exceptional daughter (the F_2 from the X-rayed female) was fertile in a second mating with an eosin-eyed miniature-winged male (the first mating was sterile) and produced one exceptional daughter (white-eyed and normal-winged). Of the five exceptional males (F_2 from the X-rayed female) two were proved to be fertile. The exceptional female (F_3 from the X-rayed female) proved fertile when mated with an eosin-eyed miniature-winged male and produced one exceptional daughter (F_4 of the X-rayed female). Since only one of the two exceptional females was fertile more data is required before it can be assumed that the exceptional females formed as a result of X-rays applied to the egg are fertile and produce further exceptions.

The experiments described confirm my earlier findings that X-rays may be made to affect the germ cells and show further that the effect produced on the first generation, so far as at present investigated, is identical with primary non-disjunction.

The writer wishes to express his indebtedness to the Research Laboratory of the General Electric Company for their continued interest in this work, to Dr. T. H. Morgan and Dr. C. B. Bridges for helpful criticism and suggestions and to Mr. O. J. Irish for technical assistance.

JAMES W. MAVOR

UNION COLLEGE,
SCHENECTADY, N. Y.

THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

REPORT OF THE SECRETARY-TREASURER OF THE PACIFIC DIVISION FOR THE CALENDAR YEAR ENDING DECEMBER 31, 1921

January 1, 1921—Cash balance		$ 847.30
Receipts:		
Received from the permanent secretary's office	$1,639.00	
Affiliated societies	125.00	
Dues and fees	520.00	
Finance committee, Berkeley meeting	98.21	
		$2,382.21
		$3,229.51
Expenditures:		
Dues remitted to permanent secretary's office	$ 293.00	
Supplies	6.58	
Salary 1921	825.00	
Salary 1920	75.00	
Office assistance	300.00	
Postage and express	41.00	
Telephone and telegraph	20.45	
Expense general	5.00	
Membership campaign	81.60	
Finance committee, Berkeley meeting	5.34	
Ukiah Observatory donation	50.00	
		$1,702.97
January 1, 1922—Cash balance		$1,526.54

BALANCE SHEET, DECEMBER 31, 1921

Assets

Equipment	$ 235.73
Cash on hand	1,526.54
	$1,762.27

Liabilities

Permanent secretary's office	$1,426.54
Investment	235.73
Sundry creditors	100.00
	$1,762.27

SUMMARY OF ANNUAL DISBURSEMENTS FOR THE YEAR 1921

Supplies	$ 6.58	
Salary	900.00	
Office assistance	300.00	
Postage and express	41.00	
Telephone and telegraph	20.45	
Expense general	5.00	
Membership campaign	81.60	
Ukiah Observatory donation	50.00	
		$1,404.63
These disbursemeents have been made from funds derived as follows:		
Finance committee, Berkeley meeting	$ 92.87	
Affiliated societies (assessments)	125.00	
Initiation fees	230.00	
Receipts from the permanent secretary's office	956.76	
		$1,404.63

COMPARATIVE STATEMENT OF RECEIPTS AND DISBURSEMENTS FOR THE YEARS 1920 AND 1921

	1920	1921
Received from the permanent secretary's office:		
Balance on account 1919	$ 750.00	
Account 1920 and 1921	1,014.00	
Account 1921-1922		$1,639.00
Received from affiliated societies	115.00	125.00
Received from new members, dues	109.00	290.00
Received from new members, initiation fees	163.00	230.00

Received from finance committee, Berkeley		92.87
Annual disbursements	1,687.42	1,404.63
New members enrolled	37	55
Total enrollment at end of year	1,000	990

W. W. SARGEANT,
Secretary-Treasurer

THE AMERICAN ASTRONOMICAL SOCIETY

THE twenty-seventh meeting of the society was held at the Sproul Observatory, Swarthmore College, Swarthmore, Pennsylvania, from December 29 to 31, 1921. This was the second time that the society had met at Swarthmore in five years, and the meeting was well attended, about sixty members and guests being present.

Social events included a reception by President and Mrs. Aydelotte, and a special program was arranged for the second evening, when the society was privileged to listen to an address by Dr. William Romaine Newbold, professor of philosophy in the University of Pennsylvania, on the subject "Evidence contained in the Voynich Manuscript that Roger Bacon possessed a Telescope." There was also an exhibit of views of the life and surroundings at some of the large observatories. Sessions for papers were held on three days.

The schedule of meetings of the society, in the near future, was announced as follows: September, 1922, Yerkes Observatory; December, 1922, Cambridge and Boston; September, 1923, Mt. Wilson Observatory; December, 1923, Vassar College.

The program of papers was as follows:

Spectroscopic notes on some variable stars: WALTER S. ADAMS and A. H. JOY.

Partial explanation, by wave-lengths, of the K-term in the B types: SEBASTIAN ALBRECHT.

Possible periodicity in mean sun-spottedness: DINSMORE ALTER.

Demonstration apparatus for descriptive astronomy class: DINSMORE ALTER.

On absolute magnitudes: BENJAMIN BOSS.

The moon's motion; a postscript: ERNEST W. BROWN.

Median parallax; a statistical method: KEIVIN BURNS.

Résumé of results bearing on the absolute magnitudes of the stars: HEBER D. CURTIS.

Changes in the spectrographic elements of Y Sagittarii: JOHN C. DUNCAN.

On the daily variation in clock corrections: W. S. EICHELBERGER and H. R. MORGAN.

A new orbit of Neptune's satellite: W. S. EICHELBERGER and ARTHUR NEWTON.

Stellar parallaxes determined at Dearborn Observatory: PHILIP FOX.

A test of two methods of measuring parallax plates: JENNIE V. FRANCE.

The use of the stereo-comparator in determining proper motions: CAROLINE E. FURNESS.

Daylight observations with a transit circle: J. C. HAMMOND.

Daily variation in clock corrections and rates: J. C. HAMMOND.

Boulengé and Aberdeen chronographs: HENRY B. HEDRICK.

Kepler's problem for the higher planetary eccentricities: HERBERT A. HOWE.

The latitude of Ukiah and the motion of the pole: WALTER D. LAMBERT.

Preliminary discussion of the correction to the constant of nutation from day and night observations in declination of α Lyræ: ELEANOR A. LAMSON and GEO. A. HILL.

The discovery of faint nebular structure around R Aquarii: C. O. LAMPLAND.

The masses of binary stars: JOHN A. MILLER and JOHN H. PITTMAN.

Comparison of McCormick trigonometric parallaxes with spectroscopic: S. A. MITCHELL.

The position of Neptune's equator: ARTHUR NEWTON.

The orbit of comet 1788 II: MARGARETTA PALMER.

On the orbital eccentricity of binary stars of very long period: HENRY NORRIS RUSSELL.

Barium and lithium in the sun: HENRY NORRIS RUSSELL and K. T. COMPTON.

Four eclipsing variables observed by Hoffmeister: BANCROFT WALKER SITTERLY.

Increased ionization over solar faculæ: CHARLES E. ST. JOHN.

The spectrum of Venus; no oxygen or water vapor lines present: CHARLES E. ST. JOHN and SETH B. NICHOLSON.

A comparison of star positions derived with the doublet with the P. G. C.: FRANK SCHLESINGER.

Report of stellar investigations: HARLOW SHAPLEY.

Differential refraction on astronomical photographs: FREDERICK SLOCUM.

Notes on variable stars: JOEL STEBBINS.

The proper-motions of 154 red stars: RALPH E. WILSON.

JOEL STEBBINS,
Secretary

URBANA, ILLINOIS.