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November 14, 1959

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# SCIENCE NEWS LETTER

®

THE WEEKLY SUMMARY OF CURRENT SCIENCE



**Scientific Santa**

See Page 326

A SCIENCE SERVICE PUBLICATION

**JUST IMPORTED  
FROM ITALY!**

# WORLD'S FIRST PERSONAL SIZE DESK ADDING MACHINE!

**Amazing Little Machine With Spinning Wheels and Trip  
Mechanism Adds Up To 9,999,999... Automatically!**

Not a flat, vest pocket adder—not a gadget—no bewildering instructions to follow. Here for the first time is a real desk-type adding machine that works on the same scientific principle as electric office computing machines... but without electricity! It adds up bank statements, sales slips, inventories, expense accounts, super-market tapes, budgets, any adding jobs you have... within seconds of even \$200.00 office adding machines! And then, this amazing machine clears itself with just a flick of your finger on the clearing bar. Yes! Instantly all the wheels inside spin back to normal—7 zeros flash into the easy-to-read answer windows—and it is ready for the next time saving, money saving adding job!

**END MENTAL ADDING—  
FOREVER**

No more adding figures in your head... scribbling numbers on paper... making mistakes that cost you time... and cost you money! Simply press the numbers down on this wonder-working little machine. The automatic trip wheel mechanism never makes a mistake. The total appears in big, clear, easy to read numbers in the answer windows—INSTANTLY and AUTOMATICALLY!

It keeps you within your budget... keeps you from overspending... protects you from the mistakes companies—even banks... often make... adds all the figures for income tax... adds up stock dividends... checks expense accounts... plus a thousand other adding chores... and pays for itself a hundred times over in the money you save.

**AN ITALIAN INVENTION**

An eminent inventor in Italy discovered the secret of the fool-proof, non-electric, spinningwheel adding mechanism inside this machine. He had been trying for years to develop a real adding machine at a price for everyone... even in war-poor Europe. NOT another flat pocket adder that requires you to read long instructions before you can begin to operate it. Instead... he wanted a real, desk type adding machine... that anyone could operate, even a child... that would be automatic... fool proof... and, above all, within the pocket-book of everyone!

He found the answer after studying the spinning wheels inside electric computing machines. He came upon a way to let a person's hand supply the 'power' to the wheels... instead of electricity! Just imagine! He invented an adding machine designed so that the gentlest touch makes the wheels inside turn! After one complete turn... the first

wheel automatically trips the next wheel... just like \$200.00 electric machines! Nothing to remember. Nothing to do but press down the numbers to be added. Everything else automatic! When the Italians... famous for smaller automobiles and smaller motorcycles... started manufacturing this revolutionary new smaller, non-electric adding machine, offices and individuals in Rome, Venice, Florence tried it. WHAT ACCLAIM IT MET WITH! Everywhere it added the longest columns of figures within seconds of the speed of electric machines. Giant companies gave it to secretaries... officers, salesmen. Efficiency of entire companies improved. Mistakes were cut down.

And from individuals came even more glowing stories. Instantly adding became a pleasure instead of an aggravating chore. Households became better managed... budgets stuck to... bills checked... mountains of figures added in no time... mistakes a thing of the past!

And when this remarkable adding machine was imported to this country, the acclaim was just as great! For here at last was what every home... every office... every store has been waiting for. The perfect, small, easy to use, automatic, desk model adding machine... in beautiful silver tone and blue finish, with big, easy to read numbers... and at a price so incredibly low that not a family or store or office can afford to be without it!

**FREE TRIAL OFFER**

How would you like to try this amazing new gleaming metal adding machine in your home, your office or your store entirely without risking a penny?

We want you to actually test it against automatic, electric adding machines. Compare it for speed, ease of use and accuracy. You must agree that it is almost as fast... and just as easy to use... you must agree that it will save you endless time, trouble, mistakes and money every week... or it won't cost you a penny.

