

scope reveals, the astronomer should find the unknown wanderer, that, afar on the verge of our solar system, obeyed the same laws which hold our earth within its annual path, and control the fulfilment for us of the divine promise that "while the earth remaineth, seed time and harvest, cold and heat, summer and winter, and day and night shall not cease."

The perturbations of Uranus had long warned the astronomer of some unknown element present within the remote confines of the system; and more recently the distinguished French discoverer of Neptune had given expression to the belief that certain disturbances in the movements of the planet Mercury must be attributed, in all probability, to a similar cause: when the scientific world was startled by the announcement that, at the opposite extreme of our solar system, within the burning zone which intervenes between Mercury and the sun, the intra-mercurial planet Vulcan had been seen, revolving around the common solar centre within a period of nineteen days and seventeen hours, at a distance from the sun not exceeding eight degrees, and with a mass only one-seventeenth of that of Mercury. The glimmering twilight of Neptune, wandering in its remote orbit, the outer sentinel of our system, long withheld it even from the gaze of the astronomer; and we await the confirmation of this announcement of another planet, still longer hidden in the burning splendor of its orbit by excess of light. But if it should prove true, it will not diminish our interest in the result, that the discovery is due to the self-taught labors of M. Lescarbault, an humble amateur astronomer, working with rude instruments of his own construction.

But from this I pass to other researches in Astronomical Science in which we may claim some personal interest. The year which has closed was specially marked to the Astronomer by a total eclipse of the sun, on the 18th of July, the line of central shadow of which extended from a point near Vancouver's Island eastward to the Labrador Coast, and after traversing the Atlantic; passed across Spain and Northern Africa, terminating finally at the southern extremity of the Red Sea. On this continent, accordingly, an Astronomical expedition was organized by the accomplished superintendent of the U. S. Coast Survey, for the purpose of observing the eclipse at Cape Chudleigh, on the Coast of Labrador, and included in its staff, as a representative of Canadian Science, one of our own members, Lieut. E. D. Ashe, R.N., the director of the Québec Observatory.