it is unlikely that all horses in the locality would be infested and as some flies even though developing in manure from an infested horse would probably escape infection.

A more comprehensive discussion of *Habronema*, illustrated with figures, will be published at a later date, probably as a bulletin of the Bureau of Animal Industry.

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SOCIETIES AND ACADEMIES

THE AMERICAN MATHEMATICAL SOCIETY

THE one hundred and fifty-fifth regular meeting of the society was held at Columbia University on Saturday, October 28. The attendance at the two sessions was about forty, including thirty-five members. President H. B. Fine occupied the chair. The council announced the election of the following persons to membership in the society: Professor T. B. Ashcraft, Colby College; Professor Clara L. Bacon, Goucher College; Professor J. M. Davis, State University of Kentucky; Professor W. C. Eells, Whitworth College; Dr. J. L. Jones, Yale University; Professor F. C. Kent, University of Oklahoma; Professor L. C. Plant, University of Montana; Mr. R. E. Powers, Denver, Colo.; Mr. T. M. Simpson, University of Wisconsin; Professor Evan Thomas, University of Vermont; Professor H. C. Wolff, University of Wisconsin; Mr. W. A. Zehring, Purdue University. Nine applications for membership were received.

A list of nominations of officers and other members of the council, to be placed on the ballot for the annual election, was adopted. Provision was made for committees to audit the treasurer's accounts and to make arrangements for the summer meeting to be held at the University of Pennsylvania in 1912. The invitation of the University of Wisconsin to hold the summer meeting and colloquium at that university in 1913 was accepted. It was decided to change the form of the *Annual Register* of the society by omitting all mention under the personal entries of membership in other organizations. A committee was appointed to consider and report to the council a plan for placing the business of the society on a permanent basis.

The following papers were read at this meeting:

A. R. Schweitzer: "On a functional equation."

E. V. Huntington: "A new approach to the theory of relativity."

L. P. Siceloff: "Simple groups from order 2,001 to order 3,640."

H. H. Mitchell: "Determination of the quaternary linear groups by geometrical methods."

G. A. Bliss: "A new proof of the existence theorem for implicit functions."

R. E. Powers: "The tenth perfect number."

E. W. Brown: "On the summation of a certain triply infinite series."

L. L. Dines: "On the highest common factor of a system of polynomials."

R. D. Carmichael: "A generalization of Cauchy's functional equation."

R. D. Carmichael: "Fundamental properties of a reduced residue system mod n."

R. D. Carmichael: "On composite numbers P which satisfy the Fermat congruence $a^{P-1} \equiv 1 \bmod P$."

Edward Kasner: "Differential invariants of infinite order."

B. H. Camp: "Series of Laplace's functions."

N. J. Lennes: "A new proof that a Jordan curve separates a plane."

The San Francisco Section of the society also met on October 28, at the University of California. The Southwestern Section holds its fifth annual meeting at Washington University on Saturday, December 2. The annual meeting of the society for the election of officers will be held at Columbia University on December 27–28. The Chicago Section will also meet in the Christmas holidays.

F. N. COLE,
Secretary

THE AMERICAN PHILOSOPHICAL SOCIETY

Factors affecting Changes in Body Weight: FRANCIS G. BENEDICT.

The normal human body is continually undergoing changes in weight, gradualllly losing weight between meals, and increasing it when food is taken. Very great losses incidental to excessive muscular exercise are chiefly due to variations in the water content of the body. By means of experiments with the respiration calorimeter, it has been shown that a change from a diet with a preponderance of carbohydrates to one with a preponderance of fat may cause a loss in weight amounting to two pounds per diem for three days. Experiments made with diabetics also show large changes, chiefly due to the retention or the loss of water. The gains or losses of body material, chiefly fat, are especially emphasized.