miserliness intolerable: in a gentian, for instance, the way she economises her ultramarine down in the bell is a little too bad.

Next, respecting general tone. I said, just now, that, for the sake of students, my tax should not be laid on black or on white pigments; but if you mean to be a colourist, you must lay a tax on them yourselves when you begin to use true colour; that is to say, you must use them little and make of them much. There is no better test of your colour tones being good, than your having made the white in your picture precious, and the black conspicuous.

I say, first, the white precious. I do not mean merely glittering or brilliant; it is easy to scratch white seagulls out of black clouds and dot clumsy foliage with chalky dew; but, when white is well managed, it ought to be strangely delicious—tender as well as bright—like inlaid mother of pearl, or white roses washed in milk. The eye ought to seek it for rest, brilliant though it may be; and to feel it as a space of strange, heavenly paleness in the midst of the flushing of the colours. This effect you can only reach by general depth of middle tint, by absolutely refusing to allow any white to exist except where you need it, and by keeping the white itself subdued by grey, except at a few points of chief lustre.

Secondly, you must make the black conspicuous. However small a point of black may be, it ought to catch the eye, otherwise your work is too heavy in the shadow. All the ordinary shadows should be of some colour—never black, nor approaching black, they should be evidently and always of a luminous nature, and the black should look strange among them; never occurring except in a black object, or in small points indicative of intense shade in the very centre of masses of shadow. Shadows of absolutely negative grey, however,
may be beautifully used with white, or with gold; but still though the black thus, in subdued strength, becomes spacious, it should always be conspicuous; the spectator should notice this grey neutrality with some wonder, and enjoy, all the more intensely on account of it, the gold colour and the white which it relieves. Of all the great colourists Velasquez is the greatest master of the black chords. His black is more precious than most other people's crimson.

It is not, however, only white and black which you must make valuable; you must give rare worth to every colour you use; but the white and black ought to separate themselves quaintly from the rest, while the other colours should be continually passing one into the other, being all evidently companions in the same gay world; while the white, black, and neutral grey should stand monkishly aloof in the midst of them. You may melt your crimson into purple, your purple into blue and your blue into green, but you must not melt any of them into black. You should, however, try, as I said, to give preciousness to all your colours; and this especially by never using a grain more than will just do the work, and giving each hue the highest value by opposition. All fine colouring, like fine drawing, is delicate; and so delicate that if, at last, you see the colour you are putting on, you are putting on too much. You ought to feel a change wrought in the general tone, by touches of colour which individually are too pale to be seen; and if there is one atom of any colour in the whole picture which is unnecessary to it, that atom hurts it.

Notice also, that nearly all good compound colours are odd colours. You shall look at a hue in a good painter's work ten minutes before you know what to call it. You thought it was brown, presently, you feel that it is red; next that there is, somehow, yellow in it; presently afterwards that there is blue in it. If you try to copy it you will always find your colour too warm or too cold—no colour in the box will seem to have any affinity with it; and yet it will be as pure as if it were laid at a single touch with a single colour.

As to the choice and harmony of colours in general, if you
ON COLOUR AND COMPOSITION.

cannot choose and harmonize them by instinct, you will never do it at all. If you need examples of utterly harsh and horrible colour, you may find plenty given in treatises upon colouring, to illustrate the laws of harmony; and if you want to colour beautifully, colour as best pleases yourself at quiet times, not so as to catch the eye, nor to look as if it were clever or difficult to colour in that way, but so that the colour may be pleasant to you when you are happy, or thoughtful. Look much at the morning and evening sky, and much at simple flowers—dog-roses, wood hyacinths, violets, poppies, thistles, heather, and such like—as Nature arranges them in the woods and fields. If ever any scientific person tells you that two colours are "discordant," make a note of the two colours, and put them together whenever you can. I have actually heard people say that blue and green were discordant; the two colours which Nature seems to intend never to be separated and never to be felt, either of them, in its full beauty without the other!—a peacock's neck, or a blue sky through green leaves, or a blue wave with green lights though it, being precisely the loveliest things, next to clouds at sunrise, in this coloured world of ours. If you have a good eye for colours, you will soon find out how constantly Nature puts purple and green together, purple and scarlet, green and blue, yellow and neutral grey, and the like; and how she strikes these colour-conords for general tones, and then works into them with innumerable subordinate ones; and you will gradually come to like what she does, and find out new and beautiful chords of colour in her work every day. If you enjoy them, depend upon it you will paint them to a certain point right: or, at least, if you do not enjoy them, you are certain to paint them wrong. If colour does not give you intense pleasure, let it alone; depend upon it, you are only tormenting the eyes and senses of people who feel colour, whenever you touch it; and that is unkind and improper. You will find, also, your power of colouring depend much on your state of health and right balance of mind; when you are fatigued or ill you will not see colours well, and when you are ill-tempered you will not choose them well: thus, though not infallibly a test of char-
acter in individuals, colour power is a great sign of mental health in nations; when they are in a state of intellectual decline, their colouring always gets dull.* You must also take great care not to be misled by affected talk about colour from people who have not the gift of it: numbers are eager and voluble about it who probably never in all their lives received one genuine colour-sensation. The modern religionists of the school of Overbeck are just like people who eat slate-pencil and chalk, and assure everybody that they are nicer and purer than strawberries and plums.

Take care also never to be misled into any idea that colour can help or display form; colour † always disguises form, and is meant to do so.

It is a favourite dogma among modern writers on colour that "warm colours" (reds and yellows) "approach" or express nearness, and "cold colours" (blue and grey) "retire" or express distance. So far is this from being the case, that no expression of distance in the world is so great as that of the gold and orange in twilight sky. Colours, as such, are absolutely inexpressive respecting distance. It is their quality (as depth, delicacy, &c.) which expresses distance, not their

* The worst general character that colour can possibly have is a prevalent tendency to a dirty yellowish green, like that of a decaying heap of vegetables; this colour is accurately indicative of decline or paralysis in missal-painting.

† That is to say, local colour inherent in the object. The gradations of colour in the various shadows belonging to various lights exhibit form, and therefore no one but a colourist can ever draw forms perfectly (see "Modern Painters," vol. iv. chap. iii. at the end); but all notions of explaining form by superimposed colour, as in architectural mouldings, are absurd. Colour adorns form, but does not interpret it. An apple is prettier, because it is striped, but it does not look a bit rounder; and a cheek is prettier because it is flushed, but you would see the form of the cheek bone better if it were not. Colour may, indeed, detach one shape from another, as in grounding a bas-relief, but it always diminishes the appearance of projection, and whether you put blue, purple, red, yellow, or green, for your ground, the bas-relief will be just as clearly or just as imperfectly relieved, as long as the colours are of equal depth. The blue ground will not retire the hundredth part of an inch more than the red one.
tint. A blue bandbox set on the same shelf with a yellow one will not look an inch farther off, but a red or orange cloud, in the upper sky, will always appear to be beyond a blue cloud close to us, as it is in reality. It is quite true that in certain objects, blue is a sign of distance; but that is not because blue is a retiring colour, but because the mist in the air is blue, and therefore any warm colour which has not strength of light enough to pierce the mist is lost or subdued in its blue: but blue is no more, on this account, a "retiring colour," than brown is a retiring colour, because, when stones are seen through brown water, the deeper they lie the browner they look; or than yellow is a retiring colour, because when objects are seen through a London fog, the farther off they are the yellower they look. Neither blue, nor yellow, nor red, can have, as such, the smallest power of expressing either nearness or distance: they express them only under the peculiar circumstances which render them at the moment, or in that place, signs of nearness or distance. Thus, vivid orange in an orange is a sign of nearness, for if you put the orange a great way off, its colour will not look so bright; but vivid orange in sky is a sign of distance, because you cannot get the colour of orange in a cloud near you. So purple in a violet or a hyacinth is a sign of nearness, because the closer you look at them the more purple you see. But purple in a mountain is a sign of distance, because a mountain close to you is not purple, but green or grey. It may, indeed, be generally assumed that a tender or pale colour will more or less express distance, and a powerful or dark colour nearness; but even this is not always so. Heathery hills will usually give a pale and tender purple near, and an intense and dark purple far away; the rose colour of sunset on snow is pale on the snow at your feet, deep and full on the snow in the distance; and the green of a Swiss lake is pale in the clear waves on the beach, but intense as an emerald in the sunstreak, six miles from shore. And in any case, when the foreground is in strong light, with much water about it, or white surface, casting intense reflections, all its colours may be perfectly delicate, pale, and faint; while the distance, when it is in shadow, may re-
lieve the whole foreground with intense darks of purple, blue, green, or ultramarine blue. So that, on the whole, it is quite hopeless and absurd to expect any help from laws of "aerial perspective." Look for the natural effects, and set them down as fully as you can, and as faithfully, and never alter a colour because it won't look in its right place. Put the colour strong, if it be strong, though far off; faint, if it be faint, though close to you. Why should you suppose that Nature always means you to know exactly how far one thing is from another? She certainly intends you always to enjoy her colouring, but she does not wish you always to measure her space. You would be hard put to it, every time you painted the sun setting, if you had to express his 95,000,000 miles of distance in "aerial perspective."

There is, however, I think, one law about distance, which has some claims to be considered a constant one: namely, that dullness and heaviness of colour are more or less indicative of nearness. All distant colour is pure colour: it may not be bright, but it is clear and lovely, not opaque nor soiled; for the air and light coming between us and any earthy or imperfect colour, purify or harmonise it; hence a bad colourist is peculiarly incapable of expressing distance. I do not of course mean that you are to use bad colours in your foreground by way of making it come forward; but only that a failure in colour, there, will not put it out of its place; while a failure in colour in the distance will at once do away with its remoteness: your dull-coloured foreground will still be a foreground, though ill-painted; but your ill-painted distance will not be merely a dull distance,—it will be no distance at all.

I have only one thing more to advise you, namely, never to colour petulantly or hurriedly. You will not, indeed, be able, if you attend properly to your colouring, to get anything like the quantity of form you could in a chiaroscuro sketch; nevertheless, if you do not dash or rush at your work, nor do it lazily, you may always get enough form to be satisfactory. An extra quarter of an hour, distributed in quietness over the course of the whole study, may just make the difference
ON COLOUR AND COMPOSITION. 355

between a quite intelligible drawing, and a slovenly and obscure one. If you determine well beforehand what outline each piece of colour is to have; and, when it is on the paper, guide it without nervousness, as far as you can, into the form required; and then, after it is dry, consider thoroughly what touches are needed to complete it, before laying one of them on; you will be surprised to find how masterly the work will soon look, as compared with a hurried or ill-considered sketch. In no process that I know of—least of all in sketching—can time be really gained by precipitation. It is gained only by caution; and gained in all sorts of ways: for not only truth of form, but force of light, is always added by an intelligent and shapely laying of the shadow colours. You may often make a simple flat tint, rightly gradated and edged, express a complicated piece of subject without a single retouch. The two Swiss cottages, for instance, with their balconies, and glittering windows, and general character of shingly eaves, are expressed in Fig. 30., with one tint of grey, and a few dispersed spots and lines of it; all of which you ought to be able to lay on without more than thrice dipping your brush, and without a single touch after the tint is dry.

Here, then, for I cannot without coloured illustrations tell you more, I must leave you to follow out the subject for yourself, with such help as you may receive from the water-colour drawings accessible to you; or from any of the little treatises on their art which have been published lately by our water-colour painters.* But do not trust much to works of this kind. You may get valuable hints from them as to mixture

* See, however, at the close of this letter, the notice of one more point connected with the management of colour, under the head "Law of Harmony."
of colours; and here and there you will find a useful artifice or process explained; but nearly all such books are written only to help idle amateurs to a meretricious skill, and they are full of precepts and principles which may, for the most part, be interpreted by their precise negatives, and then acted upon with advantage. Most of them praise boldness, when the only safe attendant spirit of a beginner is caution;—advise velocity, when the first condition of success is deliberation;—and plead for generalisation, when all the foundations of power must be laid in knowledge of specialty.

And now, in the last place, I have a few things to tell you respecting that dangerous nobleness of consummate art, Composition. For though it is quite unnecessary for you yet awhile to attempt it, and it may be inexpedient for you to attempt it at all, you ought to know what it means, and to look for and enjoy it in the art of others.

Composition means, literally and simply, putting several things together, so as to make one thing out of them; the nature and goodness of which they all have a share in producing. Thus a musician composes an air, by putting notes together in certain relations; a poet composes a poem, by putting thoughts and words in pleasant order; and a painter a picture, by putting thoughts, forms, and colours in pleasant order.

