

with great success. He commenced with one assistant, and he left it with six; and even yet, such is the severity of observation and of reduction demanded by the Greenwich instruments, and the present state of astronomy, that the Royal Observatory may be considered, in fine weather, to be not sufficiently provided with hands. In these and similar attempts, Sir Joseph Banks, then president of the Royal Society, gave him effectual aid; but after his death, it was only by repeated applications, that Mr. Pond could obtain the amount of force absolutely necessary to carry his system of observation into full vigour. He also effectually resisted a well meant, but injudicious attempt, to give him for assistants persons who, from the mode of their appointment and pretensions, were little likely to submit to the rigid subordination required in a well-ordered establishment. His firmness on this occasion probably saved the Greenwich Observatory from being a board of co-ordinate rivals, instead of the best disciplined, most effective, and most economical institution in the country.

Mr. John Ramage, well known as a practical optician, was a native of Aberdeen. He was originally engaged in trade, but began at an early period of life to give his attention to astronomical subjects, and particularly to the means of improving the reflecting telescope. His first essays were made on telescopes of the Gregorian form; but experience soon induced him to abandon that construction, and to adopt the principle of the front view, as had been done by Sir William Herschel. In 1817 he constructed a telescope of 20 feet focal length, with a mirror of $13\frac{1}{2}$ inches in diameter; and subsequently three others of 25 feet focal length, with mirrors of 15 inches. But his greatest achievement was one of 54 feet focal length and a 21-inch mirror, which was executed in 1823, and of which a description is given in the 2d Volume of the *Memoirs* of this Society. Of the immense labour which he bestowed in attempting to improve the art of making metallic specula, an idea may be formed from his statement, that it was not "till after the experience obtained in casting and polishing upwards of a hundred 15-inch mirrors, besides numerous smaller ones, that he was enabled to improve the processes recommended by writers on the subject."

Mr. Ramage's experiments were not confined to the casting and polishing of specula, but extended also to the means of simplifying the mechanism of the stands, and of facilitating the use of reflecting telescopes, and of improving the methods of mounting equatorial instruments in general. The mechanical contrivances which he employed for these purposes evince very considerable ingenuity.

Though Mr. Ramage was rather an observer of phenomena than a cultivator of the science of astronomy, he possessed extensive information on most subjects relating to its practice and theory, as well as several other branches of physics. He died at Aberdeen on the 26th of December, 1835, in the fifty-second year of his age; and this account ought more properly to have been contained in the Report of the last anniversary; but the inform-