

rushing continually to the sun, and as Sir John Herchell says, "millions of them depositing their tails there," is not ample evidence of their purpose being to restore the waste of his heat and light. With respect to this author's question, "What becomes of the light, if it does not return to the sun?" I answer, light is known to enter into combination with almost all bodies on the earth, and by analogy, on the planets also. It changes the colours of all bodies, and probably by some unknown process of nature, assumes in them a liquid or a solid state. The lately discovered Daguerreotype is a proof of this; the rays of light from the countenance fall on a plate coated with iodine, or other chemical mixture, and the impression of the countenance is embodied and solidified in it: now, light is supposed to be imponderable; but I believe that is only supposed, because we have no means of weighing it; for a grain of light may perhaps be enough to fill a house. What an immensely small space, then, light must require when entering into combination with, and becoming absorbed by the liquid and solid bodies on the earth, planets and their satellites, their oceans and atmospheres, and assuming the liquid or solid state. To shew the immense tenuity of light, I will state, that Sir Isaac Newton calculated that even the tail of a comet, forty or fifty millions of miles long, might, if *solidified*, be almost comprised in a *nutshell*.

In page 71, the author says, "Heat is only light in a state of diffusion. This is proved by the fact, that if you condense it sufficiently, you make it light." But the effect of heating anything is not to condense it, but to *rarify* it. The author falls into the same error here as in the case of hydrogen and oxygen above stated. He supposes the light to come from the heated iron, whereas it is produced by heating it to that degree at which it absorbs the oxygen from the atmosphere, and sets free

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