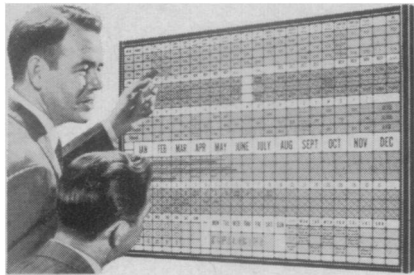


How To Get Things Done



BOARDMASTER VISUAL CONTROL

Your operations are pictured at a glance. You save time, money and prevent mixups by Seeing What is Happening at all times. Ideal for Production, Maintenance, Inventory, Scheduling, Sales, Etc. Easy to Use. You write on cards, snap on metal board. Over 750,000 in Use.

price
\$49.50

FREE 24-Page BOOKLET No. V-30
Mailed Without Obligation
GRAPHIC SYSTEMS
925 Danville Road • Yanceyville, N.C.

BARGAIN FROM LONDON

102 DIFFERENT BRITISH COLONIALS
+ 23 DIFFERENT GT. BRITAIN — ALL 24¢



Valuable "Export Parcel" includes Gt. Britain 1841 Queen Victoria imperforate (3rd stamp ever issued). Range of G.B. issues of 6 monarchs with high value 2/6, 5/- Queen Elizabeth. PLUS 102 different British Colonials. World War I "Tax"; 60 year old Cape Good Hope, many others. Total 125 all different stamps; all G.B. & Colonies. Regularly \$1.54 — Export price only 24¢ to introduce bargain overseas approvals.

FREE if you act now — 42 stamp-size portraits of Kings & Queens of England since William the Conqueror.

IMPORT DIRECT. SAVE 20-60%. Buy direct — where dealers buy. Exciting selections, low prices this easy 14-day approval way.

Send 24¢ in **UNUSED U.S. STAMPS (NO COINS)**
SATISFACTION GUARANTEED. ASK FOR LOT XK-1.

50 BROADWAY APPROVALS, LTD.
Denmark Hill, London S.E. 5, England



NEW KEYLESS LOCK

Composed of two small, nickel-plated flat steel pieces that fit together to form a powerful lock. Attaches quickly without tools to any hinged door with a latch. Ideal for persons who travel or live alone. The Totallock comes in plastic carrying case to fit pocket or purse. **Only \$1.98 Postpaid**

CORNELIA SALES COMPANY

Department M-4, Cornelia, Georgia

REWARD!

Students, Teachers, Engineers will be richly rewarded by getting our Free illustrated folder of **SLIDE RULES**. Buy Direct and pocket store-dealer's markup! Everywhere College Teachers, High School & College Students, Engineers and Draftsmen use and prefer famous **ENGINEER'S Model—World's Finest**. Buy no Slide Rules until you see our complete line. Postcard brings literature. It isn't easy for us to sell at such low prices but we're winning friends and customers.

ENGINEERING EQUIPMENT, 8x 638, JOANNA, S.C.

INVENTION

Patents of the Week

A "sea sled" that will be used as a moving platform for taking sharp underwater films has earned a patent for French undersea photographer Jacques Cousteau.

► **THE FRENCH** undersea photographer, Jacques Yves Cousteau, earned patent 3,082,731 for an underwater "sea sled."

Mr. Cousteau expects to use the sled as a platform from which to make undersea films that will be sharper in quality than any he has taken before.

The towed vehicle is pulled along the bottom at an angle to one side. The underwater vehicle is made of curved sheet metal, strongly built so that the photographic equipment and the sled itself are not damaged if the sled happens to turn over when being pulled along the bottom. A viewing window built into the front of the sled contains a liquid-tight box with the photographic equipment.

Nuclear Reactor Simulator

A nuclear reactor simulator designed primarily for educational purposes and for low cost gained patent 3,082,546 for Frederic Charles Gerard van Baerle, The Hague, Netherlands.

In order to picture how the reactor works, the invention has a transistor in a circuit with small heat stability. The transistor is so exposed to the heat of an adjustable heat source that its output is shown on a meter. The entire emphasis is upon illustrating what takes place in a reactor.

The invention is based upon the concept that the behavior of a transistor in a heat-unstable circuit bears a marked similarity to the behavior of a nuclear reactor.

Undersea or Surface Craft

A unique craft that can operate either 20 feet below the surface or above the surface as a hydrofoil boat has earned patent 3,082,975 for Dick Cardwell and Adolph F. Von Soden, San Diego, Calif.

The vessel can carry cargo or passengers. It utilizes stabilizers and hydrofoils to lift the hull out of water.

The hull is elongated and tapers toward the end. The fuselage is composed of a pair of wings, extended to the side and retractable, that can be used for either surface or underwater operations. Portholes along either side allow visual observation during surface or underwater operations.

Other Patents

Other U. S. patents granted include:

A boat storage hangar suspending boats in cradle-like slings, one atop another, which gained patent 3,082,887 for Hugh Brooks, Alhambra, Calif.

An automatic tilting dump truck stabilizer that shifts the center of support to the rear and stabilizes the truck's body, which earned patent 3,083,059 for Fred Bisantz, Galion, Ohio, who assigned rights to the Hercules Galion Products Inc. of Delaware.

A folding rocking chair that can be compressed into a very small space, for

which Benjamin K. Milbourne, San Jose, Calif., gained patent 3,083,051.

A traffic speed computer that offers a way of determining the speed variations of cars going in one direction past a sampling point, which earned patent 3,082,949 for John L. Barker, Norwalk, Conn.

• Science News Letter, 83:238 April 13, 1963

TECHNOLOGY

Electrical Model Tests How Human Ears Hear

► **AN ELECTRICAL MODEL** of the human ear is helping scientists determine how human ears hear.

Tests so far support the theory that each tone received by the ear causes two waves to travel along the membrane of the cochlea at different speeds. The ear is so sensitive it can detect the difference between a tone of 1,000 cycles per second and another of 1,003 cycles per second.

The cochlea transforms sound waves into nerve responses. It is believed to contain approximately 30,000 miniature antennas. When one wave catches up with the other along the cochlea membrane, the two waves combine, the tests showed.

This step toward understanding the sensitivity of the human ear was reported to the Air Force's Bionics Symposium in Dayton, Ohio, by Dr. Lucio M. Vallesse and Louis A. deRosa of International Telephone and Telegraph Corporation.

• Science News Letter, 83:238 April 13, 1963

ENGINEERING

Technique for Doubling Wireless Power Reported

► **THE EFFICIENCY** of microwave energy has been more than doubled by a new technique, developed by two professors, for converting it into electric power at the receiving end.

Prof. R. H. George and E. M. Sabbagh of Purdue University, Lafayette, Ind., have been able to convert 70% of the wireless power, received through space, into direct-current electricity, an improvement over their previously attained 60% efficiency and approaching the ultimate of over 90% which they envision. The highest efficiency achieved up to now by other researchers in this field has been less than 30%.

The Purdue achievement could be important in future space exploration as a method of insuring that large amounts of useful power could be transmitted to spaceships in flight and to colonies on the moon.

• Science News Letter, 83:238 April 13, 1963

Planktonic Foraminifera are minute marine animals whose skeletal remains cover about 40% of the world's ocean floors.