In all these cases, observe, an intended unity must be the result of composition. A labourer cannot be said to compose the heap of stones which he empties from his cart, nor the sower the handful of seed which he scatters from his hand. It is the essence of composition that everything should be in a determined place, perform an intended part, and act, in that part, advantageously for everything that is connected with it.

Composition, understood in this pure sense, is the type, in the arts of mankind, of the Providential government of the world.* It is an exhibition, in the order given to notes, or colours, or forms, of the advantage of perfect fellowship, dis-

ON COLOUR AND COMPOSITION.

ripline, and contentment. In a well-composed air, no note, however short or low, can be spared, but the least is as necessary as the greatest: no note, however prolonged, is tedious; but the others prepare for, and are benefited by, its duration: no note, however high, is tyrannous; the others prepare for and are benefited by, its exaltation: no note, however low, is overpowered, the others prepare for, and sympathise with, its humility: and the result is, that each and every note has a value in the position assigned to it, which by itself, it never possessed, and of which by separation from the others, it would instantly be deprived.

Similarly, in a good poem, each word and thought enhances the value of those which precede and follow it; and every syllable has a loveliness which depends not so much on its abstract sound as on its position. Look at the same word in a dictionary, and you will hardly recognise it.

Much more in a great picture; every line and colour is so arranged as to advantage the rest. None are inessential, however slight; and none are independent, however forcible. It is not enough that they truly represent natural objects; but they must fit into certain places, and gather into certain harmonious groups: so that, for instance, the red chimney of a cottage is not merely set in its place as a chimney, but that it may affect, in a certain way pleasurable to the eye, the pieces of green or blue in other parts of the picture; and we ought to see that the work is masterly, merely by the positions and quantities of these patches of green, red, and blue, even at a distance which renders it perfectly impossible to determine what the colours represent: or to see whether the red is a chimney, or an old woman’s cloak; and whether the blue is smoke, sky, or water.

It seems to be appointed, in order to remind us, in all we do, of the great laws of Divine government and human polity, that composition in the arts should strongly affect every order of mind, however unlearned or thoughtless. Hence the popular delight in rhythm and metre, and in simple musical melodies. But it is also appointed that power of composition in the fine arts should be an exclusive attribute of great intellect.
All men can more or less copy what they see, and, more or less, remember it: powers of reflection and investigation are also common to us all, so that the decision of inferiority in these rests only on questions of degree. A. has a better memory than B., and C. reflects more profoundly than D. But the gift of composition is not given at all to more than one man in a thousand; in its highest range, it does not occur above three or four times in a century.

It follows, from these general truths, that it is impossible to give rules which will enable you to compose. You might much more easily receive rules to enable you to be witty. If it were possible to be witty by rule, wit would cease to be either admirable or amusing: if it were possible to compose melody by rule, Mozart and Cimarosa need not have been born: if it were possible to compose pictures by rule, Titian and Veronese would be ordinary men. The essence of composition lies precisely in the fact of its being unteachable, in its being the operation of an individual mind of range and power exalted above others.

But though no one can invent by rule, there are some simple laws of arrangement which it is well for you to know, because, though they will not enable you to produce a good picture, they will often assist you to set forth what goodness may be in your work in a more telling way than you could have done otherwise; and by tracing them in the work of good composers, you may better understand the grasp of their imagination, and the power it possesses over their materials.

I shall briefly state the chief of these laws.

1. THE LAW OF PRINCIPALITY.

The great object of composition being always to secure unity; that is, to make out of many things one whole; the first mode in which this can be effected is, by determining that one feature shall be more important than all the rest, and that the others shall group with it in subordinate positions.

This is the simplest law of ordinary ornamentation. Thus the group of two leaves, a, Fig. 31., is unsatisfactory, because it has no leading leaf; but that at b is prettier, because it has
a head or master leaf; and c more satisfactory still, because the subordination of the other members to this head leaf is made more manifest by their gradual loss of size as they fall back from it. Hence part of the pleasure we have in the Greek honeysuckle ornament, and such others.

Thus, also, good pictures have always one light larger or brighter than the other lights, or one figure more prominent than the other figures, or one mass of colour dominant over all the other masses; and in general you will find it much benefit your sketch if you manage that there shall be one light on the cottage wall, or one blue cloud in the sky, which may attract the eye as leading light, or leading gloom, above all others. But the observance of the rule is often so cunningly concealed by the great composers, that its force is hardly at first traceable; and you will generally find that they are vulgar pictures in which the law is strikingly manifest. This may be simply illustrated by musical melody; for instance, in such phrases as this:

![Musical notation](image)

one note (here the upper c) rules the whole passage, and has the full energy of it concentrated in itself. Such passages, corresponding to completely subordinated compositions in painting, are apt to be wearisome if often repeated. But in such a phrase as this:

![Musical notation](image)

it is very difficult to say, which is the principal note. The a in the last bar is lightly dominant, but there is a very equal
current of power running through the whole; and such passages rarely weary. And this principle holds through vast scales of arrangement; so that in the grandest compositions, such as Paul Veronese's Marriage in Cana, or Raphael's Disputa, it is not easy to fix at once on the principal figure; and very commonly the figure which is really chief does not catch the eye at first, but is gradually felt to be more and more conspicuous as we gaze. Thus in Titian's grand composition of the Cornaro Family, the figure meant to be principal is a youth of fifteen or sixteen, whose portrait it was evidently the painter's object to make as interesting as possible. But a grand Madonna, and a St. George with a drifting banner, and many figures more, occupy the centre of the picture, and first catch the eye; little by little we are led away from them to a gleam of pearly light in the lower corner, and find that, from the head which it shines upon, we can turn our eyes no more.

As, in every good picture, nearly all laws of design are more or less exemplified, it will, on the whole, be an easier way of explaining them to analyse one composition thoroughly, than to give instances from various works. I shall therefore take one of Turner's simplest; which will allow us, so to speak, easily to decompose it, and illustrate each law by it as we proceed.

Figure 32. is a rude sketch of the arrangement of the whole subject; the old bridge over the Moselle at Coblentz, the town of Coblentz on the right, Ehrenbreitstein on the left. The leading or master feature is, of course the tower on the bridge. It is kept from being too principal by an important group on each side of it; the boats, on the right, and Ehrenbreitstein beyond. The boats are large in mass, and more forcible in colour, but they are broken into small divisions, while the tower is simple, and therefore it still leads. Ehrenbreitstein is noble in its mass, but so reduced by aerial perspective of colour that it cannot contend with the tower, which therefore holds the eye, and becomes the key of the picture. We shall see presently how the very objects which seem at first to contend with it for the mastery are made, occultly to increase its preëminence.
2. THE LAW OF REPETITION.

Another important means of expressing unity is to mark some kind of sympathy among the different objects, and perhaps the pleasantest, because most surprising, kind of sympathy, is when one group imitates or repeats another; not in the way of balance or symmetry, but subordinately, like a far-away and broken echo of it. Prout has insisted much on this law in all his writings on composition; and I think it is even more authoritatively present in the minds of most great composers than the law of principality. It is quite curious to see the pains that Turner sometimes takes to echo an important passage of colour; in the Pembroke Castle for instance, there are two fishing-boats, one with a red, and another with a white sail. In a line with them, on the beach, are two fish in precisely the same relative positions; one red and one white. It is observable that he uses the artifice chiefly in pictures where he wishes to obtain an expression of repose: in my notice of the plate of Scarborough, in the series of the "Harbours of England," I have already had occasion to dwell on this point;
and I extract in the note* one or two sentences which explain the principle. In the composition I have chosen for our illustration, this reduplication is employed to a singular extent. The tower, or leading feature, is first repeated by the low echo of it to the left; put your finger over this lower tower, and see how the picture is spoiled. Then the spires of Coblentz are all arranged in couples (how they are arranged in reality does not matter; when we are composing a great picture, we must play the towers about till they come right, as fearlessly as if they were chessmen instead of cathedrals). The dual arrangement of these towers would have been too easily seen, were it not for a little one which pretends to make a triad of the last group on the right, but is so faint as hardly to be discernible: it just takes off the attention from the artifice, helped in doing so by the mast at the head of the boat, which, however, has instantly its own duplicate put at the stern.† Then there is the large boat near, and its echo beyond it. That echo is divided into two again, and each of those two smaller boats has two figures in it; while two figures are also sitting together on the great rudder that lies half in the water, and half aground. Then, finally, the great mass of Ehrenbreitstein, which appears at first to have no answering form, has almost its fac-simile in the bank on which the girl is sitting; this bank is as absolutely essential to the completion of the picture as any object in the whole series. All this is done to deepen the effect of repose.

Symmetry or the balance of parts or masses in nearly equal opposition, is one of the conditions of treatment under the

* "In general, throughout Nature, reflection and repetition are peaceful things, associated with the idea of quiet succession in events, that one day should be like another day, or one history the repetition of another history, being more or less results of quietness, while dissimilarity and non succession are results of interference and disquietude. Thus, though an echo actually increases the quantity of sound heard, its repetition of the note or syllable gives an idea of calmness attainable in no other way; hence also the feeling of calm given to a landscape by the voice of a cuckoo."

† This is obscure in the rude woodcut, the masts being so delicate that they are confused among the lines of reflection. In the original they have orange light upon them, relieved against purple behind.
ON COLOUR AND COMPOSITION.

363

law of Repetition. For the opposition, in a symmetrical object, is of like things reflecting each other; it is not the balance of contrary natures (like that of day and night) but of like natures or like forms; one side of a leaf being set like the reflection of the other in water.

Symmetry in Nature is, however, never formal nor accurate. She takes the greatest care to secure some difference between the corresponding things or parts of things; and an approximation to accurate symmetry is only permitted in animals because their motions secure perpetual difference between the balancing parts. Stand before a mirror; hold your arms in precisely the same position at each side, your head upright your body straight; divide your hair exactly in the middle, and get it as nearly as you can into exactly the same shape over each ear; and you will see the effect of accurate symmetry; you will see, no less, how all grace and power in the human form result from the interference of motion and life with symmetry, and from the reconciliation of its balance with its changefulness. Your position, as seen in the mirror, is the highest type of symmetry as understood by modern architects.

In many sacred compositions, living symmetry, the balance of harmonious opposites, is one of the profoundest sources of their power: almost any works of the early painters, Angelico, Perugino, Giotto, &c., will furnish you with notable instances of it. The Madonna of Perugino in the National Gallery, with the angel Michael on one side and Raphael on the other, is as beautiful an example as you can have.

In landscape, the principle of balance is more or less carried out, in proportion to the wish of the painter to express disciplined calmness. In bad compositions as in bad architecture, it is formal, a tree on one side answering a tree on the other; but in good compositions, as in graceful statues, it is always easy, and sometimes hardly traceable. In the Co- blentz, however, you cannot have much difficulty in seeing how the boats on one side of the tower and the figures on the other are set in nearly equal balance; the tower, as a central mass uniting both.
3. The Law of Continuity.

Another important and pleasurable way of expressing unity, is by giving some orderly succession to a number of objects more or less similar. And this succession is most interesting when it is connected with some gradual change in the aspect or character of the objects. Thus the succession of the pillars of a cathedral aisle is most interesting when they retire in perspective, becoming more and more obscure in distance; so the succession of mountain promontories one behind another, on the flanks of a valley; so the succession of clouds, fading farther and farther towards the horizon; each promontory and each cloud being of different shape, yet all evidently following in a calm and appointed order. If there be no change at all in the shape or size of the objects, there is no continuity; there is only repetition—monotony. It is the change in shape which suggests the idea of their being individually free, and able to escape, if they liked, from the law that rules them, and yet submitting to it. I will leave our chosen illustrative composition for a moment to take up another, still more expressive of this law. It is one of Turner's most tender studies, a sketch on Calais Sands at sunset; so delicate in the expression of wave and cloud, that it is of no use for me to try to reach it with any kind of outline in a woodcut; but the rough sketch, Fig. 33., is enough to give an idea of its arrangement. The aim of the painter has been to give the intensest expression of repose, together with the enchanted lulling, monotonous motion of cloud and wave. All the clouds are moving in innumerable ranks after the sun, meeting towards the point in the horizon where he has set; and the tidal waves gain in winding currents upon the sand, with that stealthy haste in which they cross each other so quietly, at their edges: just folding one over another as they meet, like a little piece of ruffled silk, and leaping up a little as two children kiss and clap their hands, and then going on again, each in its silent hurry, drawing pointed arches on the sand as their thin edges intersect in parting; but all this would not have been enough expressed without the line of the old pier-timbers, black with
weeds, strained and bent by the storm waves, and now seeming to stoop in following one another, like dark ghosts escaping slowly from the cruelty of the pursuing sea.