Just push the numbers down. See how the most gentle pressure of your hand turns the wheels inside. See how it adds up to 9,999,999 automatically. And see how just a flick of the clearing bar on the side makes the numbers inside the answer window all whirl back to seven zeros... instantly! Put this amazing adding machine on your desk. See how instead of being too busy to add... or in too much of a hurry to be bothered with a complicated pocket adder... from now on you will check every calculation... check all your bills, statements, estimates, inven-

tories, budgets, reports... each in seconds... and never make costly mistakes again! If you are in business, see how this precision adding machine will save you its unbelievable low price a hundred times over. Give one to every secretary, every clerk, every person who ever adds. See how it cuts out trips to your book-keeper, saves time, improves the efficiency of your entire company. You must be convinced that ADDIPRESTO is one of the most valuable and useful inventions you ever used or it won't cost you a penny.

**Supply Still Very Limited  
Mail Free Trial Coupon  
TODAY**

Yes, it is impossible for you to appreciate the beauty, speed and efficiency of ADDIPRESTO until you actually see it and use it. Let us send it to you for one week's completely free trial.

The price of ADDIPRESTO is only \$14.95. Remember, it is a real adding machine with spinning wheels and automatic mechanism... the same type as \$200.00 office computing machines. But ADDIPRESTO works from the pressure of your hand without electricity! It will save you its remarkable low cost many times over. Because you will USE it... over and over... day after day. Don't confuse it with flat, hard to use, complicated pocket adders.

However, the supply of genuine ADDIPRESTO machines is strictly limited. The factory in Europe cannot meet the demand. You must mail the free trial coupon below at once. ADDIPRESTO is not yet sold in stores. Act now and get yours by mail.

**ADDIPRESTO is shipped with  
protective plastic cover and  
GUARANTEE CERTIFICATE.**

**GUARANTEE**

This original ADDIPRESTO is precision-made from the finest quality materials, and will give you a lifetime of accurate, effective performance. Unconditionally Guaranteed against defects in material or workmanship.



**FOR THE FIRST TIME  
—Your Own Personal  
Desk Model Automatic  
Adding Machine!**

Now you can keep ADDIPRESTO on your desk at home or office and never add anything in your head again. In SECONDS... perform almost any adding chore. No more costly mistakes. ADDIPRESTO's spinning wheels and computer type mechanism do the 'figuring' automatically!

**PROVEN IN USE**

Don't confuse this desk-model real adding machine with flat pocket adders. ADDIPRESTO is used by offices, stores, institutions, for adding jobs that demand true speed and accuracy. Used by giant corporations. Saves time, saves mental work, saves money. A real adding machine.

**MAIL THIS NO-RISK TRIAL COUPON**

**OLIVER GARFIELD CO., INC., Dept. SL-119-B  
108 E. 16th St.  
New York 3, N. Y.**

Yes, I want to try ADDIPRESTO, the new Italian Office Type Adding Machine. I will use the machine for one week without risk to me. It must be everything you say it is or I may return it and you will refund my money at once, no questions asked, and I will have used the machine entirely free.

- I enclose only \$2.00. You may bill me for the balance (\$12.95 plus postage) after my 7-day FREE trial period.
- I enclose \$14.95 (check or money order) as payment in full. This way I save over \$1.00 in postage and handling charges. Same guarantee... same 7-day FREE trial!

NAME .....

ADDRESS .....

CITY ..... ZONE ..... STATE .....

QUANTITY BUYERS SAVE! 2 Machines only \$13.95 each.  
3 to 5 Machines only \$12.95 each.

