



SCIENCE NEWS-LETTER

The Weekly Summary of Current Science
A SCIENCE SERVICE PUBLICATION

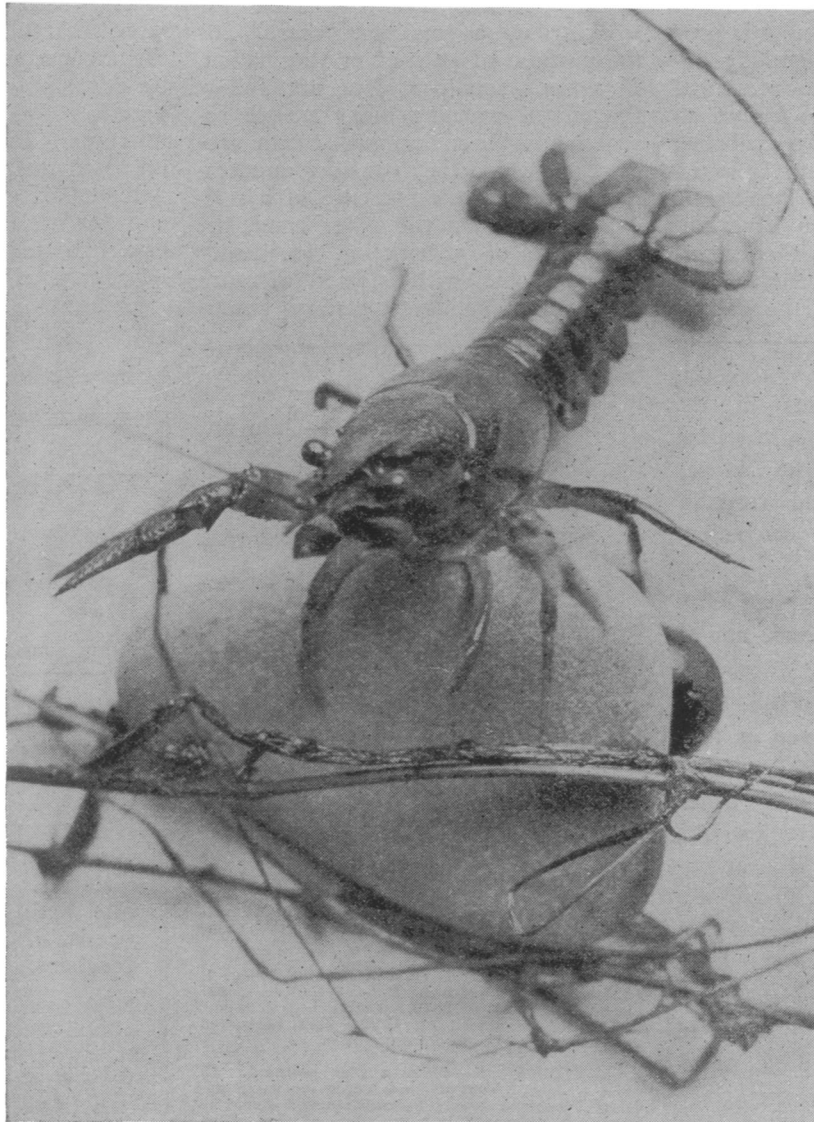


\$5 a year

15c a copy



Sept. 15, 1928



ON THE ALERT

Crayfish Poised Ready for Backward Flight

Vol. XIV

No. 388

An Indorsed Contribution to Science The New FFSA Microscope

Contains six features which have been endorsed by the satisfied users of over 200,000 Bausch & Lomb microscopes. It represents the knowledge gleaned from fifty-five years of microscope experience and three-quarters of a century of manufacturing precision lenses.

Six Advantageous Features

1. The more refined requirements of lens system formulae are satisfied by standardized objective mountings with threadless cells.
2. The fixed tube length makes for the best performance of objectives.
3. The Abbe Condenser has provision for the use of a dark-field lens element.
4. The patented fine adjustment assures long service through small number of parts and use of Butress thread, to absorb lost motion, with twelve teeth in driving contact.
5. The Substage actuated by rack and pinion provides for long range movement.
6. The Simplified Mechanical Stage with rack and pinion movements at right angles has a range in one direction of three inches, in the other one inch and accommodates 3 x 2 inch slides. Stage racks completely off the microscope.

Further information will gladly be furnished on request

**Bausch & Lomb
Optical Company**
697 St. Paul St.
Rochester, N. Y.



Botanists

Are you interested in *prepared microscope slides* and *preserved plants*?

....

Are you satisfied with the materials you are now receiving?

....