I need not, I hope, point out to the reader the illustration of this law of continuance in the subject chosen for our general illustration. It was simply that gradual succession of the retiring arches of the bridge which induced Turner to paint the subject at all; and it was this same principle which led him always to seize on subjects including long bridges wherever he could find them; but especially, observe, unequal bridges, having the highest arch at one side rather than at the centre. There is a reason for this, irrespective of general laws of composition, and connected with the nature of rivers, which I may as well stop a minute to tell you about, and let you rest from the study of composition.

All rivers, small or large, agree in one character, they like to lean a little on one side: they cannot bear to have their channels deepest in the middle, but will always, if they can, have one bank to sun themselves upon, and another to get cool under; one shingly shore to play over, where they may be shallow, and foolish, and childlike, and another steep shore, under which they can pause, and purify themselves, and get
their strength of waves fully together for due occasion. Rivers in this way are just like wise men, who keep one side of their life for play, and another for work; and can be brilliant, and chattering, and transparent, when they are at ease, and yet take deep counsel on the other side when they set themselves to their main purpose. And rivers are just in this divided, also, like wicked and good men: the good rivers have serviceable deep places all along their banks, that ships can sail in; but the wicked rivers go scoopingly irregularly under their banks until they get full of strangling eddies, which no boat can row over without being twisted against the rocks; and pools like wells, which no one can get out of but the water-kelpie that lives at the bottom;—but, wicked or good, the rivers all agree in having two kinds of sides. Now the natural way in which a village stonemason therefore throws a bridge over a strong stream is, of course, to build a great door to let the cat through, and little doors to let the kittens through; a great arch for the great current, to give it room in flood time, and little arches for the little currents along the shallow shore. This, even without any prudential respect for the floods of the great current, he would do in simple economy of work and stone; for the smaller your arches are, the less material you want on their flanks. Two arches over the same span of river, supposing the butments are at the same depth, are cheaper than one, and that by a great deal; so that, where the current is shallow, the village mason makes his arches many and low; as the water gets deeper, and it becomes troublesome to build his piers up from the bottom, he throws his arches wider; at last he comes to the deep stream, and, as he cannot build at the bottom of that, he throws his largest arch over it with a leap, and with another little one or so gains the opposite shore. Of course as arches are wider they must be higher, or they will not stand; so the roadway must rise as the arches widen. And thus we have the general type of bridge, with its highest and widest arch towards one side, and a train of minor arches running over the flat shore on the other; usually a steep bank at the riverside next the large arch; always, of course, a flat shore on
the side of the small ones; and the bend of the river assuredly concave towards this flat, cutting round, with a sweep into the steep bank; or, if there is no steep bank, still assuredly cutting into the shore at the steep end of the bridge.

Now this kind of bridge, sympathising, as it does, with the spirit of the river, and marking the nature of the thing it has to deal with and conquer, is the ideal of a bridge; and all endeavours to do the thing in a grand engineer's manner, with a level roadway and equal arches, are barbarous; not only because all monotonous forms are ugly in themselves, but because the mind perceives at once that there has been cost uselessly thrown away for the sake of formality.*

Well, to return to our continuity. We see that the Turnerian bridge in Fig. 32. is of the absolutely perfect type, and is still farther interesting by having its main arch crowned by a watch-tower. But as I want you to note especially what perhaps was not the case in the real bridge, but is entirely Turner's doing, you will find that though the arches diminish gradually, not one is regularly diminished—they are all of

* The cost of art in getting a bridge level is always lost, for you must get up to the height of the central arch at any rate, and you only can make the whole bridge level by putting the hill farther back, and pretending to have got rid of it when you have not, but have only wasted money in building an unnecessary embankment. Of course, the bridge should not be difficultly or dangerously steep, but the necessary slope, whatever it may be, should be in the bridge itself, as far as the bridge can take it, and not pushed aside into the approach, as in our Waterloo road; the only rational excuse for doing which is that when the slope must be long it is inconvenient to put on a drag at the top of the bridge, and that any restiveness of the horse is more dangerous on the bridge than on the embankment. To this I answer: first, it is not more dangerous in reality, though it looks so, for the bridge is always guarded by an effective parapet, but the embankment is sure to have no parapet, or only a useless rail; and secondly, that it is better to have the slope on the bridge, and make the roadway wide in proportion, so as to be quite safe, because a little waste of space on the river is no loss, but your wide embankment at the side loses good ground; and so my picturesque bridges are right as well as beautiful, and I hope to see them built again some day, instead of the frightful straight-backed things which we fancy are fine, and accept from the pontifical rigidities of the engineer ing mind.
different shapes and sizes: you cannot see this clearly in Fig. 32., but in the larger diagram, Fig. 34., opposite, you will with ease. This is indeed also part of the ideal of a bridge, because the lateral currents near the shore are of course irregular in size, and a simple builder would naturally vary his arches accordingly; and also, if the bottom was rocky, build his piers where the rocks came. But it is not as a part of bridge ideal, but as a necessity of all noble composition, that this irregularity is introduced by Turner. It at once raises the object thus treated from the lower or vulgar unity of rigid law to the greater unity of clouds, and waves, and trees, and human souls, each different, each obedient, and each in harmonious service.

4. THE LAW OF CURVATURE.

There is, however, another point to be noticed in this bridge of Turner's. Not only does it slope away unequally at its sides, but it slopes in a gradual though very subtle curve. And if you substitute a straight line for this curve (drawing one with a rule from the base of the tower on each side to the ends of the bridge, in Fig. 34., and effacing the curve), you will instantly see that the design has suffered grievously. You may ascertain, by experiment, that all beautiful objects whatsoever are thus terminated by delicately curved lines, except where the straight line is indispensable to their use or stability: and that when a complete system of straight lines, throughout the form, is necessary to that stability, as in crystals, the beauty, if any exists, is in colour and transparency, not in form. Cut out the shape of any crystal you like, in white wax or wood, and put it beside a white lily, and you will feel the force of the curvature in its purity, irrespective of added colour, or other interfering elements of beauty.

Well, as curves are more beautiful than straight lines, it is necessary to a good composition that its continuities of object, mass, or colour should be, if possible, in curves, rather than straight lines or angular ones. Perhaps one of the simplest and prettiest examples of a graceful continuity of this kind is in the line traced at any moment by the corks of a net as it
ON COLOUR AND COMPOSITION.

Fig. 34.
is being drawn: nearly every person is more or less attracted by the beauty of the dotted line. Now it is almost always possible, not only to secure such a continuity in the arrangement or boundaries of objects which, like these bridge arches or the corks of the net, are actually connected with each other, but—and this is a still more noble and interesting kind of continuity—among features which appear at first entirely separate. Thus the towers of Ehrenbreitstein, on the left, in Fig. 32., appear at first independent of each other; but when

I give their profile, on a larger scale, Fig. 35., the reader may easily perceive that there is a subtle cadence and harmony among them. The reason of this is, that they are all bounded by one grand curve, traced by the dotted line; out of the seven towers, four precisely touch this curve, the others only falling back from it here and there to keep the eye from dis covering it too easily.

And it is not only always possible to obtain continuities of this kind: it is, in drawing large forest or mountain forms es-
sential to truth. The towers of Ehrenbreitstein might or might not in reality fall into such a curve, but assuredly the basalt rock on which they stand did; for all mountain forms not cloven into absolute precipice, nor covered by straight slopes of shales, are more or less governed by these great curves, it being one of the aims of Nature in all her work to produce them. The reader must already know this, if he has been able to sketch at all among the mountains; if not, let him merely draw for himself, carefully, the outlines of any low hills accessible to him, where they are tolerably steep, or of the woods which grow on them. The steeper shore of the Thames at Maidenhead, or any of the downs at Brighton or Dover, or, even nearer, about Croydon (as Addington Hills), are easily accessible to a Londoner; and he will soon find not only how constant, but how graceful the curvature is. Graceful curvature is distinguished from ungraceful by two characters: first, its moderation, that is to say, its close approach to straightness in some parts of its course;* and, secondly, by its variation, that is to say, its never remaining equal in degree at different parts of its course.

This variation is itself twofold in all good curves.

A. There is, first, a steady change through the whole line from less to more curvature, or more to less, so that no part of the line is a segment of a circle, or can be drawn by compasses in any way whatever. Thus, in Fig. 36., \(a\) is a bad curve, because it is part of a circle, and is therefore monotonous throughout; but \(b\) is a good curve, because it continually changes its direction as it proceeds.

* I cannot waste space here by reprinting what I have said in other books: but the reader ought, if possible, to refer to the notices of this part of our subject in "Modern Painters," vol. iv. chap. xviii., and "Stones of Venice," vol. iii. chap. i. § 8.
The first difference between good and bad drawing of tree boughs consists in observance of this fact. Thus, when I put leaves on the line $b$, as in Fig. 37., you can immediately feel the springiness of character dependent on the changefulness of the curve. You may put leaves on the other line for yourself, but you will find you cannot make a right tree spray of it. For all tree boughs, large or small, as well as all noble natural lines whatsoever, agree in this character; and it is a point of primal necessity that your eye should always seize and your hand trace it. Here are two more portions of good curves, with leaves put on them at the extremities instead of the flanks, Fig. 38.; and two showing the arrangement of masses of foliage seen a little farther off, Fig. 39., which you may in like manner amuse yourself by turning into segments of circles—you will see with what result. I hope, however, you have beside you by this time, many good studies of tree boughs carefully made, in which you may study variations of curvature in their most complicated and lovely forms.*

B. Not only does every good curve vary in general tendency, but it is modulated, as it proceeds, by myriads of subordinate curves. Thus the outlines of a tree trunk are never as at $a$, Fig. 40, but as at $b$. So also in waves, clouds, and all other nobly formed masses. Thus another essential difference between good and bad drawing, or good and bad sculpture, depends on the quantity and refinement

* If you happen to be reading at this part of the book, without having gone through any previous practice, turn back to the sketch of the
of minor curvatures carried, by good work, into the great lines. Strictly speaking, however, this is not variation in large curves, but composition of large curves out of small ones; it is an increase in the quantity of the beautiful element, but not a change in its nature.

5. THE LAW OF RADIATION.

We have hitherto been concerned only with the binding of our various objects into beautiful lines or processions. The next point we have to consider is, how we may unite these lines or processions themselves, so as to make groups of them.

Now, there are two kinds of harmonies of lines. One in which, moving more or less side by side, they variously, but evidently with consent, retire from or approach each other, intersect or oppose each other: currents of melody in music, for different voices, thus approach and cross, fall and rise, in harmony; so the waves of the sea, as they approach the shore, flow into one another or cross, but with a great unity through all; and so various lines of composition often flow harmoniously through and across each other in a picture. But the most simple and perfect connexion of lines is by radiation; that is, by their all springing from one point, or closing towards it: and this harmony is often, in Nature almost always, united with the other; as the boughs of trees, though they intersect and play amongst each other irregularly, indicate by their general tendency their origin from one root. An essential part of the beauty of all vegetable form is in this radiation: it is seen most simply in a single flower or leaf, as in a convolvulus ramification of stone pine, Fig. 4. page 30., and examine the curves of its boughs one by one, trying them by the conditions here stated under the heads A. and B.
bell, or chestnut leaf; but more beautifully in the complicated arrangements of the large boughs and sprays. For a leaf is only a flat piece of radiation; but the tree throws its branches on all sides, and even in every profile view of it, which presents a radiation more or less correspondent to that of its leaves, it is more beautiful, because varied by the freedom of the separate branches. I believe it has been ascertained that, in all trees, the angle at which, in their leaves, the lateral ribs are set on their central rib is approximately the same at which the branches leave the great stem; and thus each section of the tree would present a kind of magnified view of its own leaf, were it not for the interfering force of gravity on the masses of foliage. This force in proportion to their age, and the lateral leverage upon them, bears them downwards at the extremities, so that, as before noticed, the lower the bough grows on the stem, the more it droops (Fig. 17, p. 295.); besides this, nearly all beautiful trees have a tendency to divide into two or more principal masses, which give a prettier and more complicated symmetry than if one stem ran all the way up the centre. Fig. 41. may thus be considered the simplest type of tree radiation, as opposed to leaf radiation. In this figure, however, all secondary ramification is unrepresented, for the sake of simplicity; but if we take one half of such a tree, and merely give two secondary branches to each main branch (as represented in the general branch structure shown at b, Fig. 18., p. 296), we shall have the form, Fig. 42. This I consider the perfect general type of tree structure; and it is curiously connected with certain forms of Greek, Byzantine, and Gothic ornamentation, into the discussion of which, however, we must not enter here. It will be observed, that both in Figs. 41. and 42. all the branches so spring from the main stem as very nearly to suggest their united radiation from the root. This is by no means universally
the case; but if the branches do not bend towards a point in
the root, they at least converge to some point or other. In
the examples in Fig. 43., the mathematical centre of curvature,
a, is thus, in one case, on the
ground at some distance from
the root, and in the other, near
the top of the tree. Half, only,
of each tree is given, for the
sake of clearness: Fig. 44

gives both sides of another ex-
ample, in which the origins of
curvature are below the root.
As the positions of such points
may be varied without end, and as the arrangement of the lines
is also farther complicated by the fact of the boughs springing
for the most part in a spiral order round the tree,
and at proportionate distances, the systems of curva-
ture which regulate the form of vegetation are quite
infinite. Infinite is a word easily said, and easily
written, and people do not always mean it when they
say it; in this case I do mean it; the number of
systems is incalculable, and even to furnish any
thing like a representative number of types, I should
have to give several hundreds of figures such as
Fig. 44.*

