This result differs from Professor Runge's value by 0.034 tenth-meters. I regret that on account of the exceptionally cloudy and hazy weather which has since prevailed I have had no opportunity to repeat these measures.

I have satisfied myself by careful observations of the atmospheric lines considered by Bélopolsky to be the cause of the duplicity of $D_3$ observed by him in 1891, that this explanation properly applies only to an apparent companion to $D_3$ sometimes seen on the more refrangible side. Both members of the telluric pair mentioned by Bélopolsky are below the companion I have measured.

The observations of the duplicity of $D_3$ have been confirmed by Dr. Huggins and by Professor Taylor Reed.

The displacement of the line caused by the motion of the prominence in the line of sight not being accurately known it was thought best to measure the wave-length of the principal component in the chromosphere at the north and south poles of the Sun. $D_3$ is about 0.52 tenth-meters wide under these conditions, and on account of the unsteadiness of the spectrum at the limb the wave-length of its center cannot be measured with great accuracy. Two independent measures made by myself at the north and south poles in the fourth and second orders of the grating gave 5875.928 and 5875.920 respectively. In spite of the increased width of both components I have under favorable conditions seen traces of duplicity in the chromosphere. The presence of the faint companion on the less refrangible side would tend to increase the measured wave-length of the principal line, and this may account for the difference between Professor Runge's value and my own. This supposition is perhaps indicated by the fact that the mean of Mr. Ellerman's measures (5875.908) is somewhat smaller than my own, while faint and difficult lines are always more clearly visible to me than to him. As soon as opportunity offers I hope to repeat my determinations of the wave-length under more favorable conditions. The present results are to be regarded as preliminary.

George E. Hale.

ÉTIENNE-LÉOPOLD TROUVELOT.

E. L. Trouvelot was born at Guyan court, Aisne, France, December 26, 1827. From his early youth he gave evidence of the pronounced taste for drawing which he subsequently found of such value in his
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scientific work. His participation in the events connected with the Coup d'État caused him to be exiled to the United States in 1852. He established himself in Boston, where he acquired the friendship of Louis Agassiz. During this period he made a large number of drawings to illustrate various subjects of entomology, ornithology, etc. As an active member of the Boston Society of Natural History he published in its annals a series of papers dealing for the most part with his entomological investigations.

His interest in astronomy was awakened in 1870, when the occurrence of a remarkable series of auroras led him to purchase a small telescope. His excellent drawings of the Sun, planets and other objects soon brought him to the attention of the astronomers of Harvard College Observatory, of which Professor Winlock was then Director. At his request M. Trouvelot joined the staff of the Observatory, and continued his observations there for several years. During the latter part of his stay in America he carried on his work in his private observatory. While at Harvard many of his observations of the Sun, planets, shooting stars, auroras, etc., were published in Volumes VIII and IX of the Annals.

In 1878 M. Trouvelot, accompanied by his son, observed the total solar eclipse as members of Professor Harkness' party at Creston, Wyoming. Their results were published with those of the American observers in Washington Observations for 1876, Appendix III.

In 1882 M. Trouvelot was appointed Astronomer at the Astrophysical Observatory of Meudon, where he continued his investigations up to the time of his death. In 1883 he was a member of the French eclipse expedition to Caroline Island.

The long list of papers published by M. Trouvelot between 1870 and 1894 comprises over eighty-five titles. Among the more important of these publications may be mentioned the well-known series of astronomical drawings, with manual, and a monograph containing 100 drawings of Venus and Mercury. Numerous articles and drawings, including a monograph on Mars, were left in manuscript. It is interesting to know that some of these will be published by his son.

M. Trouvelot was a member of several learned societies. In recognition of his contributions to astronomy he received, among other distinctions, the Valz Prize of the French Academy of Sciences.

He died at his home in Meudon April 22, 1895.¹

¹ For the facts embodied in the above note we are indebted to M. Georges Trouvelot.