Triarch botanical products are prepared by a teaching and research botanist who understands your problems.



A Post-Card Request will bring you my Catalog.

Geo. H. Conant

Botanical Laboratory

University of Pennsylvania

Philadelphia, Pa.

To Your Health

Science has vastly increased the average span of years. Science has rendered many a dread scourge—smallpox, diphtheria, tetanus, are examples—all but innocuous.

Science tends to prevent disease and thus to preserve the greatest of all boons, good health.

Stay well. Health is wealth and happiness.

Some books on personal hygiene which are full of information on how to keep well, or how to make the best of ill health.

LIGHT AND HEALTH: By M. LUCKIESH and A. J. PACINI. We all know, in a general way, how important sunlight is. This book in a most readable way, tells just how to make the most of it, what the effect of light or its absence is on the various parts of the body; how climate affects our physical and mental well-being. Non-technical. Fully illustrated. Price \$5.00.

NUTRITION: By WALTER H. EDDY. A brand-new book on what to buy, what to eat. Diet is all-important. Correct eating means much in correct living. A splendid book by an acknowledged authority and free from food-fad. Price \$2.50.

HYGIENE OF SEX: By MAX VON GRUBER, one of the world's outstanding health authorities. A simple, candid book without sensuous appeal. Price \$1.50.

PROBLEMS OF HUMAN REPRODUCTION: By PAUL POPENOE, whose books on marriage have earned international reputation. A simple survey of what is known to scientists about questions on which the public are woefully misinformed. Price \$2.50.

REST AND OTHER THINGS: By ALLEN K. KRAUSE. We seldom realize what a potent remedy we have in *rest*. This little book relates specifically to tuberculosis, but its information may be readily applied to other disorders. Price \$1.50.

ESSENTIALS OF PSYCHIATRY: By GEORGE W. HENRY. Sometimes we overlook the importance of *mental* hygiene. This book tells concisely just what scientists have learned about the workings of the mind. A study of it will help in avoiding many pitfalls we are all prone to fall into. Price \$3.00.

FIGHTERS OF FATE: By J. A. MYERS. Brief biographical sketches of men and women who have achieved great success despite the handicap of ill-health. An inspiration to the well, a beacon of encouragement for the ill. Sketches are included of Roger Babson, Poganini, Christy Mathewson, Eugene O'Neill, Cecil Rhodes and twenty others. Price \$3.00.

The Williams and Wilkins Company

Publishers of Scientific Books and Periodicals

MT. ROYAL AND GUILFORD AVENUES
BALTIMORE, MD., U. S. A.

JUST OFF THE PRESS

A NEW BIOLOGY SUPPLY CATALOG

This new MILVAY Biological Supply Catalog No. 40S is the most complete publication of its kind available. Its 192 pages are profusely illustrated and all materials included are fully described.

In it will be found complete listings of the following:

Preserved Botanical Materials
Preserved Zoological Materials
Museum Preparations
(botany and zoology)
Osteology Preparations (all classes)
Spalteholz Preparations
Microscopic Slides, complete listings
Charts and Models
Microscopes, Microtomes, etc.
Specimen Jars
Bacteria Counting Apparatus
All Biological Apparatus
Aquariums
Lantern Slides

If you have not already received this catalog, fill out the following, mail to us, and No. 40S MILVAY Biological Supply Catalog will be forwarded to you immediately without charge.

Chicago Apparatus Co.
1735 No. Ashland Ave.
Chicago, Illinois.

Gentlemen:
Please send me a copy of your New
MILVAY Biological Supply Catalog
No. 40S.

Name _____ Dept. _____
Institution _____
City _____ State _____

CHICAGO APPARATUS COMPANY

1735-43 No. Ashland Ave.
Chicago Illinois

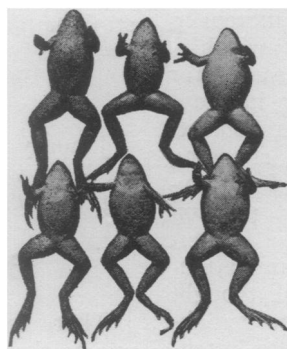
*MILVAY Scientific Equipment Costs
No More Than Ordinary Laboratory
Supplies*

Laboratory Work in Biology-Botany-Zoology

We are ready to give you twenty-four-hour service in the shipping of laboratory supplies for your science courses.

The Turtox High School Biology Catalog lists preserved and living plants and animals, microscope slides, lantern slides, charts, models, skeletons, life histories, instruments and apparatus for beginning courses in Agriculture, Botany, Biology, Zoology, General Science, Physiology, Bacteriology and Hygiene.

