

(283.) The little instrument with which Galileo's splendid discoveries were made, was hardly superior in power to an ordinary finder of the present day; but it was rapidly improved on, and in the hands of Huyghens attained to gigantic dimensions and very great power. It was to obviate the necessity of the enormous length required for these telescopes, and yet secure the same power, that Gregory and Newton devised the reflecting telescope, which has since become a much more powerful instrument than its original inventors probably ever contemplated.

(284.) The telescope, as it exists at present, with the improvements in its structure and execution which modern artists have effected, must assuredly be ranked among the highest and most refined productions of human art; that in which man has been able to approximate more closely to the workmanship of nature, and which has conferred upon him, if not another sense, at least an exaltation of one already possessed by him that merits almost to be regarded as a new one. Nor does it appear yet to have reached its ultimate perfection, to which indeed it is difficult to assign any bounds, when we take into consideration the wonderful progress which workmanship of every kind is making, and the delicacy, far superior to that of former times, with which materials may now be wrought, as well as the ingenious inventions and combinations which every year is bringing forth for accomplishing the same ends by means hitherto unattempted.*

(285.) After a long torpor, the knowledge of the properties of light began to make fresh progress about the end of the last century, advancing with an accelerated rapidity, which has continued unabated to the present time. The example was set by our late admirable and

* We allude to the recently invented achromatic combinations of Messrs. Barlow and Rogers, and the dense glasses of which Mr. Faraday has recently explained the manufacture in a memoir full of the most beautiful examples of delicate and successful chemical manipulation, and which promise to give rise to a new era in optical practice, by which the next generation at least may benefit. See *Phil. Trans.* 1830.