**AGENTS! SALESMEN!**



**THE BIGGEST MONEY-  
MAKER YOU HAVE  
EVER KNOWN!**

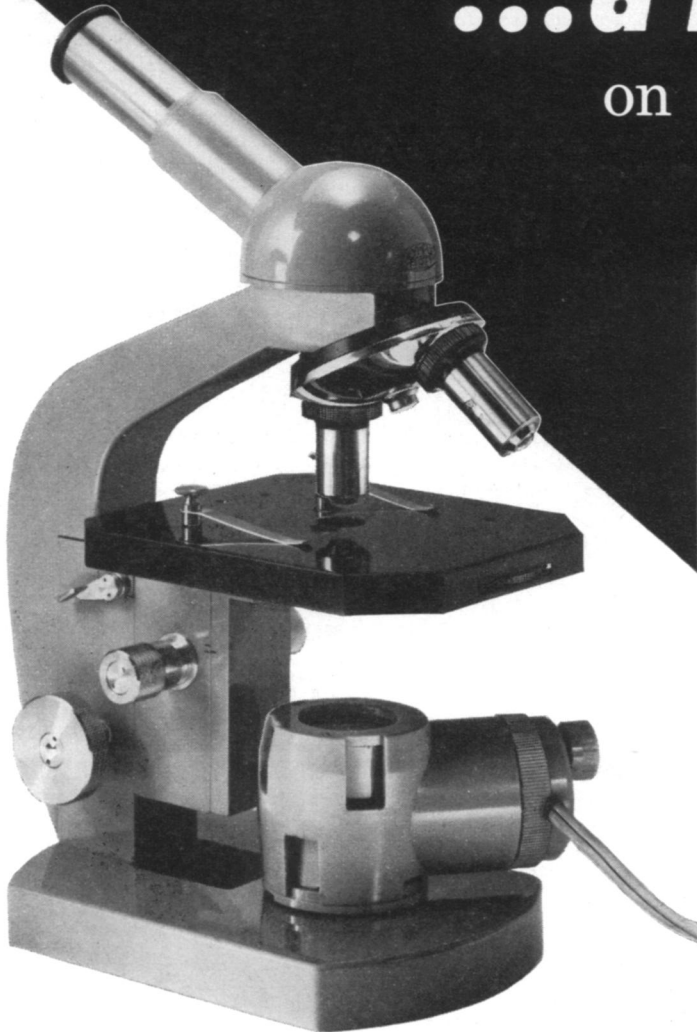
ADDIPRESTO is the greatest goldmine you ever saw. Simply show this beautiful, gleaming metal adding machine with spinning wheels and automatic trip mechanism... the same type as \$200.00 electric computers. Then make this eye opening demonstration: add a 6-INCH LONG COLUMN OF FIGURES in 30 SECONDS! After that there's no selling... no arguing. You can't keep people from buying! It's true. 8 out of 8 sales is nothing. Every home, every office, every store needs it. Send for yours today and get started to the biggest money you have ever known. There is no competition. There is no other machine like ADDIPRESTO.

**MAIL COUPON NOW!**



*Elgeet* of Rochester... *Presents:*

**... a new slant  
on Student-Teaching  
microscopes**



Science means progress, and to help both teachers and students meet the challenge of a changing world, Elgeet presents a superb new microscope with research instrument features never before offered in student-teaching models!

The inclined eyepiece is typical of the many new features, extending to students the benefits of unsurpassed convenience, ease of operation, and efficiency combined with working comfort, resulting in maximum learning possibilities even over prolonged periods of close concentration.

Rugged and versatile, the Elgeet-Olympus is precision engineered and designed for years of trouble-free service and priced for educators seeking the very best . . . on a budget.

***Elgeet*-OLYMPUS Model S-2**

Pictured standard model S-2 with double revolving nosepiece with hard-coated parfocal, achromatic interchangeable 10 $\times$  (N.A. .25) and 40 $\times$  (N.A. .65) objectives. Built-in revolving aperture disk to control illumination. 10 $\times$  Huygenian coated lens eyepiece. Choice of concave mirror or interchangeable 20 watt illuminator (Model LSK) as shown.

only  
**\$99.45**  
in lots of five

list price \$110.50 each

Write for information on other student-teaching models and complete microscope line.

**MAIL COUPON NOW**

Dept. SM-6  
Elgeet Optical Co., Inc., Scientific  
Instrument and Apparatus Div., 838  
Smith Street, Rochester 6, New York.

- Please send me complete literature on the New Elgeet-Olympus Microscopes.
- Please send name of Elgeet Dealer nearest me for free demonstration.

Name .....

Address .....