A postal request will bring your copy



Frogs, for dissection

Ask for your copy of the

Turtox High School Biology Catalog

Mailed upon request to
Teachers and Educational Officials



The Sign of the Turtox Pledges Absolute Satisfaction

General Biological Supply House (INCORPORATED)

761-763 East Sixty-ninth Place
Chicago Illinois

JUST READY

Meredith

"The Health of Youth"

By FLORENCE L. MEREDITH,
B. Sc. Ed., M. D., *Professor of
Hygiene in Tufts College; Lec-
turer on Hygiene in Simmons
College, in collaboration with
S. R. POWERS, M. D., Professor
of Natural Science in Teachers
College, Columbia University.*

THIS textbook of hygiene presents the subject in an interesting and constructive manner, stressing the pleasure, pride, profit and privilege which is derived from health.

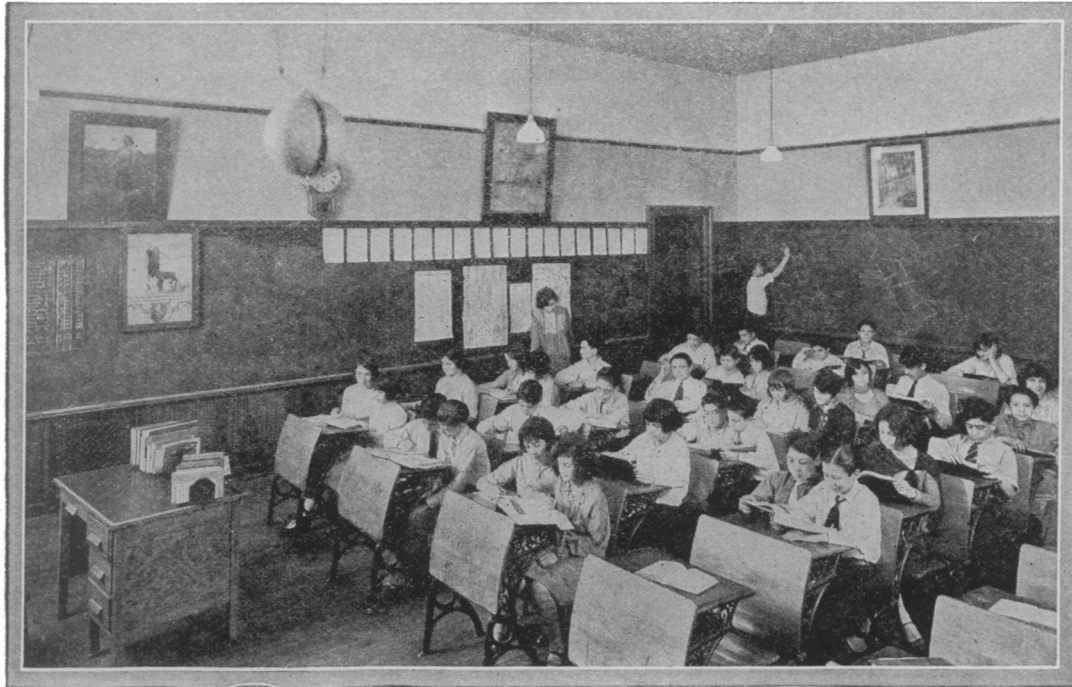
It is written for boys and girls of about thirteen to fifteen years of age. It presents the subject in a manner thoroughly understandable to them while avoiding carefully any expression of attitude which might be reminiscent to them of a life period which they are leaving and about which they are apt to be sensitive.

The book is not dogmatic, contains no health hobbies; is not spectacular; and, although written in a very simple and interesting style, is thoughtfully, clearly, accurately and scientifically presented. Careful attention has been given to vocabulary and to other pedagogical factors. It is thoroughly and usefully illustrated.

High School Grade—Published 1928
Cloth, \$1.60

P. Blakiston's Son & Co.
1012 Walnut St., Philadelphia, Pa.

COMPTON'S—IN THE CLASSROOMS OF THE NATION!



Above—a photograph of grade 7 A—Goodrich School, Chicago, Ill. Miss Florence Evans is the teacher. The class, as usual, is using Compton's in the preparation of its geography lesson.

MISS EVELYN COLBY
Principal
The Goodrich School,
Chicago, Illinois.



