SOCIETIES AND ACADEMIES

THE AMERICAN SOCIETY OF MAMMALOGISTS

THE eleventh annual meeting of the American Society of Mammalogists was held at the Museum of Zoology, University of Michigan, Ann Arbor, Michigan, from April 9 to 13, 1929, with approximately sixty members, besides many visitors, in attendance. During the three days that were devoted to the presentation of papers there were thirty-eight items presented, including lectures and moving pictures.

During the evening of April 10 the Museum of Zoology tendered the society, together with members of the Society of Ichthyologists and Herpetologists, a reception, preceded by an inspection of the museum, its collections and exhibits. The morning of April 11 was devoted to a program of mammalian genetics arranged by Dr. Clarence C. Little, and in the afternoon, one on mammalian parasitology under the direction of Professor G. R. La Rue. During the evening members and their guests attended the annual dinner of the society, the speaker of the evening being the retiring president, Dr. Glover M. Allen.

The program of papers was concluded the evening of April 12 by an illustrated lecture entitled "A Cross-section through the Sudan," by H. E. Anthony, and the following morning was devoted to a tour of the university.

At the directors' and business meeting the following officers of the society were elected for the ensuing year: *President,* Witmer Stone; *vice-presidents,* T. S. Palmer and M. W. Lyon, Jr.; *recording secretary,* H. H. Lane; *corresponding secretary,* A. Brazier Howell; *treasurer,* A. J. Poole, and *editor,* H. H. T. Jackson.

Formal announcement was for the first time made of the completion of the fund that has been raised in commemoration of Joel Asaph Allen. This fund of ten thousand dollars was raised through the able efforts of a committee consisting of Madison Grant, *chairman,* Henry Fairfield Osborn, Childs Frick, George Bird Grinnell and Harold E. Anthony. At this meeting the fund was officially entrusted to the society and a rising vote of thanks was tendered to the committee in token of its successful efforts. The sum will be added to other invested funds of the society and the interest used to defray the expenses of publishing one number per year of the *Journal of Mammalogy* to be designated as the Allen Memorial Number.

The meeting for 1930 will be held, probably during April, at the American Museum of Natural History, New York City.

A. BRAZIER HOWELL,
Corresponding Secretary

SCIENTIFIC APPARATUS AND LABORATORY METHODS

A SIMPLIFIED DIGITAL SPHYGMOGRAPH

MANY mechanical devices have been adapted to the recording of the pulse, and some of these have yielded excellent results in the hands of experienced workers. However, when elementary students are confronted with the task of securing records from instruments requiring skilful manipulation and adjustments the efforts are not always encouraging. Even students in advanced classes experience some difficulty when the Dudgeon type sphygmograph is placed in their hands. The Tambour type is perhaps involved in less delicate adjustments but because of extrinsic factors is not all that might be wished. For some years the writer has been using a comparatively simple device which has yielded excellent results and because of its ease of assemblage and its freedom from delicate adjustments is suited to student use generally. In principle it revives the old digital sphygmograph designed by Laularie which was put upon the market in France by Verdin. The chief virtues of the apparatus here described are that it is "foolproof," is easy to assemble, and is inexpensive since it appropriates the Harvard pieces found at hand in most laboratories.

A glance at the accompanying figures will disclose the essential mechanical principles of two levers in series mounted upon typical Harvard adjustable iron

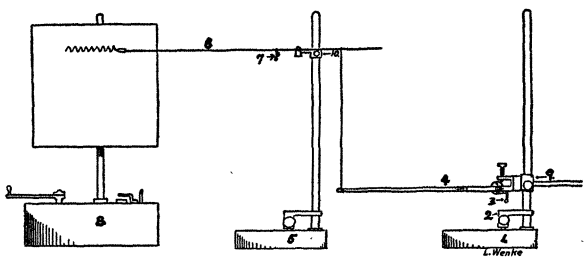

FIG. 1. Detail Assemblage of Digital Sphygmograph.