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

***Elgeet*** OPTICAL CO., INC. . . . SCIENTIFIC INSTRUMENT AND APPARATUS DIVISION  
838 SMITH STREET • ROCHESTER 6, NEW YORK

*"Quality is our watchword . . . Precision Engineering our constant goal."*

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## ANCIENT ROMAN SILVER COIN CUFF LINKS

Authenticated to Be 1500-2000 Years Old

For the select few on your gift list who appreciate originals . . . who desire something practical yet unique, give them these fabulous Ancient Roman Silver Cuff Links. Each pair carries the portrait of famed Roman Emperors or Empresses . . . Gods and Goddesses . . . each specially finished so that the portraits are highlighted and the backgrounds have an oxidized finish . . . each pair carefully matched and mounted on sterling silver cuff link backs. These original coins, struck off by hand, have been discovered by archaeologists digging in ruins of ancient Roman cities. Obviously, there are only a limited number of coins available. Each set comes in a flannel drawing pouch together with a description of the coins and a guarantee of their authenticity.

**\$10.95** ppd.  
(6 pairs for \$60)



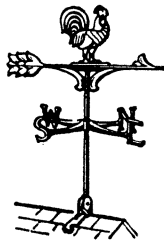
## From Ancient Biblical Lands—A Rare Collection of Terra Cotta ANTIQUE OIL LAMPS

Authenticated Up to 2000 Years Old

You have seen lamps like these in museums . . . on murals from Pompeii . . . in paintings of Biblical scenes. The Greeks, Romans and other ancient peoples used them as their principal light source—and also as a symbol of learning and wisdom. Now you can own one of these very lamps—the real thing—not a reproduction . . . perhaps a lamp once owned by a man who had heard Julius Caesar speak . . . or by one who saw Cleopatra . . . met one of the Apostles . . . visited the Temple in Jerusalem before it was destroyed! Yes—these lamps will establish a visible link between YOUR home and the Classical roots of our Western world. Wonderful starters of conversations, or meditations, and handsome works of art. Approximate size 2 1/2 x 3 x 1 1/4". Mounted on polished, walnut finished hardwood base. For mantle, curio shelf, desk bookcase, etc. An inspiring gift to your students. Also can be used in connection with engraved award plaques or pedestals. No two alike, each complete with guarantee of authenticity and approximate date of original use. It took two years to get together this collection—only 389 are available. Be sure to send your order NOW!

**\$9.95** ppd.  
(3 for \$27)

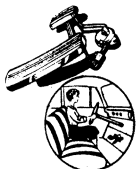
SPECIAL! 36 Page Illustrated Booklet on Egyptian Antiquities. . . . \$1.00  
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## Extra Large, Sensitive, Cast Aluminum Remington WEATHER VANE

Not only designed to give precise wind direction, but adds a distinctive note of beauty to every American home. Newly designed and precision engineered from strong cast, non-rusting aluminum. Has full 21" classic arrow with your choice of 5 eye-catching three-dimensional ornaments. Wind direction indicators—N—E—S—W—are all three-dimensional. Exclusive Universal Mount provides for sturdy permanent attachment of vane to any shape roof in a jiffy. All vanes finished in gleaming black. Height of vanes vary from 27 3/4" to 30". When ordering, specify ornament desired.

Cock o' the Walk  Prancing Horse  Flying Goose **\$9.95** ppd.  
 Coach and Four  Pointing Dog



## Drive Relaxed... Without Foot on Gas Pedal... Amazing Patented\* SPEED-SET PILOT

One of the greatest automotive developments ever to come out of West Germany, now makes long distance driving exciting and easy! You merely depress your gas pedal to set desired speed . . . gently tap the brake . . . AND YOUR SPEED IS SET . . . AUTOMATICALLY! For additional power, simply depress accelerator pedal in the usual manner and let it return to previously selected position. To stop or slow down, merely touch brake . . . the slightest pressure will immediately disengage the Herco SPEED-SET PILOT . . . long before the brakes are put to action. Your car remains responsive and under complete control at all times! When disengaged, you don't even notice it's there. You don't need your hands to put the Herco SPEED-SET PILOT to work or change speed. Permanent installation can be made by anyone, who can use a screwdriver, in less than 15 minutes. Start today to discover how effortless and enjoyable foot-free driving can really be!