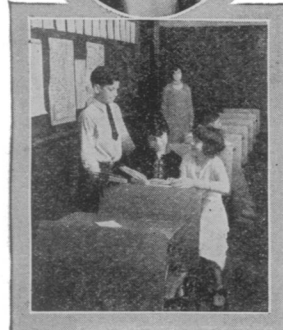
"I have always concurred with modern textbook authors and prominent educational authorities in the opinion that a small, quick-acting class-library is essential equipment for every classroom, regardless of how complete the general school library. In my own school I have made it a part of my regular program to install such a library in every classroom from the 4th grade up. In each of these libraries I have placed a set of Compton's Pictured Encyclopedia, because after careful tests I have found it accurate, comprehensive, thoroughly attractive to the pupils, and the most modern encyclopedia available." — Miss Evelyn Colby, Principal.

"I have come to look upon Compton's as just as important and indispensable a part of our regular classroom equipment as the text books. I use it daily in my class work; my classes use it in the study of every subject. With it, the hundred and one questions and countless references that arise in the preparation of any lesson can be looked up immediately while the subject at hand is still fresh in the pupil's mind. With Compton's in the class-library lesson preparation can be complete."—Miss Florence Evans, Teacher

The Growing Need for Compton's Now Nationally Recognized

THE classroom photographed above is typical of the hourly procedure in thousands of modern schoolrooms. The class using Compton's Pictured Encyclopedia from the class-library to make a lesson presentation complete.

No matter how exhaustive a textbook may be, there are still countless references to other volumes to amplify the facts the textbook gives. In Compton's all of these amplifying facts are presented in simple phraseology, accurate, interesting, completely illustrated, and immediately accessible. With Compton's in the class-library these references can be read at once.



Another typical scene in a Compton's equipped school. The attraction of Compton's carries over into recess time. Alex, Mary and Josie are using their recess period to read its fascinating pages.

LITERATURE AND LIVING, BOOK 2
By Rollo E. Lyman and Howard C. Hill,

Laboratory School of the University of Chicago. Published by Charles Scribner's Sons.

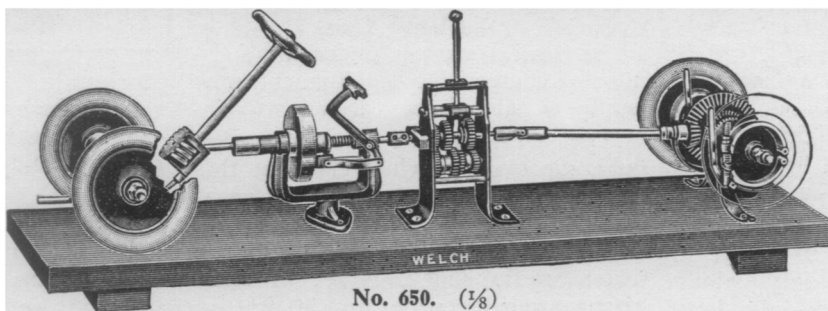
These authors advise a class-library. For this library they list ten books including Compton's Pictured Encyclopedia with the following recommendation: "These books have been selected because of their interest and value as supplementary reading. They are referred to repeatedly by title and page throughout this volume. It is recommended that at least one copy of each book be purchased for class use."

Every reference that may be sought, every fact of world-wide progress—Science, History, Geography, Human Achievement—all is up-to-the-minute in Compton's, recognized as the ideal school encyclopedia by all who have used it. Its place in the school library is one of primary importance. Leading educators and textbook authors urge a class-library for time saving and immediate, undelayed reference use. And, foremost in this class-library, Compton's Pictured Encyclopedia. Compton's in the classroom inspires love of learning, makes teaching easier and more successful for the teacher, makes learning interesting and more attractive to the class.

Start your class library with Compton's—a complete economical library of modern text and illustration in itself. Sample pages and prices sent free on request. Write us today.

F. E. COMPTON & COMPANY · Publishers · 1000 North Dearborn Street · Chicago

AUTOMOBILE MECHANICS' MODELS



Light---
Portable---
Cut-away

A necessity for teaching the details of construction and operation of an automobile.

Make auto mechanics a real vital chapter in the Physics or General Science course.

The following models are available:

Automobile Engine Model—showing cut away section of all working parts.

Steering Gear—with the worm gear application.

Clutch—showing the friction principle.

Distributor, or Timer—with miniature lights to flash at “firing” point.

Universal Joint—showing how power is transmitted in a flexible system.

Gear Shift—showing actual operation of shifting gears.

Differential and Brakes—with beveled differential gears, and both inside expanding and outside contracting brakes.

A Sign of Quality **WELCH** *A Mark of Service*
QUALITY SERVICE

W. M. Welch Manufacturing Company

1516 Orleans Street

Manufacturers, Importers and Exporters of
Scientific Apparatus and School Supplies

Chicago, Ill., U. S. A.