Thus far, however, we have only been speaking
of the great relations of stem and branches. The
forms of the branches themselves are regulated by
still more subtle laws, for they occupy an interme-
diate position between the form of the tree and of
the leaf. The leaf has a flat ramification; the tree
a completely rounded one; the bough is neither rounded nor
flat, but has a structure exactly balanced between the two, in
a half-flattened, half-rounded flake, closely resembling in shape
one of the thick leaves of an artichoke or the flake of a fir cone;
by combination forming the solid mass of the tree, as the

*The reader, I hope, observes always that every line in these figures
is itself one of varying curvature, and cannot be drawn by compasses.
leaves compose the artichoke head. I have before pointed out to you the general resemblance of these branch flakes to an extended hand; but they may be more accurately represented by the ribs of a boat. If you can imagine a very broad-headed and flattened boat applied by its keel to the end of a main branch,* as in Fig. 45., the lines which its ribs will take, and the general contour of it, as seen in different directions, from above and below; and from one side and another, will give you the closest approximation to the perspectives and foreshortenings of a well-grown branch-flake. Fig. 25. above, page 316., is an unharmed and unrestrained shoot of healthy young oak; and if you compare it with Fig. 45., you will understand at once the action of the lines of leafage; the boat only failing as a type in that its ribs are too nearly parallel to each other at the sides, while the bough sends all its ramification well forwards, rounding to the head, that it may accomplish its part in the outer form of the whole tree, yet always securing the compliance with the great universal law that the branches nearest the root bend most back; and, of course, throwing some always back as well as forwards; the appearance of reversed action being much increased, and rendered more striking and beautiful, by perspective. Figure 25. shows the perspective of such a bough as it is seen from below; Fig. 46. gives rudely the look it would have from above.

You may suppose, if you have not already discovered, what

* I hope the reader understands that these woodcuts are merely facsimiles of the sketches I make at the side of my paper to illustrate my meaning as I write—often sadly scrawled if I want to get on to something else. This one is really a little too careless; but it would take more time and trouble to make a proper drawing of so odd a boat than the matter is worth. It will answer the purpose well enough as it is.
ON COLOUR AND COMPOSITION.

subtleties of perspective and light and shade are involved in the drawing of these branch flakes, as you see them in different directions and actions; now raised, now depressed; touched on the edges by the wind, or lifted up and bent back so as to show all the white under surfaces of the leaves shivering in light, as the bottom of a boat rises white with spray at the surge-crest; or drooping in quietness towards the dew of the grass beneath them in windless mornings, or bowed down under oppressive grace of deep charged snow. Snow time, by the way, is one of the best for practice in the placing of tree masses; but you will only be able to understand them thoroughly by beginning with a single bough and a few leaves placed tolerably even, as in Fig. 38, page 372. First one with three leaves, a central and two lateral ones, as at a; then with five, as at b, and so on; directing your whole attention to the expression, both by contour and light and shade, of the boat-like arrangements, which in your earlier studies, will have been a good deal confused, partly owing to your inexperience, and partly to the depth of shade, or absolute blackness of mass required in those studies.

One thing more remains to be noted, and I will let you out of the wood. You see that in every generally representative figure I have surrounded the radiating branches with a dotted line: such lines do indeed terminate every vegetable form; and you see that they are themselves beautiful curves, which, according to their flow, and the width or narrowness of the spaces they enclose, characterize the species of tree or leaf, and express its free or formal action, its grace of youth or weight of age. So that, throughout all the freedom of her wildest foliage, Nature is resolved on expressing an encompassing limit; and marking a unity in the whole tree, caused not only by the rising of its branches from a common root, but by their joining in one work, and being bound by a common law. And having ascertained this, let us turn back for a moment to a point in leaf structure which, I doubt not, you must already have observed in your earlier studies, but which it is well to state here, as connected with the unity of the branches in the great trees. You must have noticed, I should
think, that whenever a leaf is compound,—that is to say, divided into other leaflets which in any way repeat or imitate the form of the whole leaf,—those leaflets are not symmetrical, as the whole leaf is, but always smaller on the side towards the point of the great leaf, so as to express their subordination to it, and show, even when they are pulled off, that they are not small independent leaves, but members of one large leaf.

Fig. 47., which is a block-plan of a leaf of columbine, without its minor divisions on the edges, will illustrate the principle clearly. It is composed of a central large mass, A, and two lateral ones, of which the one on the right only is lettered, B. Each of these masses is again composed of three others, a central and two lateral ones; but observe, the minor one, a of A, is balanced equally by its opposite; but the minor b 1 of B is larger than its opposite b 2. Again, each of these minor masses is divided into three; but while the central mass, a of A, is symmetrically divided, the b of B is unsymmetrical, its largest side-lobe being lowest. Again b 2, the lobe c 1 (its lowest lobe in relation to b) is larger than c 2; and so also in b 1. So that universally one lobe of a lateral leaf is always larger than the other, and the smaller lobe is that which is nearer the central mass; the lower leaf, as it
were by courtesy, subduing some of its own dignity or power, in the immediate presence of the greater or captain leaf; and always expressing, therefore, its own subordination and secondary character. This law is carried out even in single leaves. As far as I know, the upper half, towards the point of the spray, is always the smaller; and a slightly different curve, more convex at the springing, is used for the lower side, giving an exquisite variety to the form of the whole leaf; so that one of the chief elements in the beauty of every subordinate leaf throughout the tree, is made to depend on its confession of its own lowliness and subjection.

And now, if we bring together in one view the principles we have ascertained in trees, we shall find they may be summed under four great laws; and that all perfect* vegetable form is appointed to express these four laws in noble balance of authority.

1. Support from one living root.

2. Radiation, or tendency of force from some one given point, either in the root, or in some stated connexion with it.

3. Liberty of each bough to seek its own livelihood and happiness according to its needs, by irregularities of action both in its play and its work, either stretching out to get its required nourishment from light and rain, by finding some sufficient breathing-place among the other branches, or knotting and gathering itself up to get strength for any load which its fruitful blossoms may lay upon it, and for any stress of its storm-tossed luxuriance of leaves; or playing hither and thither as the fitful sunshine may tempt its young shoots, in their undecided states of mind about their future life.

4. Imperative requirement of each bough to stop within certain limits, expressive of its kindly fellowship and frater-

* Imperfect vegetable form I consider that which is in its nature dependent, as in runners and climbers; or which is susceptible of continua injury without materially losing the power of giving pleasure by its aspect, as in the case of the smaller grasses. I have not, of course, space here to explain these minor distinctions, but the laws above stated apply to all the more important trees and shrubs likely to be familiar to the student.
nity with the boughs in its neighborhood; and to work with them according to its power, magnitude, and state of health, to bring out the general perfectness of the great curve, and circumferent stateliness of the whole tree.

I think I may leave you, unhelped, to work out the moral analogies of these laws; you may, perhaps, however, be a little puzzled to see the meeting of the second one. It typically expresses that healthy human actions should spring radiantly (like rays) from some single heart motive; the most beautiful systems of action taking place when this motive lies at the root of the whole life, and the action is clearly seen to proceed from it; while also many beautiful secondary systems of action taking place from motives not so deep or central, but in some beautiful subordinate connexion with the central or life motive.

The other laws, if you think over them, you will find equally significative; and as you draw trees more and more in their various states of health and hardship, you will be every day more struck by the beauty of the types they present of the truths most essential for mankind to know;* and you will see what this vegetation of the earth, which is necessary to our life, first, as purifying the air for us and then as food, and just as necessary to our joy in all places of the earth,—what these trees and leaves, I say, are meant to teach us as we contemplate them, and read or hear their lovely language, written or spoken for us, not in frightful black letters, nor in dull sen-

* There is a very tender lesson of this kind in the shadows of leaves upon the ground; shadows which are the most likely of all to attract attention, by their pretty play and change. If you examine them, you will find that the shadows do not take the forms of the leaves, but that, through each interstice, the light falls, at a little distance, in the form of a round or oval spot; that is to say, it produces the image of the sun itself, cast either vertically or obliquely, in circle or ellipse according to the slope of the ground. Of course the sun's rays produce the same effect, when they fall through any small aperture: but the openings between leaves are the only ones likely to show it to an ordinary observer, or to attract his attention to it by its frequency, and lead him to think what this type may signify respecting the greater Sun; and how it may show us that, even when the opening through which the earth receives light is too small to let us see the Sun himself, the ray of light that enters, if it comes straight from Him, will still bear with it His image.
ON COLOUR AND COMPOSITION.

381

tences, but in fair green and shadowy shapes of waving words, and blossomed brightness of odoriferous wit, and sweet whispers of unintrusive wisdom, and playful morality.

Well, I am sorry myself to leave the wood, whatever my reader may be; but leave it we must, or we shall compose no more pictures to-day.

This law of radiation, then, enforcing unison of action in arising from, or proceeding to, some given point, is perhaps, of all principles of composition, the most influential in producing the beauty of groups of form. Other laws make them forcible or interesting, but this generally is chief in rendering them beautiful. In the arrangement of masses in pictures, it is constantly obeyed by the great composers; but, like the law of principality, with careful concealment of its imperative-ness, the point to which the lines of main curvature are directed being very often far away out of the picture. Sometimes, however, a system of curves will be employed definitely to exalt, by their concurrence, the value of some leading object, and then the law becomes traceable enough.

In the instance before us, the principal object being, as we have seen, the tower on the bridge, Turner has determined that his system of curvature should have its origin in the top of this tower. The diagram Fig. 34. page 369, compared with Fig. 32. page 361, will show how this is done. One curve joins the two towers, and is continued by the back of the figure sitting on the bank into the piece of bent timber. This is a limiting curve of great importance, and Turner has drawn a considerable part of it with the edge of the timber very carefully, and then led the eye up to the sitting girl by some white spots and indications of a ledge in the bank; then the passage to the tops of the towers cannot be missed.

The next curve is begun and drawn carefully for half an inch of its course by the rudder; it is then taken up by the basket and the heads of the figures, and leads accurately to the tower angle. The gunwales of both the boats begin the next two curves, which meet in the same point; and all are centralised by the long reflection which continues the vertical lines.

Subordinated to this first system of curves there is another,
begun by the small crossing bar of wood inserted in the angle behind the rudder; continued by the bottom of the bank on which the figure sits, interrupted forcibly beyond it,* but taken up again by the water-line leading to the bridge foot, and passing on in delicate shadows under the arches, not easily shown in so rude a diagram, towards the other extremity of the bridge. This is a most important curve, indicating that the force and sweep of the river have indeed been in old times under the large arches; while the antiquity of the bridge is told us by the long tongue of land, either of carted rubbish, or washed down by some minor stream, which has interrupted this curve, and is now used as a landing-place for the boats, and for embarkation of merchandise, of which some bales and bundles are laid in a heap, immediately beneath the great tower. A common composer would have put these bales to one side or the other, but Turner knows better; he uses them as a foundation for his tower, adding to its importance precisely as the sculptured base adorns a pillar; and he farther increases the aspect of its height by throwing the reflection of it far down in the nearer water. All the great composers have this same feeling about sustaining their vertical masses: you will constantly find Prout using the artifice most dexterously (see, for instance, the figure with the wheelbarrow under the great tower, in the sketch of St. Nicolas, at Prague, and the white group of figures under the tower in the sketch of Augsburg†); and Veronese, Titian, and Tintoret continually put their principal figures at bases of pillars. Turner found out their secret very early, the most prominent instance of his composition on this principle being the drawing of Turin from the Superga, in Hakewell's Italy.

