

INVENTION

Gold Digger Receives Patent

➤ A GOLD DIGGER has been invented. It is a pipe-like device that digs up a stream bed and deposits any gold or silver in a chamber. The apparatus for recovering gold from streams is the invention of William S. Temple of Hattiesburg, Miss., who received patent No. 2,756,977.

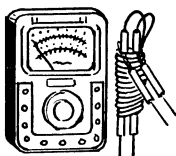
Science News Letter, August 11, 1956

MULTIMETER BUYS!

For Home, Lab, and School

ASTONISHING VALUES!

Ready to use! Not kits! All with batteries and test leads. All have damped D'Arsonval movements with rectifier for AC.

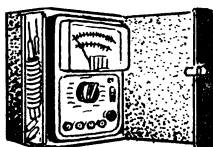


CAT. MT-1: Sensitivity 2,000 ohms/volt. Pocket-size: 3 1/2" wide x 4 3/4" long x 1 1/2" thick, in steel case. 3% accuracy on dc and ac scales. Reads dc and ac volts 0-10, 50, 250, 500, 2,500. DC current 0-0.5, 50, 500 milliamperes. Resistance 0-10,000, 1,000,000 ohms. Decibels -20 to +22

and +5 to +36.

Only **\$6.95**
(Add 50¢ to cover postage and handling. Remit \$7.45 with order.)

CAT. MT-2: Picture-window 1957 style! With enlarged easy-to-read scale, in leatherette carrying case with test-lead compartment. The instrument is 5" wide, 6 1/2" high, and 3" deep. 300 microampere movement is shunted to 1,000 ohms/volt functioning. Extra pin jack for 5-000 v range. Reads dc and ac volts 0-10, 50, 250, 500, 1,000, 5,000, with extra scale for accurate 0-2.5 vac. Has output jack for db ranges -20 to +10 and 0 to +22. Reads ohms 0-10 k, 100 k, 1,000 k. DC current 0-1, 10, 500 ma. A rugged unit.



Only **\$11.95**
(Add 75¢ to cover postage and handling. Remit \$12.70 with order.)



CAT. MT-3: 20,000 ohms/volt dc, 10,000 ohms/volt ac. Has no skipped ohm ranges. Ohms are: 0-5,000 X1, X10, X100, and X1,000. DC current 0-50 microamperes, and 0-2.5, 25, 250 ma. ac and dc volts 0-10, 50, 250, 500, 1,000. Any standard 20k ohm/volt multiplier probe extends range to 5 kv. Any 3 v external battery in series with the + pin jack extends the ohms range to 10 megs. Reads db -20 to +5 and +5 to +22. The special pin-jack for the first db scale can be used for ultra-sensitive output volt readings of 0 to 1.4 v because 0 db is 0.775 v. This is a big accurate laboratory instrument: 4 1/2" wide, 6 3/4" long, 2 3/4" deep. It is an astonishing

value at only **\$18.95**
(Add \$1.00 to cover postage and handling. Remit \$19.95 with order.)

Money-Back Guarantee on All Instruments!

ARROW SALES, INC.

P.O. Box 3007-SNL, North Hollywood, Cal.

Books of the Week

For the editorial information of our readers, books received for review since last week's issue are listed. For convenient purchase of any U. S. book in print, send a remittance to cover retail price (postage will be paid) to Book Department, Science Service, 1719 N Street, N.W., Washington 6, D. C. Request free publications direct from publisher, not from Science Service.

ATOMS AND ENERGY—H. S. W. Massey—*Philosophical Library*, 174 p., illus., \$4.75. Dealing with the scientific research that led up to the large-scale release of atomic energy in 1945. The final section of the book, which covers the applications of atomic energy and present-day research, refers to the situation prevailing in 1952.

CATALYSIS: Volume IV, Hydrocarbon Synthesis, Hydrogenation and Cyclization—Paul H. Emmett, Ed.—*Reinhold*, 570 p., illus., \$12.50. Of particular interest to the petroleum and coal industries, this volume is devoted primarily to Fischer-Tropsch synthesis and related syntheses.

FACTORY ELECTRIFICATION—F. T. Bartho and C. H. Pike, with a foreword by T. H. Windibank—*Philosophical Library*, 398 p., illus., \$12.00. In this ever expanding field, this book is useful as a reference on current knowledge and as a guide to the many aspects of factory electrification that must be constantly under review.

THE FUND FOR THE REPUBLIC: A Report on Three Years' Work—Paul G. Hoffman, Chairman—*The Fund for the Republic*, paper, free upon request to publisher, 60 E. 42nd St., New York 17, N. Y.