Schmidt & Haensch Optical
Instruments

...

Spindler & Hoyer
Seismographs

...

Kahlbaum Reagent Chemicals

...

Dr. Gruebler's Microscopical
Stains

...

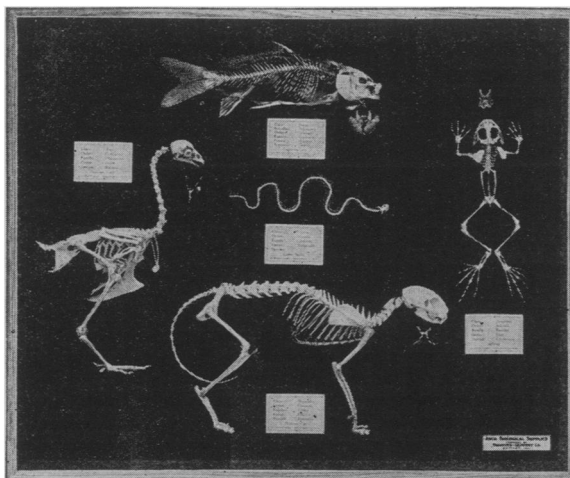
*Sole Distributors for the
United States*

AKATOS, INC.

114 LIBERTY STREET,
NEW YORK, N. Y.

High Grade Prepared Skeletons

At Favorable Prices
Satisfaction Guaranteed



Of the extensive line that we prepare and carry in stock, the following select items are favorites with High School and College instructors:

Z015 Squalus, cartilaginous, in museum jar	\$25.00
Z050 Necturus on base	11.00
Z061 Bull Frog in glass	12.00
Z066 Grass Frog in glass	6.50
Z0105 Turtle, 8" to 10"	12.50
Z0116 Alligator on base	25.00
Z0130 Chicken on base	16.00
Z0155 Cat on base	18.00
Z0195 Monkey on base	25.00

We have frequent calls from High Schools for a set of vertebrate skeletons mounted in a hardwood glass-covered wall case, size 24x32". This set includes the Perch, Pigeon, Turtle, Rat and Grass Frog, price \$53.00.

The larger set with specimens as illustrated above costs \$75.00.

Our skeletons are excellent for class use as well as for building up the permanent school museum.

Write for complete list and for biology catalog No. 5B.

DENOYER-GEPPERT COMPANY

Makers and Importers of Anatomical Models, Charts, Skeletons, Specimens and Slides

5235-57 Ravenswood Avenue

Chicago, Ill.

FISHER SCIENTIFIC COMPANY
 MANUFACTURERS
SCIENTIFIC INSTRUMENTS
LABORATORY APPARATUS AND REAGENTS
 FOR
 CHEMISTRY-METALLURGY-BIOLOGY

709-717 FORBES ST.
 PITTSBURGH, PA., U. S. A.

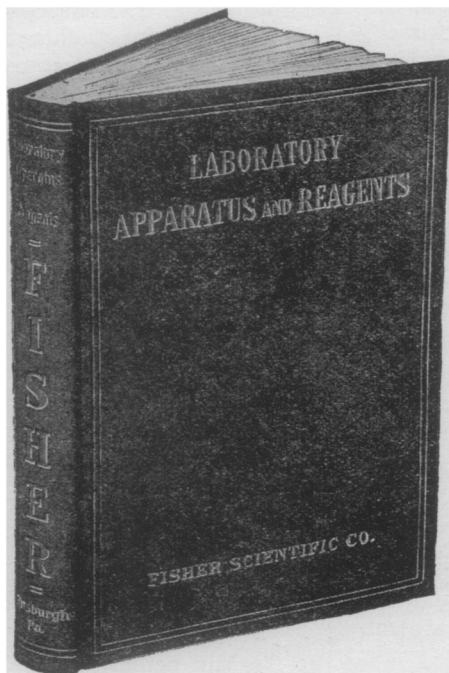
September 15, 1928

To School Executives:

The Fisher Catalogue is the medium for procurement of modern and approved apparatus for Chemistry, Botany, and Biology courses.

It is a large book of 630 pages, and has 2700 illustrations. This catalogue is different from any other book of its kind—is written from the laboratory viewpoint—is a source of pertinent information on modern apparatus and technique.

If you do not have a copy of this catalogue to consult when selecting laboratory apparatus, write for one today.



The Fisher catalogue will be sent free to laboratories or superintendents upon request. For convenience, the coupon below may be used.

Please send a Fisher catalogue to

Name of School.....

Street Address.....

City..... State.....

Nature of Science Courses.....

Request by.....

Title..... Date.....