SCIENCE

VOL. 98 FRIDAY, JULY 30, 1943 No. 2535

SCIENCE: A Weekly Journal devoted to the Advancement of Science, edited by J. MCKEEN CATTELL; WARE CATTELL, assistant editor. Published every Friday by

THE SCIENCE PRESS

Lancaster, Pennsylvania

Annual Subscription, $6.00 Single Copies, 15 Cts.

SCIENCE is the official organ of the American Association for the Advancement of Science. Information regarding membership in the Association may be secured from the office of the permanent secretary in the Smithsonian Institution Building, Washington, D. C.

ORGANIZATION OF AMERICAN SCIENTISTS FOR THE WAR.[1] II

By Dr. KARL T. COMPTON

PRESIDENT, MASSACHUSETTS INSTITUTE OF TECHNOLOGY

WAR-TIME SCIENTIFIC ORGANIZATION

In spite of the apparently complete peace-time organization which I have just described, it has always been our experience, in the time of great emergency, that it appears advisable to establish temporary new agencies to deal particularly with the emergency. For example, I happened to be attached to one of these temporary agencies during the last war and I mention the matter not only by way of illustration but also because it will enable me to relate an anecdote about your late distinguished colleague, then Sir Ernest Rutherford.

This agency was the Research Information Service, set up jointly by our Military Intelligence, Naval Intelligence and Council of National Defense, with offices in Washington, London, Paris and Rome. The function of these offices was essentially the same as that of the scientific liaison offices which have been operating so effectively between units of the British Commonwealth and the United States during the present war.

The head of the Research Information Service in London was the late Professor Bumstead, whom some of you doubtless remember. I was attached to the Paris office and happened to be temporarily in charge during the time when an allied conference on submarine detection was arranged in Paris under the auspices of this office.

One of the delegates from Great Britain was Sir Ernest Rutherford, who had been collaborating closely with the French physicist, Paul Langevin, in the development of underwater supersonic devices. The day

[1] Pilgrim Trust Lecture, under the auspices of the Royal Society of London, May 20, 1943.

vacuum pump powered with an electric motor is available to produce the decompression the apparatus can be used on the hospital wards for clinical investigation. If used in the laboratory for animal experimentation a filter pump, as shown in the figure, connected to the water line will be found quite satisfactory. A small vacuum tank may be included in the system to take care of any changes in pressure due to pressure changes in the water line.

R. A. WAUD
H. G. SKINNER

DEPARTMENT OF PHARMACOLOGY,
UNIVERSITY OF WESTERN ONTARIO
MEDICAL SCHOOL

A SIMPLIFIED ALL-PURPOSE GRAVITY WRITING LEVER

SINCE describing an inexpensive gravity writing lever for respiratory tambours[1] we have simplified and extended the usefulness of the apparatus. The principle of a carrier holding a writing arm in such a manner that gravity will cause this arm to contact the drum is the same as previously described. The difference is that the carrier has been made smaller and lighter in weight and thus applicable to heart and muscle levers. The simplified carrier is made from the ordinary aluminum writing arm wire. It is illustrated in the figure and is easily made as follows:

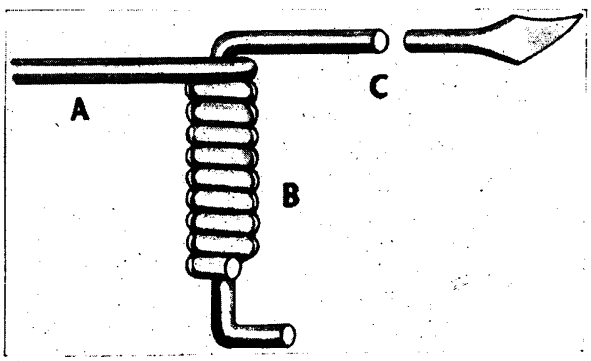

FIG. 1.

A close spiral about one-half inch in length is wound at one end of a four- or five-inch piece of the wire. The spiral is then bent at a right angle to the rest of the wire (A). About three-fourths inch of a second wire (C) is bent to nearly a right angle. The short arm of this right angle is inserted longitudinally through the spiral and its protruding end bent to hold it in place. Joined in this fashion the spiral and the short arm of the second wire make a hinge (B) which permits the long arm of the wire (C) to act with gravity and fall against the drum. The straight arm of the first wire (A) is inserted in the spindle in the usual manner. The sensitivity of the lever may be varied by the amount of tilt given the hinge (B) and by changes in the weight and length of the second wire (C). This lever is as satisfactory as many complicated models now on the market and can be made by students in a few minutes from their old levers.

[1] SCIENCE, 96: 590, 1942.

H. R. HULPIEU

INDIANA UNIVERSITY SCHOOL OF MEDICINE,
INDIANAPOLIS

A SIMPLE TIMING DEVICE FOR SPEAKERS

EVERY one attending conventions, such as those of our scientific associations, has been impressed by the necessity of controlling the time used by the speakers on crowded programs. One speaker running much over the 12, 15 or 30 minutes of time allotted to him may considerably disrupt a morning or afternoon program. The chairman naturally hesitates out of courtesy to the speaker brusquely to interrupt him and may merely announce "Time" or sharply tap with a pencil when his time is up. This introduces a personal element which may be irritating to some.

While presiding over the recent meetings of the North Dakota Academy of Science I used a photographic interval timer clock which several speakers afterwards commended. The speakers were allotted 15 minutes and I announced several times that the clock would be set to "tinkle" at 13 minutes, allowing two minutes to finish. When the speaker commenced to talk the clock was set and was thereafter ignored. No further personal element was interjected and the alarm went off impersonally for all. The "tinkle" was subdued by placing the clock under a hat.

NEAL A. WEBER

UNIVERSITY OF NORTH DAKOTA

BOOKS RECEIVED

FALES, HAROLD A. and FREDERIC KENNY. *Inorganic Qualitative Analysis.* Illustrated. Pp. ix + 237. D. Appleton-Century. $2.65.

HAYS, F. A. and G. T. KLEIN. *Poultry Breeding Applied.* Illustrated. Pp. 192. Poultry-Dairy Publishing Co.

HEALD, FREDERICK D. *Introduction to Plant Pathology.* Illustrated. Pp. xii + 603. McGraw-Hill Book Co. $4.00.

JEAN, FRANK CONVERT and OTHERS. *Man and His Physical Universe.* Illustrated. Pp. viii + 607. Ginn and Company. $3.25.

LINDSAY, ROBERT BRUCE. *Handbook of Elementary Physics.* Illustrated. Pp. xv + 382. The Dryden Press. $2.25.

RUPPERT, KARL and JOHN H. DENISON, JR. *Archaeological Reconnaissance in Campeche, Quintana Roo, and Peten.* Illustrated. Pp. vii + 156. Carnegie Institution of Washington. $4.25, paper cover; $4.75, cloth binding.

SCHMIDT, CARL L. A. *Addendum to the Chemistry of the Amino Acids and Proteins.* Illustrated. Pp. xii + 1290. Charles C Thomas. $5.00.

SHERMAN, HENRY C. *The Science of Nutrition.* Pp. x + 253. Columbia University Press. $2.75.

STILES, KARL A. *Laboratory Explorations in General Zoology.* Illustrated. Pp. x + 265. Macmillan. $2.50.

WINSLOW, CHARLES-EDWARD A. *The Conquest of Epidemic Disease.* Pp. xii + 411. Princeton University. $4.50.