while they are fresh in mind. I observed the cerebral figures for some hours, repeating the observations previously reported. When the dawn faintly illuminated the window frame I was able at one stage of brightness to see both the frame and the figures. Placing the fingers of the two hands against the outer ends of the eyeballs, I displaced them simultaneously in opposite directions; this was repeated a number of times in rapid succession. As a result there appeared two images of the frame moving in opposite directions. The retinal figures seen in front of the frame still remained single and did not move. Granting that there was no error in my observation, I cannot imagine a more conclusive proof as to the cerebral nature of the light.

The problem is really one of importance. If this light is cerebral we have a means of distinctly observing some of the phenomena in the brain. The cerebral figures are intimately associated with the contents of dreams. I believe also that the forms of the figures of cerebral light are intimately connected with the phenomena of nutrition in the brain. I find at the present time that my figures are quite different from those which I have been accustomed to observing in past years; this may correspond to a radical change in the condition of the nervous system which I have observed to have taken place during the past six months. I find also that the figures on first awakening from sleep are very different from those that are seen when the mind becomes fully awake. Systematic observations by medical men may show that diagnostic conclusions can be obtained by asking patients to describe their cerebral figures.

The question at the present time concerns the sufficiency of the observations. If they are correct and reliable there is, I believe, no escape from the conclusion that the figures are cerebral. I can see no reason to believe that my carefully and repeatedly made observations are erroneous, but it is highly desirable to have them confirmed by other observers.

E. W. SCRIPTURE.

PSYCHOLOGICAL LABORATORY,
YALE UNIVERSITY, NEW HAVEN, CONN.,
May 29, 1899.

PROFESSOR SIMON NEWCOMB.

THE issue of *Nature* for May 4th contains an admirable portrait in photogravure of Professor Simon Newcomb, together with an article describing his scientific work by M. Loewy, Director of the Paris Observatory. M. Loewy says:

Newcomb must be considered, without contradiction, as one of the most celebrated astronomers of our time, both on account of the immensity of his work and the unity of view which marks the choice of the subjects treated by him.

All is linked together in our solar system; the study of the motion of each one of the celestial bodies forming part of it is based upon the knowledge of a great number of numerical data, and there exists no fundamental element whose influence is not repercussed on the entire theory of these bodies. To endeavor to build up the theory of our whole planetary world on an absolutely homogeneous basis of constants was an almost superhuman task.

After giving an extended account of some of Professor Newcomb's more important contributions M. Loewy concludes:

We have only been able to give a short sketch of Newcomb's achievements; he is gifted with a prodigious power of work, which is testified by the extraordinarily long list of his researches.

The reception which has been accorded to them by all competent men points to their author as one of the most illustrious representatives of celestial mechanics.

This activity has embraced the most diverse branches of astronomy. Not only has he given a great scope to the intellectual movement of his country, but he has also contributed, in a very successful manner, to elevate the level of the civilization of our age, enriching the domain of science with beautiful and durable conquests.

SCIENTIFIC NOTES AND NEWS.

OXFORD University conferred, on June 8th, the degree of D.C.L. on Professor Simon Newcomb.

THE new biological laboratory of Adelbert College, Western Reserve University, was dedicated on June 13th. An address was delivered by Professor W. K. Brooks.

PROFESSOR W. C. BRÖGGER, of the University of Christiania, the distinguished Norwegian geologist, has accepted an invitation to deliver the second course of the George Huntington Williams memorial lectures at the Johns Hopkins