


ATOMIC WALL CHART



New!
Professional Quality at Low Cost!

For those wanting more than average knowledge of nuclear subjects. A periodic chart which explains and diagrams radioactive isotopes, solar energy, hydrogen bomb reaction, atom bomb fission. Shows all elements, tells which are radioactive, their latest atomic weights, number of electrons and orbits.

Features graphs of recurring properties of the elements. The graphs are striking—they show similarities between elements more clearly than whole chapters written on the subject. Another first, the name of each element is printed in prominent letters—eliminates confusion if symbol is unfamiliar. Defines dozens of nuclear terms and provides a basic education in atomic theory. The extensive text and diagrams make this chart ideal for study as well as reference. Written so you can understand it and explain it to others.

Beautifully illustrated in 4 colors on heavy chart paper. Clear varnish coated for soil resistance. Large 32 x 45 size makes impressive addition to office, den or science classroom. Shipped rolled, not folded. Send now for this professional quality chart. **ONLY \$2.95 PPD**. Satisfaction guaranteed—we back our claims.

FREE Write today for illustrated catalog of unusual science items—soon to be published.

FREY SCIENTIFIC SUPPLY CO.
273 E. Orange St. Mansfield, Ohio

POLAROID Jr. Microscope Attachment

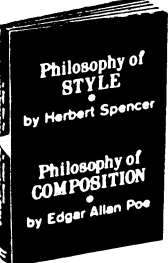
This accessory shows: Colorless crystals and fibres in brilliant colors; Converts your microscope into a polarizing instrument; Opens the whole world of polarized light to you.

Limited stock, at 1/3rd of original price.

Polaroid Jr. set complete with full instructions. **\$2.00 p.p.**

HARRY ROSS Scientific & Lab Apparatus
61-L Reade St., N.Y. 7, N.Y.

IF YOU WRITE FOR MONEY!



Enrich your writing by applying Herbert Spencer's and Edgar Allan Poe's classic principles that have inspired many of the world's greatest authors. Indispensable if you want to get published! Send \$1.00 to

PAGEANT PRESS
Dept. SN
101 5th Ave., N.Y.C. 3.

MICRO-ADS

Equipment, supplies and services of special interest to scientists, science teachers and students, science-minded laymen and hobbyists. 2¢ per word, payable in advance. Closing date 3 weeks prior to publication (Saturday).

SNL, 1719 N St., N.W., Washington 6, D. C.

BOOKS BOUGHT, SOLD. SCIENTIFIC, TECHNICAL, non-popular. Sets, files, years. Canner's, Boston 20N, Massachusetts.

GOVERNMENT SURPLUS RADIOS, RECEIVERS, transmitters, gadgets, parabolic reflectors, infra-red snooper scopes, aircraft camera lenses. Amazing catalog. 10¢. John Meshna, Malden 48, Mass.

NATIONAL GEOGRAPHIC MAGAZINES, 1888-1960, any issue. Periodical Service, Box 465-SN., Wilmington, Delaware.

INVENTION

Patents of the Week

► **DUST-LADEN** air can be purified by passing it through a field of radiant energy that destroys the dust by burning it. A low-cost, efficient purification device, patented by two Milwaukee, Wis., inventors, reportedly succeeds in utilizing radiant energy without a corresponding high increase in air temperature and the need for expensive equipment to cool the treated air.

To get this result, Adolf J. Burklin and Francis W. Lauck designed a unit that does not pass the air directly over the heating element in conventional fashion. Instead, the electrically powered energy generator is mounted inside the air passage chamber, with the heating coil housed in transparent fuse quartz and aluminum oxide, materials that are low energy absorbers.

The purifier received patent No. 2,999,930, assigned to A. O. Smith Corporation, Milwaukee.

Heat loss is further prevented by a silver-surfaced shield that reflects the energy back and forth within the chamber walls, establishing a uniform field.

When the heating element and a motor-driven fan are energized, the infrared heat energy output is absorbed by incoming dust particles and destroys them by combustion.

The unit is suitable for home use and requires only "a relatively small and inexpensive" cooling attachment, the inventors said.

Dust removal is also the purpose of an invention patented by three Californians who produced a "dust-free work bench."

A table and cabinet used for factory assembly work is supported at one end by a unit that feeds filtered air into the cabinet through a screened duct. The operator has access to the table through openings in a Plexiglas screen. The apparatus is described as "especially useful" for work on vacuum tubes, semi-conductors and ball bearings, all requiring a high degree of cleanliness during assembly.

Inventors Robert A. Abler, Los Altos, and Floyd L. Becker and David G. Clifford, Palo Alto, assigned rights to patent No. 2,999,448 to Varian Associates, Palo Alto.

The vapor of dipropargyl ether can be used to keep stored potatoes from sprouting without being absorbed by the potato and without any of the harmful toxic effects possible with dusts and sprays previously used as anti-sprouting agents, inventor Frederick A. Hessel of Montclair, N. J., claims.

His process received patent No. 2,999,746, assigned to General Aniline & Film Corporation, New York. The ether vapors are applied at a ratio of one part by weight per 1,000 parts by weight of stored potatoes.

An anti-skid sanding device, designed for installation in automobile trunk compartments, won patent No. 2,999,711 for Leonard J. Sturmer, Niagara Falls, N. Y.

Each of the two units in the trunk con-

sists of an electric rotary blower, a funnel-shaped sand hopper and a curved pipe with the forward open end over a rear tire. When a switch is turned on, the blowers, operated from the car battery, shoot streams of sand onto the tires to prevent skidding while the wheels are rotated.

• Science News Letter, 80:230 September 30, 1961

SPACE

NAS Scientists Support Man in Space Program

► **THE UNITED STATES** should continue its push into space, the Space Science Board of the National Academy of Sciences, Washington, D. C., believes.

The Board recommended to the Administration that "scientific exploration of the moon and planets should be clearly stated as the ultimate objective of the U. S. space program for the foreseeable future."

The recommendation shows that many scientists favor space exploration. One criticism of the U. S. program for space exploration has been that it is mainly politically inspired and of little scientific value.

The Academy Board said the U. S. should stress that it will continue to aim at scientific understanding of space, the problems of man in space and of using space science for man's welfare.

• Science News Letter, 80:230 September 30, 1961

AERONAUTICS

Aerobatic Team Shows Diamond T-Formation See Front Cover

The Blue Diamonds, leading aerobatic team of Britain's Royal Air Force, show a new formation, the Diamond T, presented at the annual show of British aircraft and flying at Farnborough, England.

The Blue Diamonds, seen on the cover of this week's SCIENCE NEWS LETTER, are not only air acrobats but also a fully operational front line unit.

• Science News Letter, 80:230 September 30, 1961

Questions

ASTRONOMY—How many miles above the earth are po'ar radiation "caps" believed present? p. 219.

SPACE—How many U. S. satellites are now in earth orbit? p. 221.

Photographs: Cover, British Information Services; p. 219, International Telephone and Telegraph Corporation; p. 221, National Aeronautics and Space Administration; p. 223, Aeronutronic, Ford Motor Company; p. 226, Century 21 Exposition; p. 232, Dennix Products Co.