

MONTHLY NOTICES

OF THE

ROYAL ASTRONOMICAL SOCIETY.

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No. 8

E. B. KNOBEL, President, in the Chair.

The Rev. James Baikie, Glenview Terrace, Barterholm, Paisley, N.B.;

John Dansken, F.S.I., 4 Eldon Terrace, Partick, Glasgow;

Henry Daniel McCarthy, 5 Promenade, Cheltenham; and

Martin Charles Sharp, M.A., 5 Portman Street, Portman Square, W.,

were balloted for and duly elected Fellows of the Society.

The following candidates were proposed for election as Fellows of the Society, the names of the proposers from personal knowledge being appended:—

John A. Brashear, Astronomical and Physical Instrument Maker, Allegheny, Pennsylvania, U.S.A. (proposed by W. H. Maw);

Walter William Bryant, Assistant, Royal Observatory, Greenwich, Seymour Cottage, Conduit Vale, Blackheath, S.E. (proposed by W. H. M. Christie);

Captain James Fisher, 7 Fenchurch Avenue, E.C. (proposed by Capt. P. Thompson);

Thomas Charlton Hudson, Assistant, Royal Observatory, Greenwich, 88 King George Street, West Greenwich, S.E. (proposed by W. H. M. Christie);

Francis R. Wardle, Banker, 43 Moorgate Street, E.C. (proposed by H. B. Chamberlin).

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Seventy-six presents were announced as having been received since the last meeting, including, amongst others,

J. Woodbridge Davis, *The Dynamics of the Sun*, presented by Mr. G. F. Chambers; *Description of the Star Camera at the Sydney Observatory*, and enlarged photograph of the region surrounding the η *Argûs* nebula, presented by Mr. H. C. Russell; *Observations of Double Stars*, part 2, and the orbit of *Iapetus*, by Asaph Hall, presented by the author; H. Jacoby, *The Rutherford photographic measures of the group of the Pleiades*, presented by the author; *First and Second Reports of the Solar Physics Committee*, presented by the Committee; *Tables de Logarithmes à huit décimales*, presented by the French War Office; S. Glasenapp, *Mesures d'étoiles doubles*, presented by the author; Two lantern slides of the region surrounding Nova *Aurigæ*, presented by the Lick Observatory; Photographs of double stars (lantern slide) to illustrate method of determining star magnitudes by photography, presented by Mr. W. E. Wilson; Photographs of the globular cluster 15 M *Pegasi*, and of the nebula H V 15, near 52 *Cygni*, presented by Mr. Roberts.

The Opposition of Mars, 1892. By E. J. Stone, M.A., F.R.S.,
Radcliffe Observer.

A circular has been recently issued from the Washington Observatory, in which a scheme is formulated for meridian observations of *Mars* from 1892, June 20, to September 23, for a redetermination of the constant of solar parallax.

The horizontal equatorial parallax of *Mars* at the opposition of 1892 reaches a limit of $23''.4$; but the planet has a considerable south declination, and this will somewhat reduce the combined parallactic displacements available from observations made at the northern and southern observatories, increase the probable errors of the observations, and render it more difficult to completely eliminate the effects of refraction errors by the observations of comparison stars than was the case in 1862 and 1877; but a result of considerable weight might probably be obtained if the co-operation of several southern and northern observatories could be secured, and the same comparison stars regularly observed at all the stations under the same instrumental conditions as the planet.

But the necessary co-operation has been rendered doubtful by the shortness of the notice given, which renders any modification of details difficult, and by the recommendation of a scheme of observation of a somewhat complicated character.

The method of determining the constant of solar parallax from meridian observations of *Mars* has always appeared to me one of the most powerful available for the purpose, and on the following grounds, viz.:—