THE GENERATION OF ELECTRICITY BY WIND POWER—E. W. Golding—*Philosophical Library*, 318 p., illus., \$12.00. Giving an account of the research and development conducted in Great Britain and other countries in an effort to make use of wind power on a significant scale.

GROUP DIFFERENCES IN ATTITUDES AND VOTES: A Study of the 1954 Congressional Election—Angus Campbell and Homer C. Cooper—*Institute for Social Research, University of Michigan*, 149 p., \$3.00. This report includes not only basic socio-economic, religious and racial groupings, but also such groups as labor unions and political parties.

INSECTS AND SPIDERS: A Book of Keys with Biological Notes—C. P. Friedlander and D. A. Priest—*Philosophical Library*, 124 p., illus., \$2.75. Presenting the classification of insects and spiders in a simple yet scientific manner.

MANPOWER AND EDUCATION—Education Policies Commission—*National Education Association*, 128 p., illus., cloth \$1.75, paper \$1.25. Reviewing the outstanding features of the manpower situation in the U. S., suggesting ways in which the problem should be approached, and tracing some of the major implications in the situation for American schools and colleges.

MERCHANT SHIPS: WORLD BUILT: Vessels of 1000 Tons Gross and Over Completed in 1955—Adlard Coles (*John de Graff*), 1956 volume, 264 p., illus., \$6.00. Marking further changes in the appearance of ships, even in those of a strictly utilitarian nature.

MUSICAL ACOUSTICS—Charles A. Culver—*McGraw-Hill*, 4th ed., 305 p., illus., \$6.00. In this new edition chapters on basic concepts and simple harmonic motion have been added, as well as lists of questions and problems at the end of many of the chapters.

NONPROFIT RESEARCH AND PATENT MANAGEMENT IN THE UNITED STATES—Archie M. Palmer—*National Academy of Sciences-National Research Council, (Office Of Patent Policy Survey)*, 54 p., paper, \$1.00. Presenting a summary analysis of the current situation and discussing educational institutions that offer research serv-

ices to industry and government, as well as the special nonprofit research and patent management organizations and their procedures in the conduct of sponsored research.

PATENTS ON LIGHT WEIGHT CERAMICS—A. J. Metzger, Ed.—*Virginia Polytechnic Institute, Engineering Experiment Station Series Bulletin No. 111*, 69 p., paper, 25 cents. Listing the patents, both foreign and domestic, with a brief abstract of each.

THE PETROLEUM REFINERY ENGINEER'S HANDBOOK—J. F. Strachan—*Philosophical Library*, 168 p., illus., \$15.00. A new edition of "Practical Inspection of Oil Refinery Equipment," which was published in 1947, this book includes the recent methods of inspection and recording, as well as aspects of plant corrosion and protective measures.

SODIUM: Its Manufacture, Properties and Uses—Marshall Sittig, with a chapter on "The Physical and Thermodynamic Properties of Sodium" by George Wm. Thomson and Edward Gareis—*Reinhold*, 529 p., illus., \$12.50. Attempting to cover all that is currently important in the manufacture, handling and use of sodium for the chemist or the engineer.

SPORTS INJURIES MANUAL FOR TRAINERS AND COACHES—Donald F. Featherstone—*Philosophical Library*, 132 p., illus., \$6.00. A first aid text to aid the coach or trainer without medical training.

SPRING LAKE ARCHEOLOGY: The Lee Mill Cave—Elden Johnson and Philip S. Taylor—*Science Museum, Science Bulletin No. 3, Part 2*, 31 p., illus., paper, \$1.00. This cave in Minnesota contains a stratified record of three cultural levels of occupation covering a very long span of time.

Science News Letter, August 11, 1956

URANIUM-TUNGSTEN-MERCURY ZIRCONIUM-ZINC

Prospecting Information! Latest News and Data on Equipment and Methods.

Ultra-Violet Products, Inc. Dept. N, San Gabriel, Calif. Please send me Prospecting information, description of equipment available, and name of nearest dealer.

Name _____
Address _____
City _____ State _____

IF YOU'RE PROSPECTING FOR ANYTHING, YOU NEED AN ULTRA-VIOLET MINERALIGHT

HERE'S WHY! The Mineralight shows traces of uranium not sufficient to excite other responses, and detects minerals which are often found with uranium ore. By itself or teamed with a Geiger or Scintillation Counter, Mineralight is a must.

SEE THE MINERALIGHT IN ACTION

Your MINERALIGHT dealer can demonstrate the various models for you and give you complete information on Geiger counters, scintillation counters, and other prospecting equipment, as well as the latest data on uranium prospecting. See him today or write for valuable bulletin—"Uranium Prospecting with Magic Mineralight".

ULTRA-VIOLET PRODUCTS, INC.