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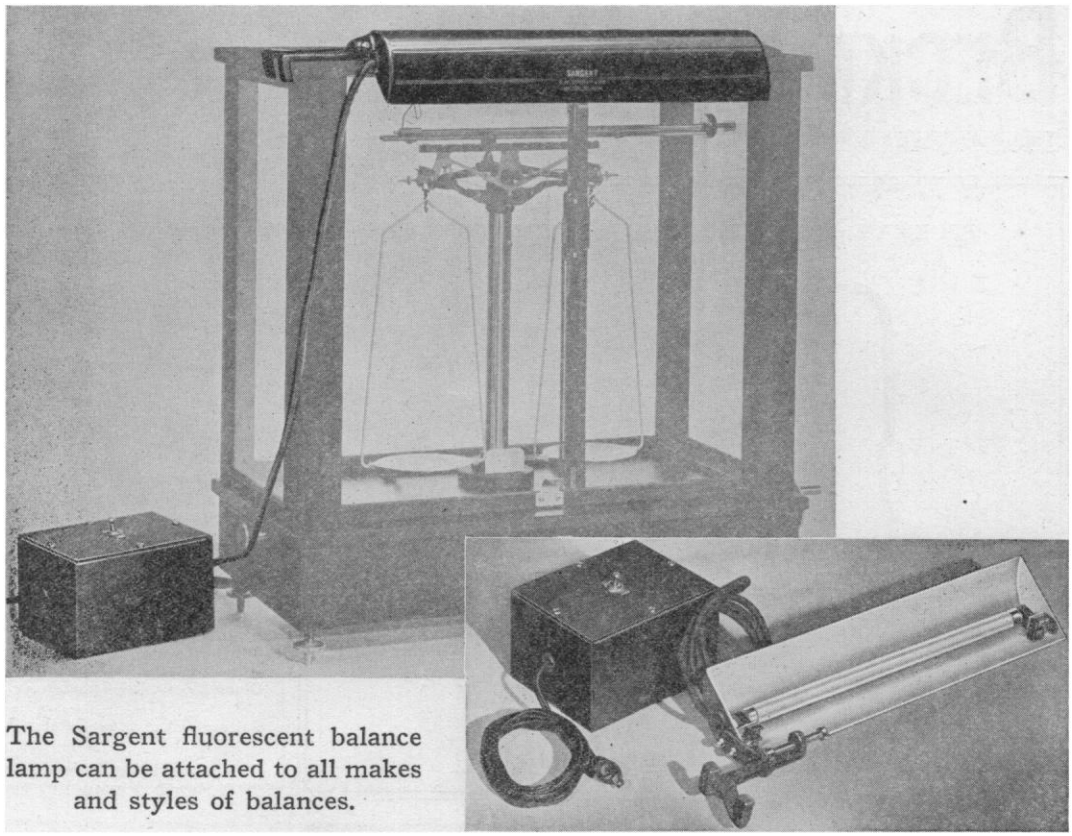

The Sargent fluorescent balance lamp can be attached to all makes and styles of balances.

Directed Frontal Illumination

Mounted at the front of the balance case, the *parabolic reflector* directs all light over the entire working area of the balance. In contrast to customary overhead methods of illumination, light is directed through the front door to uniformly illuminate beam, chain scale, pointer index and pans. By this arrangement, the light has a path to all these parts uninterrupted by the balance mechanism, so eliminating objectionable shadows and poorly lighted areas.

The lamp is rigidly supported by a claw-like clamp which canot mar the case finish, and when in position permits free movement of the sliding door. The weight of the reflector is greatly reduced by making a separate unit of the auxiliary so that it can be placed on the laboratory bench close to the balance.

The *parabolic reflector* is a completely welded sheet metal unit, having a dark blue porcelain enamel finish on the outside surface and a white porcelain enamel finish on the inside. The G. E. fluorescent tube supplied with the lamp produces approximately 750 hours of glareless, efficient light of daylight quality.

S-3820 Balance Lamp, Fluorescent, Sargent. Complete with No. S-44285. T-5 fluorescent tube **11.50**

S-44285 Fluorescent Tube, T-5, 8 watts. For replacement. Each **1.10**

E. H. SARGENT & CO.

SCIENTIFIC LABORATORY SUPPLIES

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Following the recent announcement of crystalline biotin (methyl ester), Research Laboratories of S.M.A. Corporation now offers crystalline biotin (free acid).

Prepared by hydrolysis of the methyl ester and supplied as a solution in distilled water, biotin (free acid) may have definite advantages in certain instances over the methyl ester previously available. It is supplied in 1 ml. ampuls each containing 25 micrograms.

Solution Biotin (Free Acid)—25 Micrograms in 1 ml.

1 Ampul $4.00

Because of the widespread interest in biotin and the limited supply of crystalline material immediately available, orders for biotin (free acid) will be restricted to 3 ampuls.

Solution Biotin (Methyl Ester)—25 Micrograms in 1 ml.

1 Ampul . . . . . $ 3.50
3 Ampuls 10.00
12 Ampuls 35.00

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RESEARCH LABORATORIES · S. M. A. CORPORATION
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THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

PRELIMINARY ANNOUNCEMENT OF THE DALLAS MEETING

Edited by Dr. F. R. MOULTON

PERMANENT SECRETARY

FROM next December 29 to January 3, inclusive, the association will hold its one hundred tenth meeting in Dallas, Texas. The Southwestern Division of the association and the Texas Academy of Science are joining with the association to make the meeting a notable scientific event in the Southwest. Fourteen of the fifteen sections of the association and two subsections will present a program, a number of which will be comprehensive symposia on subjects of current scientific importance. At these sessions the chairman of the respective sections will deliver their addresses as retiring vice-presidents of the association. In addition, thirty affiliated and associated societies and several local Texas societies, besides numerous educational institutions, are joining in the numerous programs that have been organized.