**\$14.95** ppd.  
\*Pat. Pend.

- Maintains desired speed position while you relax.
- Eliminates fatigue—keeps you fresh and alert.
- Prevents aches and stiffness from driving in the same position—you can take foot off pedal, stretch, move about—drive with less tension.
- Fits any car—is quickly installed—saves on fuel.
- Unconditionally guaranteed for ONE FULL YEAR—should last the life of your car.



Precision Made in U.S.A.

## Famous RMS Powerful, Clear Tone "DOUBLE-TALK" INTERCOM

Why walk when you can talk? Save steps, stair climbing and time . . . simply lay down the wire between two points . . . plug DOUBLE-TALK into nearest electric wall outlet . . . and you're ready to talk and listen both ways. No phone bills—no rental for equipment—no installation cost—no batteries! Consists of two units: MASTER and REMOTE for baby sitter! Leaves your hands free, lets you do many things while cooking, shopping, etc. Hundreds of uses: shop to office—garage to house—store to stockroom—home to business—dining room to kitchen—house to gate for interviewing callers. DOUBLE-TALK even used for inclement-weather "back-fence" visits and neighborly teen-age chats . . . leaves the phone free for important calls. Simple, foolproof, lightweight—UL approved. A child can install it. Easily portable—may be taken along for temporary use anywhere! Exceptionally low priced—pays for itself out of reduced phone bills, extra efficiency and saved time. Get DOUBLE-TALK—you'll wonder how you ever did without it!

**\$29.95** ppd.



## ROLLED GOLD ALARM WRIST WATCH

Huge contribution to personal efficiency while traveling and at home! Makes you independent of sleepy hotel clerks and pullman attendants—lets you rest soundly because you're not afraid of oversleeping. Great for refreshing catnaps any time! Reminds of engagements, phone calls, dates, hours for taking medicine, TV shows. Wonderful for amateur scientists and astronomers, a must for service men. Clear, loud, long ring is sure to wake you. Swiss made—beautifully styled in rolled gold plate with stainless steel back—raised numerals, sweep second hand, unbreakable crystal, custom-type leather band. 17 jewel precision movement is anti-magnetic, water and shock resistant, has full guaranteed Nevabreak mainspring.

**\$34.95** ppd.

Comparable with Radios Listing at \$75.00 without Batteries!

## 8 Transistor "Jewel" Pocket Radio

Made in U.S.A. **\$29.95** Incl. ppd. Batt.



JEWEL 8 transistor radio—never before available at this low, low price! Has unbreakable Styrene plastic case—earphone attachment outlet—3 position metal stand-up easel and carrying handle. Built-in antenna is OMNI-DIRECTIONAL . . . radio plays equally well regardless of position. Powerful 8 transistor super-heterodyne circuit, has full tuning range of 540 to 1620 kilocycles. Brings in distant stations without station overlap. Clear, full distortion-free tone that can be turned up to amazingly big volume. Plays in trains, plane, car, steel construction buildings—anywhere! Each complete with warranty registration card for factory service and repair in New York City. Limited quantities . . . order NOW for prompt delivery!

Leather Carrying Case with snap lock and sturdy leather strap—\$2.49 ppd.

PRECISION PRIVATE EARPHONE ATTACHMENT—\$1.95 ppd.

## Water ON or OFF at SAME TEMPERATURE—SAME PRESSURE with SHOWER ECONOMIZER

Saves Water, Fuel, Money!



Set your shower to temperature and pressure desired—then shut it off by a slight tug of the "Economizer" chain. After you're all soaped up, another gentle tug of the chain restores the EXACT same temperature and pressure as before! Fits all showers, screws on in a minute. Made of solid brass—heavy chrome plated. Unconditionally guaranteed for 2 years—precision made to last a lifetime! Perfect for homes, resorts, schools, hotels, motels, apartment houses, institutions, trailers.

**\$3.95** plus 35¢ pp. & hdlg.  
3 for \$10.85—plus 50¢ pp. & hdlg.



## Now—It's a SNAP to "Button-Up" with SNAP FASTENER PLIER

Complete with 16 Sets of Snap Fasteners

It's brand new! It's the time and money saving invention you've long awaited. It's the professional model SNAP FASTENER PLIER that works perfectly every time! 8 precision made sets of brass and 8 sets of nickel sure-grip fasteners are guaranteed RUST-PROOF and LAUNDRY-PROOF . . . will not fall out or tear out even under the toughest laundering and usage. Does away with button sewing forever.