* In the smaller figure (32.), it will be seen that this interruption is caused by a cart coming down to the water's edge; and this object is serviceable as beginning another system of curves leading out of the picture on the right, but so obscurely drawn as not to be easily represented in outline. As it is unnecessary to the explanation of our point here, it has been omitted in the larger diagram, the direction of the curve it begins being indicated by the dashes only.

† Both in the Sketches in Flanders and Germany.
I chose Fig. 20., already given to illustrate foliage drawing, chiefly because, being another instance of precisely the same arrangement, it will serve to convince you of its being intentional. There, the vertical, formed by the larger tree, is continued by the figure of the farmer, and that of one of the smaller trees by his stick. The lines of the interior mass of the bushes radiate, under the law of radiation, from a point behind the farmer’s head; but their outline curves are carried on and repeated, under the law of continuity, by the curves of the dog and boy—by the way, note the remarkable instance in these of the use of darkest lines towards the light;—all more or less guiding the eye up to the right, in order to bring it finally to the Keep of Windsor, which is the central object of the picture, as the bridge tower is in the Coblenz. The wall on which the boy climbs answers the purpose of contrasting, both in direction and character, with these greater curves; thus corresponding as nearly as possible to the minor tongue of land in the Coblenz. This, however, introduces us to another law, which we must consider separately.

6. THE LAW OF CONTRAST.

Of course the character of everything is best manifested by Contrast. Rest can only be enjoyed after labour; sound, to be heard clearly, must rise out of silence; light is exhibited by darkness, darkness by light; and so on in all things. Now in art every colour has an opponent colour, which, if brought near it, will relieve it more completely than any other; so, also, every form and line may be made more striking to the eye by an opponent form or line near them; a curved line is set off by a straight one, a massy form by a slight one, and so on; and in all good work nearly double the value, which any given colour or form would have uncombined, is given to each by contrast.*

* If you happen to meet with the plate of Durer’s representing a coat of arms with a skull in the shield, note the value given to the concave curves and sharp point of the helmet by the convex leafage carried round it in front; and the use of the blank white part of the shield in opposing the rich folds of the dress.
In this case again, however, a too manifest use of the artifice vulgarises a picture. Great painters do not commonly, or very visibly, admit violent contrast. They introduce it by stealth and with intermediate links of tender change; allowing, indeed, the opposition to tell upon the mind as a surprise, but not as a shock.*

Thus in the rock of Ehrenbreitstein, Fig. 35., the main current of the lines being downwards, in a convex swell, they are suddenly stopped at the lowest tower by a counter series of beds, directed nearly straight across them. This adverse force sets off and relieves the great curvature, but it is reconciled to it by a series of radiating lines below, which at first sympathize with the oblique bar, then gradually get steeper, till they meet and join in the fall of the great curve. No passage, however intentionally monotonous, is ever introduced by a good artist without some slight counter current of this kind; so much, indeed, do the great composers feel the necessity of it, that they will even do things purposely ill or unsatisfactorily, in order to give greater value to their well-doing in other places. In a skilful poet's versification the so-called bad or inferior lines are not inferior because he could not do them better, but because he feels that if all were equally weighty, there would be no real sense of weight anywhere; if all were equally melodious, the melody itself would be fatiguing; and he purposely introduces the labouring or discordant verse, that the full ring may be felt in his main sentence, and the finished sweetness in his chosen rhythm.† And continually in painting, inferior artists destroy their work by giving too much

* Turner hardly ever, as far as I remember, allows a strong light to oppose a full dark, without some intervening tint. His suns never set behind dark mountains without a film of cloud above the mountain's edge.

† "A prudent chief not always must display
   His powers in equal ranks and fair array,
   But with the occasion and the place comply,
   Conceal his force; nay, seem sometimes to fly.
   Those oft are stratagems which errors seem,
   Nor is it Homer nods, but we that dream."

_Essay on Criticism._
of all that they think is good, while the great painter gives just enough to be enjoyed, and passes to an opposite kind of enjoyment, or to an inferior state of enjoyment: he gives a passage of rich, involved, exquisitely wrought colour, then passes away into slight, and pale and simple colour; he paints for a minute or two with intense decision, then suddenly becomes, as the spectator thinks, slovenly; but he is not slovenly: you could not have taken any more decision from him just then; you have had as much as is good for you; he paints over a great space of his picture forms of the most rounded and melting tenderness, and suddenly, as you think by a freak,

![Fig. 48.](image)

gives you a bit as jagged and sharp as a leafless blackthorn. Perhaps the most exquisite piece of subtle contrast in the world of painting is the arrow point, laid sharp against the white side and among the flowing hair of Correggio's Antiope. It is quite singular how very little contrast will sometimes serve to make an entire group of forms interesting which would otherwise have been valueless. There is a good deal of picturesque material, for instance, in this top of an old tower, Fig. 48., tiles and stones and sloping roof not disagreeably mingled; but all would have been unsatisfactory if there had not happened to be that iron ring on the inner wall, which by its
vigorou black circular line precisely opposes all the square and angular characters of the battlements and roof. Draw the tower without the ring, and see what a difference it will make.

One of the most important applications of the law of contrast is in association with the law of continuity, causing an unexpected but gentle break in a continuous series. This artifice is perpetual in music, and perpetual also in good illumination; the way in which little surprises of change are prepared in any current borders, or chains of ornamental design, being one of the most subtle characteristics of the work of the good periods. We take, for instance, a bar of ornament between two written columns of an early 14th century MS., and at the first glance we suppose it to be quite monotonous all the way up, composed of a winding tendril, with alternately a blue leaf and a scarlet bud. Presently, however, we see that, in order to observe the law of principality there is one large scarlet leaf instead of a bud, nearly half-way up, which forms a centre to the whole rod; and when we begin to examine the order of the leaves, we find it varied carefully. Let a stand for scarlet bud, b for blue leaf, c for two blue leaves on one stalk, s for a stalk without a leaf, and r for the large red leaf. Then counting from the ground, the order begins as follows:

b, b, a; b, s, b, a; b, b, a; b, b, a; and we think we shall have two b's and an a all the way, when suddenly it becomes b, a; b, r; b, a; b, a; b, a; and we think we are going to have b, a continued; but no: here it becomes b, s; b, s; b, a; b, s; b, s; c, s; b, s; b, s; and we think we are surely going to have b, s continued, but behold it runs away to the end with a quick b, b, a; b, b, b, b! * Very often, however, the designer is satisfied with one surprise, but I never saw a good illuminated border without one at least; and no series of any kind is ever introduced by a great composer in a painting without a snap somewhere. There is a pretty one in Turner's drawing of Rome, with the large balustrade for a foreground in the Hakewell's

* I am describing from a MS., circa 1300, of Gregory's "Decretalia" in my own possession.
Italy series: the single baluster struck out of the line, and showing the street below through the gap, simply makes the whole composition right, when otherwise, it would have been stiff and absurd.

If you look back to Fig. 48, you will see, in the arrangement of the battlements, a simple instance of the use of such variation. The whole top of the tower, though actually three sides of a square, strikes the eye as a continuous series of five masses. The first two, on the left, somewhat square and blank; then the next two higher and richer, the tiles being seen on their slopes. Both these groups being couples, there is enough monotony in the series to make a change pleasant; and the last battlement, therefore, is a little higher than the first two,—a little lower than the second two,—and different in shape from either. Hide it with your finger, and see how ugly and formal the other four battlements look.

There are in this figure several other simple illustrations of the laws we have been tracing. Thus the whole shape of the wall's mass being square, it is well, still for the sake of contrast, to oppose it not only by the element of curvature, in the ring, and lines of the roof below, but by that of sharpness; hence the pleasure which the eye takes in the projecting point of the roof. Also because the walls are thick and sturdy, it is well to contrast their strength with weakness; therefore we enjoy the evident decrepitude of this roof as it sinks between them. The whole mass being nearly white, we want a contrasting shadow somewhere; and get it, under our piece of decrepitude. This shade, with the tiles of the wall below, forms another pointed mass, necessary to the first by the law of repetition. Hide this inferior angle with your finger, and see how ugly the other looks. A sense of the law of symmetry, though you might hardly suppose it, has some share in the feeling with which you look at the battlements; there is a certain pleasure in the opposed slopes of their top, on one side down to the left, on the other to the right. Still less would you think the law of radiation had anything to do with the matter: but if you take the extreme point of the black shadow on the left for a centre and follow first the low curve
of the eaves of the wall, it will lead you, if you continue it, to the point of the tower cornice; follow the second curve, the top of the tiles of the wall, and it will strike the top of the right-hand battlement; then draw a curve from the highest point of the angle battlement on the left, through the points of the roof and its dark echo; and you will see how the whole top of the tower radiates from this lowest dark point. There are other curvatures crossing these main ones, to keep them from being too conspicuous. Follow the curve of the upper roof, it will take you to the top of the highest battlement; and the stones indicated at the right-hand side of the tower are more extended at the bottom, in order to get some less direct expression of sympathy, such as irregular stones may be capable of, with the general flow of the curves from left to right.

You may not readily believe, at first, that all these laws are indeed involved in so trifling a piece of composition. But as you study longer, you will discover that these laws, and many more, are obeyed by the powerful composers in every touch: that literally, there is never a dash of their pencil which is not carrying out appointed purposes of this kind in twenty various ways at once; and that there is as much difference, in way of intention and authority, between one of the great composers ruling his colours, and a common painter confused by them, as there is between a general directing the march of an army, and an old lady carried off her feet by a mob.

7. THE LAW OF INTERCHANGE.

Closely connected with the law of contrast is a law which enforces the unity of opposite things, by giving to each a portion of the character of the other. If, for instance, you divide a shield into two masses of colour, all the way down—suppose blue and white, and put a bar, or figure of an animal, partly on one division, partly on the other, you will find it pleasant to the eye if you make the part of the animal blue which comes upon the white half, and white which comes upon the blue half. This is done in heraldry, partly for the sake of perfect intelligibility, but yet more for the sake of delight in interchange of colour, since, in all ornamentation
whatever, the practice is continual, in the ages of good de-

sign.

Sometimes this alternation is merely a reversal of contrasts ;
as that, after red has been for some time on one side, and
blue on the other, red shall pass to blue's side and blue to
red's. This kind of alternation takes place simply in four-
quartered shields; in more subtle pieces of treatment, a little
bit only of each colour is carried into the other, and they are
as it were dovetailed together. One of the most curious facts
which will impress itself upon you, when you have drawn some
time carefully from Nature in light and shade, is the appear-
ance of intentional artifice with which contrasts of this alter-
nate kind are produced by her; the artistry with which she
will darken a tree trunk as long as it comes against light sky,
and throw sunlight on it precisely at the spot where it comes
against a dark hill, and similarly treat all her masses of shade
and colour, is so great, that if you only follow her closely,
every one who looks at your drawing with attention will
think that you have been inventing the most artificially and
unnaturally delightful interchanges of shadow that could pos-
sibly be devised by human wit.

You will find this law of interchange insisted upon at length
by Prout in his "Lessons on Light and Shade:" it seems, of
all his principles of composition, to be the one he is most con-
oscient of; many others he obeys by instinct, but this he for-
mally accepts and forcibly declares.

The typical purpose of the law of interchange is, of course,
to teach us how opposite natures may be helped and strength-
ened by receiving each, as far as they can, some impress or
 imparted power, from the other.

8. THE LAW OF CONSISTENCY.

It is to be remembered, in the next place, that while con-
trast exhibits the characters of things, it very often neutralises
or paralyses their power. A number of white things may be
shown to be clearly white by opposition of a black thing, but
if you want the full power of their gathered light, the black
thing may be seriously in our way. Thus, while contrast
displays things, it is unity and sympathy which employ them, concentrating the power of several into a mass. And, not in art merely, but in all the affairs of life, the wisdom of man is continually called upon to reconcile these opposite methods of exhibiting, or using, the materials in his power. By change he gives them pleasantness, and by consistency value; by change he is refreshed, and by perseverance strengthened.

Hence many compositions address themselves to the spectator by aggregate force of colour or line, more than by contrasts of either; many noble pictures are painted almost exclusively in various tones of red, or grey, or gold, so as to be instantly striking by their breadth of flush, or glow, or tender coldness, these qualities being exhibited only by slight and subtle use of contrast. Similarly as to form; some compositions associate massive and rugged forms, others slight and graceful ones, each with few interruptions by lines of contrary character. And, in general, such compositions possess higher sublimity than those which are more mingled in their elements. They tell a special tale, and summon a definite state of feeling, while the grand compositions merely please the eye.

