

Belgium, M. Quetelet has given great attention to them; and, in our own country, Sir William Hamilton, and Professor Lloyd, of Dublin, have been followed by Mr. Mac Cullagh. Professor Powell, of Oxford, has continued his researches with unremitting industry; and, at Cambridge, Professor Airy, who did much for the establishment and diffusion of the theory before he was removed to the post of Astronomer Royal, at Greenwich, has had the satisfaction to see his labors continued by others, even to the most recent time; for Mr. Kelland,²⁶ whom we have already mentioned, and Mr. Archibald Smith,²⁷ the two persons who, in 1834 and 1836, received the highest mathematical honors which that university can bestow, have both of them published investigations respecting the undulatory theory.

We may be permitted to add, as a reflection obviously suggested by these facts, that the cause of the progress of science is incalculably benefited by the existence of a body of men, trained and stimulated to the study of the higher mathematics, such as exist in the British universities, who are thus prepared, when an abstruse and sublime theory comes before the world with all the characters of truth, to appreciate its evidence, to take steady hold of its principles, to pursue its calculations, and thus to convert into a portion of the permanent treasure and inheritance of the civilized world, discoveries which might otherwise expire with the great geniuses who produced them, and be lost for ages, as, in former times, great scientific discoveries have sometimes been.

The reader who is acquainted with the history of recent optical discovery, will see that we have omitted much which has justly excited admiration; as, for example, the phenomena produced by glass under heat or pressure, noticed by MM. Lobeck, and Biot, and Brewster, and many most curious properties of particular minerals. We have omitted, too, all notice of the phenomena and laws of the absorption of light, which hitherto stand unconnected with the theory. But in this we have not materially deviated from our main design; for our end, in what we have done, has been to trace the advances of Optics

²⁶ *On the Dispersion of Light, as explained by the Hypothesis of Finite Intervals.* Camb. Trans. vol. vi. p. 153.

²⁷ *Investigation of the Equation to Fresnel's Wave Surface,* ib. p. 85. See also, in the same volume, *Mathematical Considerations on the Problem of the Rainbow,* showing it to belong to Physical Optics, by R. Potter, Esq., of Queen's College.