Perfect for Dresses, Diapers, Blouses, Shirts, Shorts, Gloves, Pajamas, Play Clothes, Underwear and many, many other similar items!

Eyelet Plier complete with 12 sets of Fasteners. **\$1.98** plus 25¢ pp. & hdlg.

SPECIAL—30 complete sets of brass and nickel snap fasteners. **\$1.00** ppd.

Send check or money order. If COD, fees extra. Money Back Guarantee.

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## Free and Low Cost Science Materials

Associations and industrial companies have educational material of great use to those interested in science. Science News Letter announces from time to time such free and low cost science materials. These are a supplement to the extensive listing of free and low cost materials in the Sponsor Handbook, supplied free to sponsors of clubs affiliated with Science Clubs of America. Others may purchase it for \$1.00 from Science Clubs of America, 1719 N Street, N. W., Washington 6, D. C.

**THE ASIA SOCIETY, INC.**, 18 E. 50th St., New York 22, N. Y.—Teachers Packet: Contains materials on countries of South Asia to encourage opportunities for the study of Asia in American schools. Designed primarily for secondary schools, but also useful in junior high and elementary schools. Includes maps, audio-visual materials and booklets; also bibliography for additional reading, \$2.00.

**U. S. DEPARTMENT OF COMMERCE**, Office of Technical Services, Washington 25, D. C.—PB151152: Full 20-p. report on study by U. S. Army Medical Nutrition Lab. on food preserved by radiation sterilization and effect on human subjects, 75¢.

**NATIONAL EDUCATION ASSN.**, 1201 16th St., N.W., Washington 6, D. C. Booklet: Science for the Academically Talented Student. Report of a Conference sponsored jointly by the National Education Association Project on the Academically Talented Student and the National Science Teachers Association. Discusses identification, scope of science curriculum, teaching methods, and science teacher requirements for academically talented students. Single copies 60¢, discount of 10% on 2-9 copies and 20% on 10 or more copies.

**ADDISON-WESLEY PUBLISHING CO., INC.**, Dept. SCA, Reading, Mass.—Book: An Introduction to the Engineering Profession by McGuire and Barlow. Describes background, type of duties involved, and educational preparation required for each branch of engineering. Also contains a section of how to use slide rule, and sample problems for each field. 260 p., 133 illus., \$2.50.

**THE AMERICAN LEGION**, Nat. Headquarters, Indianapolis 6, Ind.—Booklet: Need a Lift? Condensed information regarding career opportunities and educational benefits for children of veterans and non-veterans in need of financial aid to continue their education. Gives a list of scholarships available and a list of organizations which will provide career information, 15¢ each.

**ILLUMINATING ENGINEERING SOCIETY**, Publications Office, 1860 Broadway, New York 23, N. Y.—Book: Laboratory Activities with Light, gives history of light, its properties and uses; includes 12 illustrated experiments with light, suitable for classroom demonstration by student. \$1.00 for single copy up to 9; 10-99 copies, 90¢ each; 100 or more, 75¢ each.

**CRITERION MANUFACTURING CO.**, 331 Church St., Dept. SCA, Hartford 3, Conn. Free: Catalog F of parts for building telescopes; catalog of dynamo reflecting telescopes; literature on binoculars, microscopes, telescopes. Star Explorer with adjustable dial gives location of stars and planets. Giant Wall Chart #9572, The Solar System, 50" x 38", includes map of moon; giant Star Chart #9574, 50" x 38" includes celestial navigation information, 50¢ each.

**SOCIETY FOR VISUAL EDUCATION, INC.**, 1345 West Diversey Pkwy., Chicago 14, Ill.—Film-strip Tabloid (Free to teachers, principals, libraries and administrators): Visual Review, describes new materials and methods for improving instruction at classroom level. Quarterly, during 1959-60.