Perhaps the prospects for the meeting in Dallas can be made clear most easily by comparing a few statistics pertaining to it with those of other meetings held in southern cities. Five previous annual meetings have been held in the South: New Orleans, 1905–06; Atlanta, 1913–14; Nashville, 1927; New Orleans, 1931–32; Richmond, 1938–39. In the following table the number of papers that will be presented at Dallas is

As a practical example, in the graphic calculation of the results of routine biological assays of the all-or-none type it was found convenient to plot all such results on a graph in which each x or log dose unit was 50 cm long and each y or probit unit was 5 cm long. Therefore, $R = 50/5 = 10$. For making the scale a simple table like that below was constructed. In the

TABLE I

Slope or b	Slope/R or tan θ	θ in degrees
1	0.1	5.72
2	0.2	11.32
3	0.3	16.70
.	.	.
.	.	.
60	6.0	80.53

first column a series of consecutive slope figures, such as one may expect to encounter, was written down. The second column, giving the values of the tan θ was calculated by substituting the corresponding slope figures in the equation $\tan \theta = b/10$. The values of θ were then obtained from a table of tangents, and for convenience the minutes were converted into decimal fractions of degrees by dividing by 60. To mark off the actual divisions on the scale, select a point as the angle zero on a piece of polar coordinate paper which is divided into 360 degrees, and mark off each slope value at the proper number of degrees from zero, using the relationship between the slope values and the corresponding angles as given in the first and last columns of the table. For example, at a distance of 16.7° from zero make a mark corresponding to the slope 3.

This particular scale may be used with any assay providing that on the graph, each x unit (log dose) is 10 times as long as each y unit (cc, gm, probit, etc.). For any graph in which R is not 10 the size of the scale divisions will be different.

To use this protractor-like scale, place the center of the circle of which the slope scale is an arc at the intersection of the dose-response curve with the x axis and let the zero of the scale also fall on the x axis. The slope may be read directly from the slope scale at the point at which it is intersected by the straight-line dose-response curve. In the figure, the scale shows that the slope is 10.

A complete graphic treatment of the Bliss[1] method for handling the all-or-none type of data will be published in the near future.

EDWIN J. DEBEER

THE EXPERIMENTAL RESEARCH LABORATORIES,
BURROUGHS WELLCOME & CO., U. S. A.,
TUCKAHOE, N. Y.

MODIFIED HYDRAULIC METHOD FOR REMOVING PLUNGERS FROM "FROZEN" SYRINGES

A METHOD similar to the one described recently by McCoord in SCIENCE, volume 94, page 170, has been used by us for several years to remove the plungers of "frozen" syringes. An additional simple device which we use makes the method more convenient and foolproof. We realize that this modification may already be familiar to some, but feel that since the problem is such a common one in clinical laboratories, any additional improvement is worthy of publicity.

The drawing (Fig. 1) illustrates the method. The

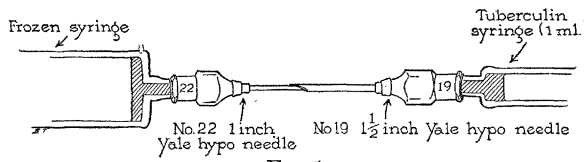

FIG. 1.

device referred to consists of a number 22 (one inch) Yale hypodermic needle telescoped into a number 19 (one and one-half inch) Yale hypodermic needle so as to make a tight connection. Other tight-fitting combinations of needles may be used and, if desired, the connection may be soldered, although we have not found this necessary. By attaching one end of the device to the "frozen" syringe and the other to a tuberculin syringe filled with water, enough hydraulic pressure can be developed by exerting force on the plunger of the tuberculin syringe to free the barrel. The desired result is almost always attained. The device can be made in a few minutes and can be kept on hand for future use which, in our experience, is frequent.

MILAN NOVAK

COLLEGES OF MEDICINE,
DENTISTRY AND PHARMACY,
UNIVERSITY OF ILLINOIS

BOOKS RECEIVED

HOLZINGER, KARL J. and HARRY H. HARMAN. *Factor Analysis; A Synthesis of Factorial Methods.* Pp. xii + 417. University of Chicago Press. $5.00.

ROY, SHARAT K. *The Upper Ordovician Fauna of Frobisher Bay, Baffin Land.* Pp. 212. Illustrated. Field Museum of Natural History. $3.50.

SOROKIN, PITIRIM A. *The Crisis of Our Age.* Pp. 338. Illustrated. Dutton. $3.50.

WHITING, JOHN W. M. *Becoming a Kwoma; Teaching and Learning in a New Guinea Tribe.* Pp. xix + 226. Yale University Press. $2.75.

YOE, JOHN H. and LANDON A. SARVER. *Organic Analytical Reagents.* Pp. ix + 339. Wiley. $4.00.

ZECHMEISTER, L. and L. CHOLNOKY. *Principles and Practice of Chromatography.* Pp. xviii + 362. 74 figures. Wiley. $5.00.