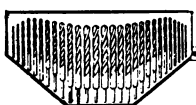


Chrome Vanadium 29-piece DRILL SET

Specially made for speed drilling. In sturdy plastic tool roll. Finest alloy steel drills hardened and precision ground to the sharpest, longest lasting cutting edge obtainable: will easily and cleanly bite through hardwoods, plastics, aluminum, iron and the toughest steels. Unconditionally guaranteed for thousands of drillings. Full jobber length. Sizes by 64th from 1/16" to 3/4". There are only a limited quantity of sets available at this low price, so hurry!

Also available with Turned Down Shanks to fit all 3/8" drills. In individual pocket roll.

\$6.49

ppd.

\$8.95

ppd.

60-Piece Set Wire Gauge**Chrome Vanadium Drills**

Top quality high test Chrome Vanadium Drills designed for speed drilling through toughest steels, woods, plastic, iron and aluminum. Precision ground, long-lasting cutting edges. Guaranteed to give years of satisfaction. A full 60 pc. set

nos. 1 through 60. A \$14.95 Value—**\$5.40**

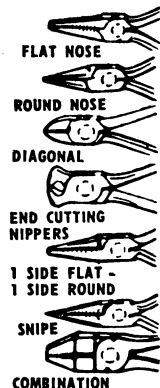
plus 35¢ pp. & hdlg.

Same set above available with Huor Index container—**ONLY \$6.65**

plus 35¢ pp. & hdlg.

75c each for Finest Quality**Imported****PRECISION PLIERS**

For Jewelers, Optical Workers, Hobbyists, Craftsmen of All Kinds! These superb German instruments are of deep-forged, heat-treated high quality tool steel, fabricated to most exacting specifications. All-over ground and polished to smooth hard surfaces. Smooth working joints with high test cutting quality meet perfectly to safely and with just right tension. Jaws securely hold even the most delicate objects in hard-to-reach corners and angles. Each plier is 4" long and a veritable gem of precision and strength.



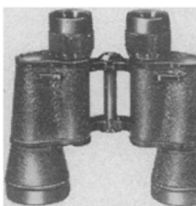
75c each all 7 for \$5.00

ppd.

MONEY BACK . . . If this isn't one of the **FINEST** values we've **EVER** offered!

PRECISION 7 X 50 PRISMATIC BINOCULARS

Genuine Leather Case, Accurate Built-In Compass, Coated Lenses at the lowest price we've ever offered!



Imagine! Now you can enjoy all your favorite sporting events—baseball, track, etc.—from a front row seat! These powerful "Zeiss" type, Navy model binoculars bring far-away objects right up close! Precision made by one of Japan's most famous camera names . . . to high standards. 50mm. objective lens provide wide field and greatest illumination. Use for yachting, hunting, bird watching, etc. Individual focus eye pieces. Same type binocs sell for much more, everywhere!

ONLY \$24.95

Plus 50c pp., hdlg.

Also available—7x35 prismatic binoculars with same outstanding features as above. **ONLY \$20.95**

Plus 50c pp., hdlg.

All binocs have genuine leather case, built-in precision compass, eye piece covers, polishing cloth

Minimum order \$1.00. Send Check or M.O. C.O.D. plus fee. Money Back Guarantee.

SCOTT-MITCHELL HOUSE, INC.

Dept. 2412, 611 Broadway, New York 12, N. Y.

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.

THE ADVANCEMENT OF SCIENCE: Vol. XIII, No. 50—*British Association for the Advancement of Science*, 145 p., illus., paper, 7s 6d. Including the address of Sir Raymond Priestley "Twentieth-Century Man Against Antarctica," given at the Sheffield meeting in August.

THE CONSTITUTION OF MATTER—Robert Oppenheimer—*Oregon State System of Higher Education*, Condon Lectures, 37 p., illus., paper, \$1.00. Lectures given by the director of the

Institute for Advanced Study, Princeton, N. J., intended as an introduction for the layman to a rather unfamiliar field.

JULES VERNE—Marguerite Allotte de la Fuye, Translated by Erik de Mauny—*Coward-McCann*, 222 p., \$3.95. Considering Verne both as a writer and a prophet of the new scientific age.

THE KING'S DAY: A Day in the Life of an African King—Margaret Plass—*Chicago Natural History Museum*, 22 p., 10 plates, paper, 35 cents. Based on the exhibits in the Cameroons King's House of the Museum.