# Build This Superb *Schober* Organ From Simple Kits and SAVE OVER 50%!

## The Beautiful *Schober* CONSOLETTA

— the only small organ with two full 61-note keyboards and 22 stops. Requires only 2' x 3'2" floor space! Commercial value approximately \$1600 or more — yet you save over 50% when you build this thrilling instrument!

LET US SEND YOU FREE DETAILS HOW TO ASSEMBLE A *Schober* ELECTRONIC ORGAN IN SPARE TIME!



## Give Your Family A Lifetime of Musical Joy With A Magnificent Schober ELECTRONIC Organ!

Now you can build the brilliant, full-range Schober CONSOLETTA or the larger CONCERT MODEL with simple hand tools. No skills are necessary to construct an instrument with one of the finest reputations among electronic organs. No woodworking necessary — consoles come completely assembled and finished. All you do is assemble clearly marked electronic parts guided by clear illustrations and detailed step-by-step instructions. Even teen-agers can assemble the Schober! You build from kits, as fast or as slowly as you please... at home, in spare time — with a small table serving as your entire work shop!

Pay As You Build Your Organ; Start With As Little As \$18.94!

You may start building your Schober at once with an investment of as little as \$18.94. The musical instrument you assemble is as fine, and technically perfect, as a commercial organ built in a factory — yet you save over 50% on top-quality electronic parts, on high-priced labor, on usual retail store markup! In your own home, with your own hands you build an organ with *genuine pipe organ tones* in an infinite variety of tone colors to bring into your home the full grandeur of the Emperor of Instruments. You may build the CONSOLETTA for your home, or you may want to build the great CONCERT MODEL for home, church, school or theatre. You save 50% and more in either case.

Send For Complete Details On Schober Organs and For Hi-Fi Demonstration Record

The coupon will bring you a handsome 16-page booklet in full color describing Schober organs in detail, plus articles on how easy and rewarding it is to build your own organ and how pleasant and quick it is to learn to play the organ. In addition, we have prepared an exciting 10" hi-fi LP record demonstrating the full range of tones and voices available on the Schober, which you may have for only \$2.00 (refunded when you order a kit). Literature on the Schober is FREE! There is no obligation; no salesman will call.

THE GREAT CONCERT MODEL meets specifications of American Guild of Organists



Mail This Coupon For FREE Literature and Hi-Fi Record Today!

The Schober Organ Corp., Dept. SN-1  
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Please send me FREE full-color booklet and other literature on the Schober organs.  
 Please send me the 10" hi-fi Schober demonstration record. I enclose \$2.00 (refundable on receipt of my first kit order).

Name.....

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Make over 200 Small  
Computing and Reasoning  
Machines with . . .

# BRAINIAC®

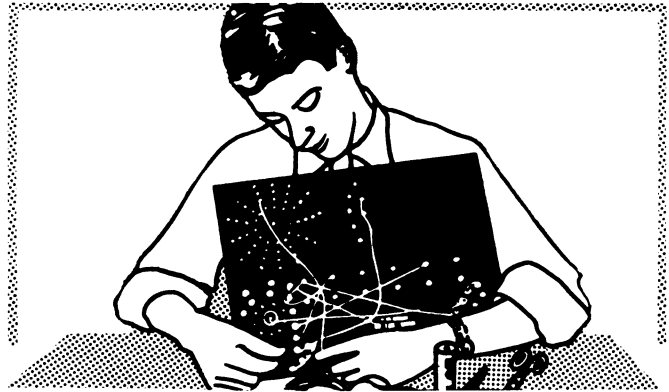
## NEW 1959-60 ELECTRIC BRAIN CONSTRUCTION KIT

EQUALS THE ORIGINAL GENIAC® electric brain construction kit (1955) PLUS many improvements and additions: over 600 parts—including 116 improved patented wipers so that all switches work well. Instead of covering only 33 machines, the BRAINIAC K18 Kit gives full specifications for 201 computing, reasoning, arithmetical, logical, puzzle-solving and game-playing machines . . . all 33 GENIACS (1955), 13 TYNIACS (1956), and 155 BRAINIACS (1957-58-59), etc.