1 Adjustable Stand	6 Heart Lever Arm
2 Adjusting Screw Arm	7 Shot Counterpoise
3 Nail Pad	8 Harvard Kymograph
4 Muscle Lever Arm	9 and 10 Double Clamp
5 Adjustable Stand	

stands. On stand (1) is a Harvard light muscle lever, with a small piece of No. 14 copper wire looped and soldered to the lever in such a way as to protrude backward and downward below the fulcrum to constitute the nail pad (3). The long lever arm (4) will be recognized as the usual light aluminum writing point which mounted edgeways gives stiffness for the silk thread attachment at its extreme end. A light heart lever of Harvard type is mounted on the second standard (5), with its long aluminum rod supporting a writing point. The silk thread spans the space and connects the long arm of one lever with the short arm of the other, and by adjustment the appropriate

amplification of the writing point is effected. After some experimenting two little BB shot split and mounted on silk thread in the usual way (7) were found effective counterpoises. These are held after adjustment by a smear of colophonium wax placed over the loop.

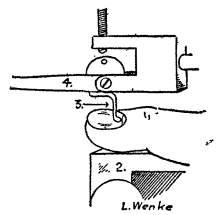

FIG. 2. Finger Placement and Dispatching Lever.
2 Adjusting arm for finger support
3 Nail Pad
4 Lever Arm

Preliminary to taking records the student acting as subject is seated at the laboratory table in such a position that the right forearm rests comfortably upon the table. The ball of the finger (preferably the index finger although any finger will serve) is slipped up on the adjusting screw arm (2), the thumb then rests comfortably on the base of the stand and the other three fingers are flexed and rest naturally upon the table under the palm. The double clamp (9) carrying the dispatching lever (4) can then be lowered so that nail pad (3) will press gently upon the fingernail. By adjusting the little counterpoise weights (7), just the proper pressure can be made to impinge upon the nail so that the finger will throb at each heart beat. After a few minutes when complete muscular relaxation is attained the throbs become more and more pronounced, and with a little experience excellent records showing all phases of typical heart cycles are obtained. It is obvious that if more weight is needed to accentuate the throb, the little lead weights should be moved outwards on the lever arm (6). It is also clear that if the throb in the

FIG. 3. Typical Sphygmogram.
Note the sharp amplitude, well-defined dicrotic notch with pre- and post-dicrotic phases in most instances.

finger needs to be amplified it is only necessary to reduce the length of the short arm of the writing lever by slipping the silk thread nearer the fulcrum at (10). By making these adjustments it has been possible to obtain excellent records of considerable amplitude on the smoked kymograph drum (8).

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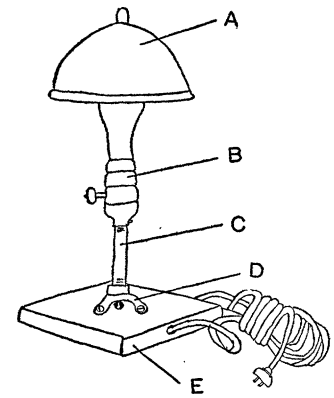
AN ECONOMICAL LABORATORY TABLE LIGHT

A VERY satisfactory table lamp for microscopic work in elementary courses in biology may be made at a small fraction of the cost of such lamps as sold by the regular dealers. The materials, with the exception of the brass shade, may be bought in any hardware store, and may be assembled in half an hour by a janitor or student assistant. The appearance of the finished product, as shown in the figure, is quite good.



The base, *E*, is a wooden block about 6 x 6 x 1 inches in size, with a one-inch hole through the exact center, under the column of the lamp, a quarter-inch hole running from the center of one edge of the base to the central hole; this makes it easy to run the flexible cord, which may be of any desired length, to the base of the socket, *B*. The switch-socket is screwed to the end of a 3 x 5/8 inch gas-pipe "nipple," *C*, which, in turn, is attached to the base, directly over the central hole, by what the electricians call a "crow-foot," *D*, used by them to attach hanging lights to ceilings.

An ordinary inside-ground bulb gives very satisfactory results, though a "daylight" glass bulb would, of course, be better.

The brass shade, *A*, keeps the light out of the student's eyes. The base and iron-work may be painted with black enamel paint or finished in any way desired.

The cost of the outfit is about as follows: brass shade, .45; nipple, .05; crow-foot, .05; switch-socket, .20; 8 ft. flexible cord, .20; plug, .05; base and paint, 05; *total*, $1.05, not including bulb.

This type of lamp has an advantage over the usual type of microscope lamp in that it not only illuminates the microscopic object but also gives a good light upon the student's note-book. It is light and compact and is easily removed from the table when not needed.

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