MY EXPERIMENTS WITH VOLCANOES—Thomas A. Jaggar—*Hawaiian Volcano Research Association (Bishop Museum)*, 198 p., illus., \$4.00. The author, famous volcanologist, spent the last years of his life writing this history of his 60 years of intensive, rugged and hazardous scientific achievements, which included experiments on the active Hawaiian volcano, Kilauea.

SCIENCE CLUBS OF AMERICA SPONSOR HANDBOOK—Margaret E. Patterson, Ed.—*Science Service*, 1957 ed., 64 p., illus., paper, \$1.00. Useful information for science clubs. A new feature is the index to "Free and Low Cost Materials."

THE WONDERFUL WORLD OF ARCHAEOLOGY—Ronald Jessup—*Garden City Books*, 69 p., illus., \$2.95. Telling for children, the story of archaeological finds around the world and under the seas.

Science News Letter, November 10, 1956

133 PIECE SURPLUS \$2 POWER TOOL SET

Brand New—U. S. Gov't Surplus
Once in a Lifetime Bargain on Power
Tool Accessory Set.
Guaranteed \$11.00 Retail Value—
Now Yours for only \$2.00.
A must for every homeowner,
hobbyist, craftsman and carpenter.

**12 1/2 Million Tools—Less Than 2 Cents Each**

Now the famous Blue Steel Tool Co. can make this fabulous offer because they just bought out an entire U. S. Gov't. Surplus warehouse—12 1/2 million tools in all. Every single piece is absolutely and completely guaranteed to be of the first professional and industrial quality. If bought separately would cost you at least \$11.00. But now yours for only \$2.00, less than 2 cents apiece.

You can use this U. S. Gov't. surplus bargain 133 tool set with any electrical drill . . . any flexible shaft . . . any grinder. And here's what you get in this guaranteed \$11.00 retail value . . . for only \$2.00. Grinding wheels—sanding cartridges and disc—steel cutters—mandrels—burnisher—mounted stones—knife edge rubber wheels, etc.

You'll find thousands of uses for this set around the house, for home repairs, hobby work, tool-shop work, wood, metal and plastic hobby work. You'll use it for sanding, grinding, buffing, polishing, carving, burnishing, etching, milling, cleaning, cutting off, hole cleaning, deburring and hundreds of other jobs.

You must order now to make sure you get this tool bargain of a lifetime.

Send \$2.00 and 25c for postage and handling for one 133 piece set—\$4.00 for (2) 133 piece sets or \$6.00 for (3) 133 piece sets.
Because of the large number of tools we must ask for 25c for postage and handling on all one set orders. We absorb these costs on 2 or 3 tool set orders.
You will refund my money if I am not satisfied.

BLUE STEEL CO., Dept. HR-11, HARTSDALE, N.Y.

16-Year-Old Boy Designs Computer

A sixteen-year-old Pittsburgh boy has designed a special computer that composes musical tunes. Making use of a GENIAC electric brain construction kit and his own stochastic analysis of frequency of certain notes in simple melodies, he was able to devise a method for generating new melodic elements which retained a likeness to common patterns while sounding different.

The new design, stimulated by the annual contest sponsored by Oliver Garfield Co., originators of the GENIAC kit, has demonstrated in a striking fashion the utility of GENIACS in encouraging thinking about computers. At the present time hundreds of schools and colleges have introduced GENIACS into their curricula to extend their pupils knowledge of computer circuitry.

Since so much of contemporary computer circuitry makes use of relatively simple electrical ideas which are recombined into a variety of intricate networks, it has been possible to present over forty basic computer circuits which can be built with the specially designed multi-deck switches of the GENIAC kit. The completed machines are all powered by one flashlight battery.

GENIAC circuits are ingenious, frequently requiring Game theory for their conception but are simply constructed. The machines encompass Tic Tac Toe and Nim, analyze actuarial problems, reason in syllogisms, test your intelligence, and generally start youngsters and adults thinking in terms of problem-solving equipment.

The components are so versatile that larger industrial firms buy them as supplementary desk calculators for solving recombination problems and exercises in symbolic logic.

The entire kit, consisting of over four hundred parts and components plus a complete course (with seven manuals) in basic circuit design, is available directly from the manufacturers, Oliver Garfield Company, Department SL 56, 126 Lexington Avenue, New York 16, N. Y. The price is \$19.95, with a seven-day return guarantee.