

Secretary—Joel Stebbins.

Treasurer—Benjamin Boss.

Councilors—Ernest W. Brown, Otto Klotz, Solon I. Bailey, W. J. Hussey, Henry Norris Russell, V. M. Slipper.

The program of papers was as follows:

Variations of type in the Cepheid variables I Carinae and η Aquilae as shown by the general spectrum: SEBASTIAN ALBRECHT.

A systematic search for novae at the Harvard Observatory: S. I. BAILEY.

On the change in the period of the variable star Bailey No. 33 in the cluster M5: E. E. BARNARD.

Remeasurement of Hall's star in the Pleiades: E. E. BARNARD.

Variable stars in M 11: E. E. BARNARD.

On the vanishing of astronomical negatives: E. E. BARNARD.

Some observations of the total solar eclipse on May 29, 1919, at Cape Palmas, Liberia: L. A. BAUER.

Hypersensitizing commercial panchromatic plates: S. M. BURKA. (Introduced by C. C. KIESS.)

Some recent developments in the study of SS Cygni: LEON CAMPBELL.

The spectra of variable stars of long period: ANNIE J. CANNON.

Atmospheric refraction near the horizon: GEORGE C. COMSTOCK.

Studies of class B spectra having hydrogen emission: R. H. CURTISS.

Fluctuations in the moon's longitude in relation to meteorological variations: RALPH E. DELURY.

Apparent relation between Chinese earthquakes and California tree growths, 0-1680 A.D.: RALPH E. DELURY.

Levels of the Great Lakes in relation to numbers of sun-spots: RALPH E. DELURY.

Simultaneous spectroscopic observations of the rate of rotation in north and south solar hemispheres: RALPH E. DELURY.

The periodograph and its application to variable star periods and other problems: A. E. DOUGLASS.

On the eclipsing variables RT Persei and U Cephei: R. S. DUGAN.

Preliminary results of a comparative test of the 100-inch and 60-inch telescopes of the Mount Wilson Observatory: GEORGE E. HALE.

Rates of the standard sidereal clocks at the U. S. Naval Observatory: J. C. HAMMOND AND C. B. WATTS.

Note on the spectrum of Nova Aquilae No. 3: W. E. HARPER.

The orbit of the spectroscopic binary ι Delphini: W. E. HARPER.

The orbit of the spectroscopic binary Boss 4507: W. E. HARPER.

A desideratum in solving Kepler's problem: H. A. HOWE.

The red and infra-red arc spectra of eight elements: C. C. KIESS AND W. F. MEGGERS.

Color-index of planets: EDWARD S. KING.

Photographic observations of the Great Nebula in Orion: C. O. LAMPLAND.

Star tables good to the year 2000 for civil engineers and navigators: H. C. LORD.

Origin of the sun's heat: W. D. MACMILLAN.

False spectra produced by gratings: W. F. MEGGERS, C. C. KIESS AND F. M. WALTERS, JR.

Evidences of change in coronal structure during the eclipse of June 8, 1918: J. A. MILLER.

The masses of 32 visual binary stars: J. A. MILLER AND J. H. PITMAN.

Measures of double stars on photographs: CHARLES P. OLIVIER.

Shifting absorption at the heads of the brighter helium bands in the spectrum of γ Argus: C. D. PERRINE.

Methods of asteroid observation and reduction: GEORGE HENRY PETERS.

The great eruptive prominences of May 29 and July 15, 1919: EDISON PETTIT.

Studies in prominence characteristics: EDISON PETTIT.

The proper motions and parallaxes of 359 stars in the cluster h Persei: HANNAH STEELE PETTIT.

The spectroscopic orbits and dimensions of the eclipsing variables U Ophiuchi, RS Vulpeculae, and TW Draconis: J. S. PLASKETT.

Report on progress of work with the 72-inch telescope: J. S. PLASKETT.

Annular eclipse of the sun of 1919, November 22, as visible in the United States: WM. F. RIGGE.

Direct micrometrical observations of the sun: E. D. ROE, JR.

The spectrum of the milky way: V. M. SLIPPER.

All-American time: ELLIOTT SMITH.

Progress in photo-electric photometry: JOEL STEBBINS.

Pearce's criterion: R. M. STEWART.

The treatment of discordant observations: R. M. STEWART.

Tests of dyes for red and infra-red photography: FLORENCE J. STOCKER.

Experiments with Kapteyn's method for reducing guiding error: R. TRÜMPER AND FRANK SCHLESINGER.

Meridian circle observations of Nova Aquilae No. 3: R. H. TUCKER.

The use of semi-absolute photographic positions in double star astronomy: GEORGE VAN BIESBROECK.

Note on proper motions of certain long period variable stars: ANNE S. YOUNG AND LOUISE F. JENKINS.

Three spectroscopic binary orbits: REYNOLD K. YOUNG.

JOEL STEBBINS,
Secretary

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