**THIS IS BRAINIAC!** With our Brainiac Kit K18, you can build over 200 small electric brain machines and toys which "think," compute, reason, and display intelligent behavior. Each one works on a single flashlight battery . . . is FUN to make, FUN to use and play with, and TEACHES you something new about electrical computing and reasoning circuits. All connections with nuts and bolts—no soldering required. Originated by Berkeley Enterprises, the Brainiac K18 kit is the result of 10 years' design and development work with miniature mechanical brains including: Geniac (see "Geniacs: Small Electric Brain Machines and How to Make Them" by Edmund C. Berkeley, 64 pp., published by Geniac Project, a partnership with Oliver Garfield discontinued September 1955), Tyniac (1956), Relay Moe (automatic relay machine playing tit-tat-toe—pictured in Life Magazine, March 19, 1956), Simon (miniature automatic digital computer with 129 relays—see "Simple Simon" by E. C. Berkeley in Scientific American, November 1, 1950), Squee (electronic robot squirrel—see "Light Sensitive Electronic Beast" by E. C. Berkeley in Radio Electronics, December 1951), etc.

### PROGRAMMING YOUR OWN PROBLEMS FOR THE BRAINIAC

The Brainiac is the smallest and lowest-cost semi-automatic, general-purpose digital computer existing. Many problems in ALL fields of knowledge and business can be programmed for the Brainiac—to the extent that a number of versatile multiple switches can express the problem. We shall be glad to program YOUR OWN problems. Write us—no charge for simple problems, modest charge for complicated ones.



**WHAT CAN YOU MAKE WITH BRAINIAC KIT K18?** Over 200 machines including—**LOGIC MACHINES:** Syllogism Prover, Intelligence Test, Boolean Algebra Circuits, Douglas MacDonald's Will Analyzer, A Simple Kalin-Burkhart Logical Truth Calculator, Diagnosing Motor Car Trouble, etc. **GAME-PLAYING MACHINES:** Tit-Tat-Toe, Nim, Wheeled

Bandit, Black Match, Sundorra 21, etc. **COMPUTERS:** To add, subtract, multiply or divide using decimal or binary numbers, Forty-Year Calendar, Prime Number Indicator, Money-Changing Machine, etc. **CRYPTOGRAPHIC MACHINES:** Coders, Decoders, Lock

with 15,000,000 Combinations, etc. **PUZZLE-SOLVING MACHINES:** The Missionaries and the Cannibals, Age-Guessing Machine, Submarine Rescue Chamber, Daisy Petal Machine, Fox-Hen-Corn & Hired Man, Uranium Space Ship and the Space Pirates, The Three Monkeys Who Spurned Evil, General Alarm at the Fortress of Dreaderie, etc. **QUIZ MACHINE:** How to Tell an Aardvark from an Armadillo, The Waxing and the Waning Moon, Polar Air Routes, history, geography, trigonometry, grammar, statistics, calculus, etc.

**WHO IS EDMUND C. BERKELEY?** Author of *Giant Brains or Machines That Think*, Wiley, 1949, 270 pp. (15,000 copies sold); Author of *Computers: Their Operation and Applications*, Reinhold, 1956, 366 pp.; Author of *Symbolic Logic and Intelligent Machines*, Reinhold, 1959, 203 pp.; Editor & Publisher of the magazine, *Computers and Automation*; Maker and Developer of small robots; Fellow of the Society of Actuaries; Secretary (1947-53) of the Association for Computing Machinery; Designer of all the Tyniacs and Brainiacs, more than half of the 33 Geniacs (1955); Designer of the patented Multiple Switch Disc and other features in the 1955 Geniac kit.

**BRAINIAC KIT (1959-60 MODEL) K18 . . .** the kit with limitless possibilities—backed by an organization of 12 years standing in the computer field—\$18.95. (For shipment west of Mississippi, add 80¢; outside U.S., add \$1.80.)

**7-Day Full Refund Guarantee If Not Satisfactory**

MAIL THIS COUPON OR A COPY OF IT

BERKELEY ENTERPRISES, Inc.

815 Washington St., R208, Newtonville 60, Mass.

Please send me Brainiac Kit K18. (Returnable in 7 days for full refund if not satisfactory—if in good condition.) I enclose \$\_\_\_\_\_ in full payment.

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