

years; the dimensions of the prominences showed a similar decrease, while the mean latitude was a little higher, and the prominences more evenly distributed, in both hemispheres.

THE ECLIPSE OF THE SUN, APRIL 17.

REFERRING to Dr. Marie Stopes's observation of a halo about the eclipsed sun on April 17, Mr. Patrick Hepburn writes that Mrs. Hepburn, observing from near the central line in France, noticed what seemed to be rather of the nature of a corona than a halo, although they concluded that it had no connection with the true solar corona; it was coloured, with the violet outwards. Mr. C. O. Bartrum also discusses this phenomenon, and from two friends, one of whom saw the eclipse from near Paris, the other from Highgate, he gathers that "the appearance of a circle round the sun" seems to have been a corona due to diffraction, the colours appearing purer and brighter than usual because of the reduction in the effective size of the sun.

On photographs taken at Funchal (Madeira), and sent to us by Mr. Michael Grabham, there is obviously light cloud producing a "corona" effect around the sun, but the halo so plainly shown on them is palpably a photographic halation phenomenon. Another photograph shows several excellent crescentic images projected on to a wood floor through the foliage of stephanotis.

Mr. A. A. Buss writes that the time of his prominence observations (NATURE, April 25, p. 193) was from 8.0 to 8.30 a.m. The positions he gave agree very well with prominences photographed by M. Deslandres (NATURE, May 2, p. 221), although Mr. Buss did not note the large prominences in 47° N. lat. (E.) and 47° S. lat. (W.) as being especially conspicuous; the position angles would be about 17° and 197° respectively. But Mr. Buss observed visually in H α radiation, while M. Deslandres used the K (calcium) radiation for his spectroheliograms; this and the difference in time would readily explain the apparent changes, especially as the fact that considerable prominence activity occurred on the day of the eclipse is confirmed by both observers. Mr. Buss states that prominences were seen near p.a. 117° from April 14 to 29, thus forming a chain extending more than half-way round the sun; the western extremity of the chain was detected at the W. limb towards the end of the month. Possibly the H α spectroheliograms taken during this period will show magnificent "filaments" in the position indicated. Mr. Buss pictures the grandeur of such phenomena could they be spectroscopically observed from a position in space on the sun's axis prolonged.

Mr. Worthington, who, with Mr. Slater, was operating near Ovar, secured a photograph of the bright chromospheric arcs, which shows a large number of lines between λ_{3100} and D. Only the lower halves of the chromospheric circles are shown, the upper halves being lost in continuous spectrum, probably produced by portions of the sun which remained uncovered at the moment of exposure. The original negative is deposited at the Royal Astronomical Society's rooms, as were those secured at Vavau last year, where it may be inspected by anyone interested in the matter.

Several papers dealing with the eclipse appear in the *Comptes rendus* for April 29 (No. 18). MM. Carimey, Raveau, and Stablo describe bands of darkness which they observed from near the central line on the plateau de la Beauce. Comte de la Baume-Pluvinel was at St. Germain-en-Laye, and took a large number of cinematograph pictures of the eclipse;

with a chronometer alongside, at the rate of 13 or 14 per second. A study of these gives the time of central eclipse at 12h. 10m. $45s. \pm 0.2s.$, but this may be a little modified if the lunar depressions on opposite sides were not equally deep; for last contact the time determined was 1h. 32m. 7s. Four plates taken with an objective of 15 metres focal length show a slight aureole attributable to the corona, but no details of coronal structure. A three-prism spectroscope, with a wide slit, was directed to part of the chromosphere between two Baily's beads in p.a. about 130° . A considerable number of monochromatic images of the chromosphere were shown between λ_{486} and λ_{389} , about forty appearing between H and K. At Clayes (long. $0^{\circ} 21' 9.8''$ west, lat., $48^{\circ} 49' 13''$ N.), MM. R. Jouast and P. de la Gorce determined the variations of the intensity of the light on a horizontal plane during the eclipse. There was a steady decrease from 50,000 units at 10h. 55m. $15.5s.$ to 16 units at 12h. 9m. $55.5s.$, then a more rapid increase to 50,000 units at 12h. 50m. $49.0s.$ Kinematograph pictures were taken by MM. Vlès and J. Carvalló at Cacabelos, in Spain.

MATTER AND MIND.

SIR GEORGE REID is known to be a versatile thinker, and he shows himself to be also a philosopher in an address on "The World of Matter and the World of Mind" delivered by him recently before the Royal Scottish Geographical Society. We live on a single globe among millions of similar bodies, and we have no direct evidence of life elsewhere in space. Yet, "If living things exist only on this globe, living things are the loneliest of all the objects which the telescope can reach, or the microscope reveal, or the mind of man conceive. Man would be the loneliest of all, for he stands alone even among the living things of his own planet." Moreover, the achievements of man in the few thousand years of historic time are so brilliant in comparison with what was accomplished in the million years or so of geological time that Sir George Reid considers the argument derived from the remains of a physical structure resembling our own furnishes no conclusive proof that we are in body and soul the lineal descendants of fossilised ancestors. The principle of continuity breaks down when the evolution of mind is considered; if a Plato, Newton, or Darwin can be developed from a cave-dweller, "is not such an evolution a greater tax on human faith than the marvels of a direct creation can be?" Man, the intelligent centre of progressive life, is conscious of directive control: the will is merely the executive officer of the mind, and behind it there must be "some sort of pilotage."

This position is not new, and has been occupied by many philosophers from Aristotle to Bergson without any completely satisfactory view being obtained from it. The rise and progress of mental life, the emergence of volition, or the will to decide between reason and desire, and the idea of will behind phenomena, find no clear place in the naturalistic scheme of human evolution. Matter—whether organic or inorganic—is yielding to the importunate efforts of scientific investigators, but mind as a subject of serious study is given little attention even at the universities. Sir George Reid pleads for greater encouragement to the work of psychologists in these seats of learning, and his address should do something to save the Cinderella among the sciences from her present condition of neglect