This unity or breadth of character generally attaches most to the works of the greatest men; their separate pictures have all separate aims. We have not, in each, grey colour set against sombre, and sharp forms against soft, and loud passages against low; but we have the bright picture, with its delicate sadness; the sombre picture, with its single ray of relief; the stern picture, with only one tender group of lines; the soft and calm picture, with only one rock angle at its flank; and so on. Hence the variety of their work, as well as its impressiveness. The principal bearing of this law, however, is on the separate masses or divisions of a picture: the character of the whole composition may be broken or various, if we please, but there must certainly be a tendency to consistent assemblage in its divisions. As an army may act on several points at once, but can only act effectually by having somewhere formed and regular masses, and not wholly by skirmishers; so a picture may be various in its tendencies, but
must be somewhere united and coherent in its masses. Good composers are always associating their colours in great groups; binding their forms together by encompassing lines, and securing, by various dexterities of expedit, what they themselves call "breadth:" that is to say, a large gathering of each kind of thing into one place; light being gathered to light, darkness to darkness, and colour to colour. If, however, this be done by introducing false lights or false colours, it is absurd and monstrous; the skill of a painter consists in obtaining breadth by rational arrangement of his objects, not by forced or wanton treatment of them. It is an easy matter to paint one thing all white, and another all black or brown; but not an easy matter to assemble all the circumstances which will naturally produce white in one place, and brown in another. Generally speaking, however, breadth will result in sufficient degree from fidelity of study: Nature is always broad; and if you paint her colours in true relations, you will paint them in majestic masses. If you find your work look broken and scattered, it is, in all probability, not only ill composed, but untrue.

The opposite quality to breadth, that of division or scattering of light and colour, has a certain contrasting charm, and is occasionally introduced with exquisite effect by good composers.* Still, it is never the mere scattering, but the order discernible through this scattering, which is the real source of pleasure; not the mere multitude, but the constellation of multitude. The broken lights in the work of a good painter wander like flocks upon the hills, not unshep-herded; speaking of life and peace: the broken lights of a bad painter fall like hailstones, and are capable only of mischief, leaving it to be wished they were also of dissolution.

*One of the most wonderful compositions of Tintoret in Venice, is little more than a field of subdued crimson, spotted with flakes of scattered gold. The upper clouds in the most beautiful skies owe great part of their power to infinitude of division; order being marked through this division.
9. THE LAW OF HARMONY.

This last law is not, strictly speaking, so much one of composition as of truth, but it must guide composition, and is properly, therefore, to be stated in this place.

Good drawing is, as we have seen, an abstract of natural facts; you cannot represent all that you would, but must continually be falling short, whether you will or no, of the force, or quantity, of Nature. Now, suppose that your means and time do not admit of your giving the depth of colour in the scene, and that you are obliged to paint it paler. If you paint all the colours proportionately paler, as if an equal quantity of tint had been washed away from each of them, you still obtain a harmonious, though not an equally forcible statement of natural fact. But if you take away the colours unequally, and leave some tints nearly as deep as they are in Nature, while others are much subdued, you have no longer a true statement. You cannot say to the observer, "Fancy all those colours a little deeper, and you will have the actual fact." However he adds in imagination, or takes away, something is sure to be still wrong. The picture is out of harmony.

It will happen, however, much more frequently, that you have to darken the whole system of colours, than to make them paler. You remember, in your first studies of colour from Nature, you were to leave the passages of light which were too bright to be imitated, as white paper. But, in completing the picture, it becomes necessary to put colour into them; and then the other colours must be made darker, in some fixed relation to them. If you deepen all proportionately, though the whole scene is darker than reality, it is only as if you were looking at the reality in a lower light: but if, while you darken some of the tints, you leave others undarkened, the picture is out of harmony, and will not give the impression of truth.

It is not, indeed, possible to deepen all the colours so much as to relieve the lights in their natural degree; you would merely sink most of your colours, if you tried to do so, into a
ON COLOUR AND COMPOSITION.

broad mass of blackness: but it is quite possible to lower them harmoniously, and yet more in some parts of the picture than in others, so as to allow you to show the light you want in a visible relief. In well-harmonised pictures this is done by gradually deepening the tone of the picture towards the lighter parts of it, without materially lowering it in the very dark parts; the tendency in such pictures being, of course, to include large masses of middle tints. But the principal point to be observed in doing this, is to deepen the individual tints without dirtying or obscuring them. It is easy to lower the tone of the picture by washing it over with grey or brown; and easy to see the effect of the landscape, when its colours are thus universally polluted with black, by using the black convex mirror, one of the most pestilent inventions for falsifying nature and degrading art which ever was put into an artist's hand.* For the thing required is not to darken pale yellow by mixing grey with it, but to deepen the pure yellow; not to darken crimson by mixing black with it, but by making it deeper and richer crimson: and thus the required effect could only be seen in Nature, if you had pieces of glass of the colour of every object in your landscape, and of every minor hue that made up those colours, and then could see the real landscape through this deep gorgeousness of the varied glass. You cannot do this with glass, but you can do it for yourself as you work; that is to say, you can put deep blue for pale blue, deep gold for pale gold, and so on, in the proportion you need; and then you may paint as forcibly as you choose, but your work will still be in the manner of Titian, not of Caravaggio or Spagnoletto, or any other of the black slaves of painting.†

* I fully believe that the strange grey gloom, accompanied by considerable power of effect, which prevails in modern French art must be owing to the use of this mischievous instrument; the French landscape always gives me the idea of Nature seen carelessly in the dark mirror, and painted coarsely, but scientifically, through the veil of its perversion.

† Various other parts of this subject are entered into, especially in their bearing on the ideal of painting, in "Modern Painters," vol. iv. chap. iii.
Supposing those scales of colour, which I told you to prepare in order to show you the relations of colour to grey, were quite accurately made, and numerous enough, you would have nothing more to do, in order to obtain a deeper tone in any given mass of colour, than to substitute for each of its hues the hue as many degrees deeper in the scale as you wanted, that is to say, if you want to deepen the whole two degrees, substituting for the yellow No. 5. the yellow No. 7., and for the red No. 9. the red No. 11., and so on; but the hues of any object in Nature are far too numerous, and their degrees too subtle, to admit of so mechanical a process. Still, you may see the principle of the whole matter clearly by taking a group of colours out of your scale, arranging them prettily, and then washing them all over with grey: that represents the treatment of Nature by the black mirror. Then arrange the same group of colours, with the tints five or six degrees deeper in the scale; and that will represent the treatment of Nature by Titian.

You can only, however, feel your way fully to the right of the thing by working from Nature.

The best subject on which to begin a piece of study of this kind is a good thick tree trunk, seen against blue sky with some white clouds in it. Paint the clouds in true and tenderly gradated white; then give the sky a bold full blue, bringing them well out; then paint the trunk and leaves grandly dark against all, but in such glowing dark green and brown as you see they will bear. Afterwards proceed to more complicated studies, matching the colours carefully first by your old method; then deepening each colour with its own tint, and being careful, above all things, to keep truth of equal change when the colours are connected with each other, as in dark and light sides of the same object. Much more aspect and sense of harmony are gained by the precision with which you observe the relation of colours in dark sides and light sides, and the influence of modifying reflections, than by mere accuracy of added depth in independent colours.

This harmony of tone, as it is generally called, is the most important of those which the artist has to regard. But there
are all kinds of harmonies in a picture, according to its mode of production. There is even a harmony of touch. If you paint one part of it very rapidly and forcibly, and another part slowly and delicately, each division of the picture may be right separately, but they will not agree together: the whole will be effectless and valueless, out of harmony. Similarly, if you paint one part of it by a yellow light in a warm day, and another by a grey light in a cold day, though both may have been sunlight, and both may be well toned, and have their relative shadows truly cast, neither will look like light: they will destroy each other's power, by being out of harmony. These are only broad and definable instances of discordance; but there is an extent of harmony in all good work much too subtle for definition; depending on the draughtsman's carrying everything he draws up to just the balancing and harmonious point, in finish, and colour, and depth of tone, and intensity of moral feeling, and style of touch, all considered at once; and never allowing himself to lean too emphatically on detached parts, or exalt one thing at the expense of another; or feel acutely in one place and coldly in another. If you have got some of Cruikshank's etchings, you will be able, I think, to feel the nature of harmonious treatment in a simple kind, by comparing them with any of Richter's illustrations to the numerous German story-books lately published at Christmas, with all the German stories spoiled. Cruikshank's work is often incomplete in character and poor in incident, but, as drawing, it is perfect in harmony. The pure and simple effects of daylight which he gets by his thorough mastery of treatment in this respect, are quite unrivalled, as far as I know, by any other work executed with so few touches. His vignettes to Grimm's German stories, already recommended, are the most remarkable in this quality. Richter's illustrations, on the contrary, are of a very high stamp as respects understanding of human character, with infinite playfulness and tenderness of fancy; but, as drawings, they are almost unendurably out of harmony, violent blacks in one place being continually opposed to trenchant white in another; and, as is almost sure to be the case with bad harmonists, the local colour hardly felt anywhere. All German
work is apt to be out of harmony, in consequence of its too frequent conditions of affectation, and its wilful refusals of fact; as well as by reason of a feverish kind of excitement, which dwells violently on particular points, and makes all the lines of thought in the picture to stand on end, as it were, like a cat’s fur electrified; while good work is always as quiet as a couchant leopard, and as strong.

I have now stated to you all the laws of composition which occur to me as capable of being illustrated or defined; but there are multitudes of others which, in the present state of my knowledge, I cannot define, and others which I never hope to define; and these the most important, and connected with the deepest powers of the art. Among those which I hope to be able to explain when I have thought of them more, are the laws which relate to nobleness and ignobleness; that ignobleness especially which we commonly call “vulgarity,” and which, in its essence, is one of the most curious subjects of inquiry connected with human feeling. Among those which I never hope to explain, are chiefly laws of expression, and others bearing simply on simple matters; but, for that very reason, more influential than any others. These are, from the first, as inexplicable as our bodily sensations are; it being just as impossible, I think, to explain why one succession of musical notes* shall be noble and pathetic, and such as might have been sung by Casella to Dante, and why another succession is base and ridiculous, and would be fit only for the reasonably good ear of Bottom, as to explain why we like sweetness, and dislike bitterness. The best part of every great work is always inexplicable: it is good because it is good; and innocently gracious, opening as the green of the earth, or falling as the dew of heaven.

But though you cannot explain them, you may always render

*In all the best arrangements of colour, the delight occasioned by their mode of succession is entirely inexplicable, nor can it be reasoned about; we like it just as we like an air in music,—but cannot reason any refractory person into liking it, if they do not: and yet there is distinctly a right and a wrong in it, and a good taste and bad taste respecting it, as also in music.
ON COLOUR AND COMPOSITION.

yourself more and more sensitive to these higher qualities by the discipline which you generally give to your character, and this especially with regard to the choice of incidents; a kind of composition in some sort easier than the artistical arrangements of lines and colours, but in every sort nobler, because addressed to deeper feelings.

For instance, in the “Datur Hora Quieti,” the last vignette to Roger's Poems, the plough in the foreground has three purposes. The first purpose is to meet the stream of sunlight on the river, and make it brighter by opposition; but any dark object whatever would have done this. Its second purpose is by its two arms, to repeat the cadence of the group of the two ships, and thus give a greater expression of repose; but two sitting figures would have done this. Its third and chief, or pathetic, purpose is, as it lies abandoned in the furrow (the vessels also being moored, and having their sails down), to be a type of human labour closed with the close of day. The parts of it on which the hand leans are brought most clearly into sight; and they are the chief dark of the picture, because the tillage of the ground is required of man as a punishment; but they make the soft light of the setting sun brighter, because rest is sweetest after toil. These thoughts may never occur to us as we glance carelessly at the design; and yet their under current assuredly affects the feelings, and increases, as the painter meant it should, the impression of melancholy, and of peace.

Again, in the “Lancaster Sands,” which is one of the plates I have marked as most desirable for your possession; the stream of light which falls from the setting sun on the advancing tide stands similarly in need of some force of near object to relieve its brightness. But the incident which Turner has here adopted is the swoop of an angry seagull at a dog, who yelps at it, drawing back as the wave rises over his feet, and the bird shrieks within a foot of his face. Its unexpected boldness is a type of the anger of its ocean element, and warns us of the sea's advance just as surely as the abandoned plough told us of the ceased labour of the day.

