

of the Royal Navy, who was engaged in surveying the coasts of South America; and Dr. William Hyde Wollaston.

To Dr. Wollaston every part of science seemed equally familiar; and of him it might perhaps be more truly said than of any philosopher who has preceded him, that "*nil erat quod non tetigit, nil tetigit quod non ornavit.*" Astronomy was one of his chief and favourite pursuits—a taste inherited from his father, and cherished by his intimacy with the late Astronomer Royal of Dublin (now Bishop of Cloyne) and the present Astronomer Royal of Greenwich—an intimacy commenced in early youth at Cambridge, and maintained through life. Science is indebted to him for many ingenious and important speculations; such are his papers published in the Philosophical Transactions, on horizontal refractions, and on the horizontal refraction and dip of the horizon, containing his curious and ingenious invention of the dip sector. Among the most remarkable of his astronomical papers, however, is that on the finite extent of the atmosphere, which affords a striking instance of the advantages that may accrue to science by the union of remote branches of knowledge in the same mind. The arguments brought forward in that paper in favour of the non-divisibility of matter *in infinitum*, from astronomical phenomena, carry with them at least every semblance of soundness, and afford a singular specimen of his acute and scrutinizing habit of thought; while the almost miraculous delicacy and curious felicity of his manipulation in the practical departments of science—that microscopic tact, which in a thousand instances led him, through routes impervious to grosser intellects, to the most striking, unexpected, and novel results—is there exemplified in a remarkable manner, in the minute and apparently insignificant apparatus with which he was enabled to verify his own views, under circumstances which would effectually baffle ordinary instruments and ordinary observers.

The sister science of optics is even more indebted to Dr. Wollaston than astronomy. His verification of the Huygenian law of double refraction; his investigation of the refractive and dispersive powers of bodies, as a separate branch of physical inquiry, on which the perfection of the achromatic telescope depends; his discovery of the dark lines in the spectrum, since independently observed, with more refined means, and in greater detail, by Fraunhofer; but chiefly as concerns our science, the ingenious and elegant method practised by him for perfecting the adjustment of the triple achromatic object-glass, give him the highest claims to eminence in this department. The instrument on which he tried and perfected this mode of adjustment is now, through his liberality, the property of this Society.

The Council think it right to include in this Report the letter containing his announcement of this valuable gift.

*Dorset Street, Dec. 8, 1828.*

MY DEAR SIR,—Being in possession of a telescope which I hold in great estimation, and being desirous that its good