

---

scribed, which is the most intense heat we can raise, and in which platina melts like lead.

(27.) On the benefits which the sun's light confers on us it cannot be necessary to say much; only one thing, I think, may not be known to all who may read these pages, viz., that it is not only by enabling us to see that it is useful, but that it is quite as necessary as its heat to the life and well-being both of plants and animals. Animals, indeed, may live some time in complete darkness, but they grow unhealthy; lose strength and pine away; while plants very quickly lose their green colour; turn white or pale yellow; lose all their peculiar scent and flavour; refuse to flower; and at last rot and die off. What I have now to say about the light of the sun is of quite a different nature.

(28.) The sun's light, as we all know, is purely *white*. If the sun sometimes looks yellow or red, it is because it is seen through vapours, or smoke, or a London fog of smoke *and vapour mixed*. It has been seen blue;\* but when high up, in a clear sky, it is quite white. The whiteness of snow, of a white cloud, of white paper, is the whiteness of the sun's light which falls upon them. Whatever reflects the rays of the sun *without choice or preference, appears white*. Whatever does not do so appears coloured; and if it does not reflect them at all—black. Now I must explain what I mean by saying—"without choice or pre-

\* This has been denied by Arago. But I have a description of the phænomenon by an eye-witness, accompanied with a coloured drawing, which leaves no doubt on my mind of the reality of the fact. It was after a hurricane at Barbadoes.