It is not, however, so much in the selection of single in-
cidents of this kind as in the feeling which regulates the ar-
angement of the whole subject that the mind of a great com-
poser is known. A single incident may be suggested by a
felicitous chance, as a pretty motto might be for the heading
of a chapter. But the great composers so arrange all their
designs that one incident illustrates another, just as one colour
relieves another. Perhaps the "Heysham," of the Yorkshire
series which, as to its locality, may be considered a companion
to the last drawing we have spoken of, the "Lancaster Sands,"
presents as interesting an example as we could find of Turner's
feeling in this respect. The subject is a simple north-country
village, on the shore of Morecambe Bay; not in the common
sense, a picturesque village: there are no pretty bow-windows,
or red roofs, or rocky steps of entrance to the rustic doors,
or quaint gables; nothing but a single street of thatched and
chiefly clay-built cottages, ranged in a somewhat monotonous
line, the roofs so green with moss that at first we hardly dis-
cern the houses from the fields and trees. The village street
is closed at the end by a wooden gate, indicating the little
traffic there is on the road through it, and giving it something
the look of a large farmstead, in which a right of way lies
through the yard. The road which leads to this gate is full
of ruts, and winds down a bad bit of hill between two broken
banks of moor ground, succeeding immediately to the few
enclosures which surround the village; they can hardly be
called gardens; but a decayed fragment or two of fencing
fill the gaps in the bank; and a clothes-line, with some
clothes on it, striped blue and red, and a smock-frock, is
stretched between the trunks of some stunted willows; a very
small haystack and pigstye being seen at the back of the cot-
tage beyond. An empty, two-wheeled, lumbering cart, drawn
by a pair of horses with huge wooden collars, the driver sitting
lazily in the sun, sideways on the leader, is going slowly home
along the rough road, it being about country dinner-time.
At the end of the village there is a better house, with three
chimneys and a dormer window in its roof, and the roof is of
stone shingle instead of thatch, but very rough. This house
is no doubt the clergymen's; there is some smoke from one
of its chimneys, none from any other in the village; this smoke is from the lowest chimney at the back, evidently that of the kitchen, and it is rather thick, the fire not having been long lighted. A few hundred yards from the clergyman’s house, nearer the shore, is the church, discernible from the cottage only by its low-arched belfry, a little neater than one would expect in such a village; perhaps lately built by the Puseyite incumbent;* and beyond the church, close to the sea, are two fragments of a border war-tower, standing on their circular mound, worn on its brow deep into edges and furrows by the feet of the village children. On the bank of moor, which forms the foreground, are a few cows, the carter’s dog barking at a vixenish one: the milkmaid is feeding another, a gentle white one, which turns its head to her, expectant of a handful of fresh hay, which she has brought for it in her blue apron, fastened up round her waist; she stands with her pail on her head, evidently the village coquette, for she has a neat bodice, and pretty striped petticoat under the blue apron, and red stockings. Nearer us, the cowherd, barefooted, stands on a piece of the limestone rock (for the ground is thistly and not plearable to bare feet);—whether boy or girl we are not sure; it may be a boy, with a girl’s worn-out bonnet on, or a girl with a pair of ragged trowsers on; probably the first, as the old bonnet is evidently useful to keep the sun out of our eyes when we are looking for strayed cows among the moorland hollows, and helps us at present to watch (holding the bonnet’s edge down) the quarrel of the vixenish cow with the dog, which, leaning on our long stick, we allow to proceed without any interference. A little to the right the hay is being got in, of which the milkmaid has just taken her apronful to the white cow; but the hay is very thin, and cannot well be raked up because of the rocks; we must glean it

* “Puseyism” was unknown in the days when this drawing was made; but the kindly and helpful influences of what may be call ecclesiastical sentiment, which, in a morbidly exaggerated condition, forms one of the principal elements of “Puseyism,”—I use this word regretfully, no other existing which will serve for it,—had been known and felt in our wild northern districts long before.
like corn, hence the smallness of our stack behind the willows; and a woman is pressing a bundle of it hard together, kneeling against the rock’s edge, to carry it safely to the hay-cart without dropping any. Beyond the village is a rocky hill, deep set with brushwood, a square crag or two of limestone emerging here and there, with pleasant turf on their brows, heaved in russet and mossy mounds against the sky, which, clear and calm, and as golden as the moss, stretches down behind it towards the sea. A single cottage just shows its roof over the edge of the hill, looking seaward; perhaps one of the village shepherds is a sea captain now, and may have built it there, that his mother may first see the sails of his ship whenever it runs into the bay. Then under the hill, and beyond the border tower, is the blue sea itself, the waves flowing in over the sand in long curved lines, slowly; shadows of cloud and gleams of shallow water on white sand alternating—miles away; but no sail is visible, not one fisherboat on the beach, not one dark speck on the quiet horizon. Beyond all are the Cumberland mountains, clear in the sun, with rosy light on all their crags.

I should think the reader cannot but feel the kind of harmony there is in this composition; the entire purpose of the painter to give us the impression of wild, yet gentle, country life, monotonous as the succession of the noiseless waves, patient and enduring as the rocks; but peaceful, and full of health and quiet hope, and sanctified by the pure mountain air and baptismal dew of heaven, falling softly between days of toil and nights of innocence.

All noble composition of this kind can be reached only by instinct: you cannot set yourself to arrange such a subject; you may see it, and seize it, at all times, but never laboriously invent it. And your power of discerning what is best in expression, among natural subjects, depends wholly on the temper in which you keep your own mind; above all, on your living so much alone as to allow it to become acutely sensitive in its own stillness. The noisy life of modern days is wholly incompatible with any true perception of natural beauty. If you go down into Cumberland by the railroad, live in some
frequented hotel, and explore the hills with merry companions, however much you may enjoy your tour or their conversation, depend upon it you will never choose so much as one pictorial subject rightly; you will not see into the depth of any. But take knapsack and stick, walk towards the hills by short day's journeys—ten or twelve miles a day—taking a week from some starting-place sixty or seventy miles away: sleep at the pretty little wayside inns, or the rough village ones; then take the hills as they tempt you, following glen or shore as your eye glances or your heart guides, wholly scornful of local fame or fashion, and of everything which it is the ordinary traveller's duty to see or pride to do. Never force yourself to admire anything when you are not in the humour; but never force yourself away from what you feel to be lovely, in search of anything better: and gradually the deeper scenes of the natural world will unfold themselves to you in still increasing fulness of passionate power; and your difficulty will be no more to seek or to compose subjects, but only to choose one from among the multitude of melodious thoughts with which you will be haunted, thoughts which will of course be noble or original in proportion to your own depth of character and general power of mind: for it is not so much by the consideration you give to any single drawing, as by the previous discipline of your powers of thought, that the character of your composition will be determined. Simplicity of life will make you sensitive to the refinement and modesty of scenery, just as inordinate excitement and pomp of daily life will make you enjoy coarse colours and affected forms. Habits of patient comparison and accurate judgment will make your art precious, as they will make your actions wise; and every increase of noble enthusiasm in your living spirit will be measured by the reflection of its light upon the works of your hands.

Faithfully yours,

J. Ruskin.
APPENDIX.

THINGS TO BE STUDIED.

The worst danger by far, to which a solitary student is exposed, is that of liking things that he should not. It is not so much his difficulties, as his tastes, which he must set himself to conquer; and although, under the guidance of a master, many works of art may be made instructive, which are only of partial excellence (the good and bad of them being duly distinguished), his safeguard, as long as he studies alone, will be in allowing himself to possess only things, in their way, so free from faults, that nothing he copies in them can seriously mislead him, and to contemplate only those works of art which he knows to be either perfect or noble in their errors. I will therefore set down in clear order, the names of the masters whom you may safely admire, and a few of the books which you may safely possess. In these days of cheap illustration, the danger is always rather of your possessing too much than too little. It may admit of some question, how far the looking at bad art may set off and illustrate the characters of the good; but, on the whole, I believe it is best to live always on quite wholesome food, and that our taste of it will not be made more acute by feeding, however temporarily, on ashes. Of course the works of the great masters can only be serviceable to the student after he has made considerable progress himself. It only wastes the time and dulls the feelings of young persons, to drag them through picture galleries; at least, unless they themselves wish to look at particular pictures. Generally, young people only care to enter a picture gallery when there is a chance of getting leave to run a race to the other end of
it; and they had better do that in the garden below. If, however, they have any real enjoyment of pictures, and want to look at this one or that, the principal point is never to disturb them in looking at what interests them, and never to make them look at what does not. Nothing is of the least use to young people (nor, by the way, of much use to old ones), but what interests them; and therefore, though it is of great importance to put nothing but good art into their possession, yet when they are passing though great houses or galleries, they should be allowed to look precisely at what pleases them: if it is not useful to them as art, it will be in some other way: and the healthiest way in which art can interest them is when they look at it, not as art, but because it represents something they like in nature. If a boy has had his heart filled by the life of some great man, and goes up thirstily to a Vandyck portrait of him, to see what he was like, that is the wholesomest way in which he can begin the study of portraiture; if he love mountains, and dwell on a Turner drawing because he sees in it a likeness to a Yorkshire scar, or an Alpine pass, that is the wholesomest way in which he can begin the study of landscape; and if a girl's mind is filled with dreams of angels and saints, and she pauses before an Angelico because she thinks it must surely be indeed like heaven, that is the wholesomest way for her to begin the study of religious art.

When, however, the student has made some definite progress, and every picture becomes really a guide to him, false or true, in his own work, it is of great importance that he should never so much as look at bad art; and then, if the reader is willing to trust me in the matter, the following advice will be useful to him. In which, with his permission, I will quit the indirect and return to the epistolary address, as being the more convenient.

First, in Galleries of Pictures:

1. You may look, with trust in their being always right, at Titian, Veronese, Tintoret, Giorgione, John Bellini, and Velasquez; the authenticity of the picture being of course established for you by proper authority.

2. You may look with admiration, admitting, however
question of right and wrong,* at Van Eyck, Holbein, Perugino, Francia, Angelico, Leonardo da Vinci, Correggio, Vandyck, Rembrandt, Reynolds, Gainsborough, Turner, and the modern Pre-Raphaelites.† You had better look at no other painters than these, for you run a chance, otherwise, of being led far off the road, or into grievous faults, by some of the other great ones, as Michael Angelo, Raphael, and Rubens; and of being, besides, corrupted in taste by the base ones, as Murillo, Salvator, Claude, Gasper Poussin, Teniers, and such others. You may look, however, for examples of evil, with safe universality of reprobation, being sure that everything you see is bad, at Domenichino, the Caracci, Bronzino, and the figure pieces of Salvator.

Among those named for study under question, you cannot look too much at, nor grow too enthusiastically fond of, Angelico, Correggio, Reynolds, Turner, and the Pre-Raphaelites; but, if you find yourself getting especially fond of any of the others, leave off looking at them, for you must be going wrong some way or other. If, for instance, you begin to like Rembrandt or Leonardo especially, you are losing your feeling for colour; if you like Van Eyck or Perugino especially, you must be getting too fond of rigid detail; and if you like Vandyck or Gainsborough especially, you must be too much attracted by gentlemanly flimsiness.

Secondly, of published, or otherwise multiplied, art, such as you may be able to get yourself, or to see at private houses or in shops, the works of the following masters are the most desirable, after the Turners, Rembrandts, and Durers, which I have asked you to get first:

1. Samuel Prout.

All his published lithographic sketches are of the greatest

* I do not mean necessarily to imply inferiority of rank, in saying that this second class of painters have questionable qualities. The greatest men have often many faults, and sometimes their faults are a part of their greatness; but such men are not, of course, to be looked upon by the student with absolute implicitness of faith.

† Including under this term, John Lewis, and William Hunt of the Old Water-colour, who, take him all in all, is the best painter of still life, I believe, that ever existed.
value, wholly unrivalled in power of composition, and in love and feeling of architectural subject. His somewhat mannered linear execution, though not to be imitated in your own sketches from Nature, may be occasionally copied, for discipline's sake, with great advantage; it will give you a peculiar steadiness of hand, not quickly attainable in any other way: and there is no fear of your getting into any faultful mannerism as long as you carry out the different modes of more delicate study above recommended.

If you are interested in architecture, and wish to make it your chief study, you should draw much from photographs of it; and then from the architecture itself, with the same completion of detail and gradation, only keeping the shadows of due paleness, in photographs they are always about four times as dark as they ought to be; and treat buildings with as much care and love as artists do their rock foregrounds, drawing all the moss and weeds, and stains upon them. But if, without caring to understand architecture, you merely want the picturesque character of it, and to be able to sketch it fast, you cannot do better than take Prout for your exclusive master; only do not think that you are copying Prout by drawing straight lines with dots at the end of them. Get first his "Rhine," and draw the subjects that have most hills, and least architecture in them, with chalk on smooth paper, till you can lay on his broad flat tints, and get his gradations of light, which are very wonderful; then take up the architectural subjects in the "Rhine," and draw again and again the groups of figures, &c., in his "Microcosm," and "Lessons on Light and Shadow." After that, proceed to copy the grand subjects in the sketches in "Flanders and Germany;" or in "Switzerland and Italy," if you cannot get the Flanders; but the Switzerland is very far inferior. Then work from Nature, not trying to Proutise Nature, by breaking smooth buildings into rough ones, but only drawing what you see, with Prout's simple method and firm lines. Don't copy his coloured works. They are good, but not at all equal to his chalk and pencil drawings, and you will become a mere imitator, and a very feeble imitator, if you use colour at all in
Prout's method. I have not space to explain why this is so, it would take a long piece of reasoning; trust me for the statement.

2. John Lewis.
His sketches in Spain, lithographed by himself, are very valuable. Get them, if you can, and also some engravings (about eight or ten, I think, altogether) of wild beasts, executed by his own hand a long time ago; they are very precious in every way. The series of the "Alhambra" is rather slight, and few of the subjects are lithographed by himself; still it is well worth having.
But let no lithographic work come into the house, if you can help it, nor even look at any, except Prout's, and those sketches of Lewis's.

3. George Cruikshank.
If you ever happen to meet with the two volumes of "Grimm's German Stories," which were illustrated by him long ago, pounce upon them instantly; the etchings in them are the finest things, next to Rembrandt's, that, as far as I know, have been done since etching was invented. You cannot look at them too much, nor copy them too often.
All his works are very valuable, though disagreeable when they touch on the worst vulgarities of modern life; and often much spoiled by a curiously mistaken type of face, divided so as to give too much to the mouth and eyes, and leave too little for forehead, the eyes being set about two thirds up, instead of at half the height of the head. But his manner of work is always right; and his tragic power, though rarely developed, and warped by habits of caricature, is, in reality, as great as his grotesque power.
There is no fear of his hurting your taste, as long as your principal work lies among art of so totally different a character as most of that which I have recommended to you; and you may, therefore, get great good by copying almost anything of his that may come in your way; except only his illustrations lately published to "Cinderella," and "Jack and the
Beanstalk,” and “Tom Thumb,” which are much over-laboured, and confused in line. You should get them, but do not copy them.

4. Alfred Rethel.
I only know two publications by him; one, the “Dance of Death,” with text by Reinick, published in Leipsic, but to be had now of any London bookseller for the sum, I believe, of eighteen pence, and containing six plates full of instructive character; the other, of two plates only, “Death the Avenger,” and “Death the Friend.” These two are far superior to the “Todtentanz,” and, if you can get them, will be enough in themselves, to show all that Rethel can teach you. If you dislike ghastly subjects, get “Death the Friend” only.

5. Bewick.
The execution of the plumage in Bewick’s birds is the most masterly thing ever yet done in wood-cutting; it is just worked as Paul Veronese would have worked in wood, had he taken to it. His vignettes, though too coarse in execution, and vulgar in types of form, to be good copies, show, nevertheless, intellectual power of the highest order; and there are pieces of sentiment in them, either pathetic or satirical, which have never since been equalled in illustrations of this simple kind; the bitter intensity of the feeling being just like that which characterises some of the leading Pre-Raphaelites. Bewick is the Burns of painting.

The “Book of Job,” engraved by himself, is of the highest rank in certain characters of imagination and expression; in the mode of obtaining certain effects of light it will also be a very useful example to you. In expressing conditions of glaring and flickering light, Blake is greater than Rembrandt.

7. Richter.
I have already told you what to guard against in looking at his works. I am a little doubtful whether I have done well in including them in this catalogue at all; but the fancies in them are so pretty and numberless, that I must risk, for their sake,
the chance of hurting you a little in judgment of style. If you want to make presents of story-books to children, his are the best you can now get.

8. Rossetti.

An edition of Tennyson, lately published, contains woodcuts from drawings by Rossetti and other chief Pre-Raphaelite masters. They are terribly spoiled in the cutting, and generally the best part, the expression of feature, entirely lost;* still they are full of instruction, and cannot be studied too closely. But observe, respecting these wood-cuts, that if you have been in the habit of looking at much spurious work, in which sentiment, action, and style are borrowed or artificial, you will assuredly be offended at first by all genuine work, which is intense in feeling. Genuine art, which is merely art, such as Veronese’s or Titian’s, may not offend you, though the chances are that you will not care about it: but genuine works of feeling, such as Maude and Aurora Leigh in poetry, or the grand Pre-Raphaelite designs in painting, are sure to offend you; and if you cease to work hard, and persist in looking at vicious and false art, they will continue to offend you. It will be well, therefore, to have one type of entirely false art, in order to know what to guard against. Flaxman’s outlines to Dante contain, I think, examples of almost every kind of falsehood and feebleness which it is possible for a trained artist, not base in thought, to commit or admit, both in design and execution. Base or degraded choice of subject, such as you will constantly find in Teniers and others of the Dutch painters, I need not, I hope, warn you against; you will simply turn away from it in disgust; while mere bad or feeble drawing, which makes mistakes in every direction at once, cannot teach you the particular sort of educated fallacy

* This is especially the case in the St. Cecily, Rossetti’s first illustration to the “palace of art,” which would have been the best in the book had it been well engraved. The whole work should be taken up again, and done by line engraving, perfectly; and wholly from Pre-Raphaelite designs, with which no other modern work can bear the least comparison.
in question. But, in these designs of Flaxman's, you have gentlemanly feeling, and fair knowledge of anatomy, and firm setting down of lines, all applied in the foolishest and worst possible way; you cannot have a more finished example of learned error, amiable want of meaning, and bad drawing with a steady hand.* Retsch's outlines have more real material in them than Flaxman's, occasionally showing true fancy and power; in artistic principle they are nearly as bad, and in taste worse. All outlines from statuary, as given in works on classical art, will be very hurtful to you if you in the least like them; and nearly all finished line engravings. Some particular prints I could name which possess instructive qualities, but it would take too long to distinguish them, and the best way is to avoid line engravings of figures altogether. If you happen to be a rich person, possessing quantities of them, and if you are fond of the large finished prints from Raphael, Correggio, &c., it is wholly impossible that you can make any

* The praise I have given incidentally to Flaxman's sculpture in the "Seven Lamps," and elsewhere, refers wholly to his studies from Nature, and simple groups in marble, which were always good and interesting. Still, I have overrated him, even in this respect; and it is generally to be remembered that, in speaking of artists whose works I cannot be supposed to have specially studied, the errors I fall into will always be on the side of praise. For, of course, praise is most likely to be given when the thing praised is above one's knowledge; and, therefore, as our knowledge increases, such things may be found less praiseworthy than we thought. But blame can only be justly given when the thing blamed is below one's level of sight; and, practically, I never do blame anything until I have got well past it, and am certain that there is demonstrable falsehood in it. I believe, therefore, all my blame to be wholly trustworthy, having never yet had occasion to repent of one depreciatory word that I have ever written, while I have often found that, with respect to things I had not time to study closely, I was led too far by sudden admiration, helped, perhaps, by peculiar associations, or other deceptive accidents; and this the more, because I never care to check an expression of delight, thinking the chances are, that, even if mistaken, it will do more good than harm; but I weigh every word of blame with scrupulous caution. I have sometimes erased a strong passage of blame from second editions of my books; but this was only when I found it offended the reader without convincing him, never because I repented of it myself.
progress in knowledge of real art till you have sold them all—or burnt them, which would be a greater benefit to the world. I hope that some day, true and noble engravings will be made from the few pictures of the great schools, which the restorations undertaken by the modern managers of foreign galleries may leave us; but the existing engravings have nothing whatever in common with the good in the works they profess to represent, and if you like them, you like in the originals of them hardly anything but their errors.

Finally, your judgment will be, of course, much affected by your taste in literature. Indeed, I know many persons who have the purest taste in literature, and yet false taste in art, and it is a phenomenon which puzzles me not a little: but I have never known any one with false taste in books, and true taste in pictures. It is also of the greatest importance to you, not only for art's sake, but for all kinds of sake, in these days of book deluge, to keep out of the salt swamps of literature, and live on a rocky island of your own, with a spring and a lake in it, pure and good. I cannot, of course, suggest the choice of your library to you, every several mind needs different books; but there are some books which we all need, and assuredly, if you read Homer,* Plato, Æschylus, Herodotus, Dante,† Shakspeare, and Spenser, as much as you ought, you will not require wide enlargement of shelves to right and left of them for purposes of perpetual study. Among modern books, avoid generally magazine and review literature. Sometimes it may contain a useful abridgement or a wholesome piece of criticism; but the chances are ten to one it will either waste your time or mislead you. If you want to understand any subject whatever, read the best book upon it you can hear of; not a review of the book. If you don't like the first book you

* Chapman's, if not the original.
† Carey's or Cayley's, if not the original. I do not know which are the best translations of Plato. Herodotus and Æschylus can only be read in the original. It may seem strange that I name books like these for "beginners:" but all the greatest books contain food for all ages; and an intelligent and rightly bred youth or girl ought to enjoy much, even in Plato, by the time they are fifteen or sixteen.
try, seek for another; but do not hope ever to understand the subject without pains, by a reviewer's help. Avoid especially that class of literature which has a knowing tone; it is the most poisonous of all. Every good book, or piece of book, is full of admiration and awe; it may contain firm assertion or stern satire, but it never sneers coldly, nor asserts haughtily, and it always leads you to reverence or love something with your whole heart. It is not always easy to distinguish the satire of the venomous race of books from the satire of the noble and pure ones; but in general you may notice that the cold-blooded Crustacean and Batrachian books will sneer at sentiment; and the warm-blooded, human books, at sin. Then, in general, the more you can restrain your serious reading to reflective or lyric poetry, history, and natural history, avoiding fiction and the drama, the healthier your mind will become. Of modern poetry keep to Scott, Wordsworth, Keats, Crabbe, Tennyson, the two Brownings, Lowell, Longfellow, and Coventry Patmore, whose "Angel in the House" is a most finished piece of writing, and the sweetest analysis we possess of quiet modern domestic feeling; while Mrs. Browning's "Aurora Leigh" is, as far as I know, the greatest poem which the century has produced in any language. Cast Coleridge at once aside, as sickly and useless; and Shelley as shallow and verbose; Byron, until your taste is fully formed, and you are able to discern the magnificence in him from the wrong. Never read bad or common poetry, nor write any poetry yourself; there is, perhaps, rather too much than too little in the world already.

Of reflective prose, read chiefly Bacon, Johnson, and Helps. Carlyle is hardly to be named as a writer for "beginners," because his teaching, though to some of us vitally necessary, may to others be hurtful. If you understand and like him, read him; if he offends you, you are not yet ready for him, and perhaps may never be so; at all events, give him up, as you would sea-bathing if you found it hurt you, till you are stronger. Of fiction, read Sir Charles Grandison, Scott's novels, Miss Edgeworth's, and, if you are a young lady, Madame de Genlis', the French Miss Edgeworth; making
THINGS TO BE STUDIED.

these, I mean, your constant companions. Of course you must, or will read other books for amusement, once or twice; but you will find that these have an element of perpetuity in them, existing in nothing else of their kind: while their peculiar quietness and repose of manner will also be of the greatest value in teaching you to feel the same characters in art. Read little at a time, trying to feel interest in little things, and reading not so much for the sake of the story as to get acquainted with the pleasant people into whose company these writers bring you. A common book will often give you much amusement, but it is only a noble book which will give you dear friends. Remember also that it is of less importance to you in your earlier years, that the books you read should be clever, than that they should be right. I do not mean oppressively or repulsively instructive; but that the thoughts they express should be just, and the feelings they excite generous. It is not necessary for you to read the wittiest or the most suggestive books: it is better, in general, to hear what is already known, and may be simply said. Much of the literature of the present day, though good to be read by persons of ripe age, has a tendency to agitate rather than confirm, and leaves its readers too frequently in a helpless or hopeless indignation, the worst possible state into which the mind of youth can be thrown. It may, indeed, become necessary for you, as you advance in life, to set your hand to things that need to be altered in the world, or apply your heart chiefly to what must be pitied in it, or condemned; but, for a young person, the safest temper is one of reverence, and the safest place one of obscurity. Certainly at present, and perhaps through all your life, your teachers are wisest when they make you content in quiet virtue, and that literature and art are best for you which point out, in common life and familiar things, the objects for hopeful labour, and for humble love.
Ruskin, John,
The ethics of the dust
Mark's ed. --