

## • New Machines And Gadgets •

⚙️ **HOLLOW GLASS** building blocks have been patented that contain a louver-like metal screen to cut down light glare inside the building and to reduce heat radiation during hot days.

Science News Letter, August 7, 1943

⚙️ **PLANES** can take-off automatically, fly a predetermined course without a pilot, then safely land through an improved radio-control apparatus recently patented.

Science News Letter, August 7, 1943

⚙️ **A NEW HYPODERMIC** injector has no needle. Instead the liquid is expelled in a fine stream under sufficient pressure to puncture the skin and inject itself into the tissues, according to the inventor. Only a microscopic hole results. Depth of penetration is controlled by varying the pressure and the quantity of liquid injected. The patient has the sensation of a slight breeze blowing against the skin, it is reported, rather than a sensation of pain.

Science News Letter, August 7, 1943

⚙️ **BOTTLE OPENERS**, constructed of an inexpensive metal strip that fits neatly over the cap and down the side of the bottle, are designed to be sold with each bottle and used only once. Some day commercial use of the invention may eliminate the recurrent hunt for a bottle opener.

Science News Letter, August 7, 1943

⚙️ **STRAINS** that occur when a bullet smacks into armor plate are revealed by firing at steel and plastic targets

coated with lacquer. The circular pattern of tiny cracks which results is dyed to make the pattern more prominent, as shown in the picture. These tell-tale "footprints" are studied by engineers to aid development of better armor plate and better armor-piercing shells. The method is expected to have peacetime use for locating strains in machinery.

Science News Letter, August 7, 1943

⚙️ **NEARLY** three-fourths the time needed to machine 36% nickel alloy is being saved by adding a lustrous gray chemical element to the mixture. The alloy can be machined much more easily and retains its valuable property of expanding very little when heated.

Science News Letter, August 7, 1943

⚙️ **LOW-COST** sound recordings can now be made on film and played back immediately without processing. The method has proven especially useful in the business office for dictation and executives are able to send recorded messages to branch offices. Physicians can record the heart beat of a patient and file the strip of film for future comparison. The sound can be held to a whisper or amplified to fill an auditorium.

Science News Letter, August 7, 1943

If you want more information on the new things described here, send a three-cent stamp to SCIENCE NEWS LETTER, 1719 N. St., N. W., Washington 6, D. C., and ask for Gadget Bulletin 168.

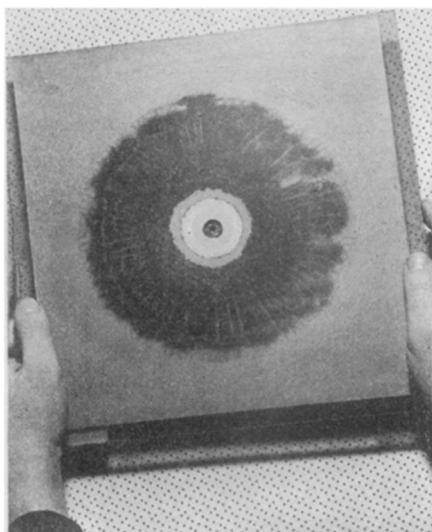
### ENGINEERING

## Telescoping Igloo Designed For Troops in Far North

➤ **AMERICAN TROOPS** in Alaska, Iceland and other high-latitude lands are often housed in semi-cylindrical "tin igloos." A structure of this type, that collapses into minimum bulk for shipping, is the subject of patent 2,323,106, granted to R. D. Whiteman of Piedmont, Kansas. The down-arching sides are so pivoted that they can be swung back into the central space of the hut. After that has been done, the roof is lowered by means of wound-up cables to little more than half its height when in use. The whole makes a conveniently box-like "package" for loading on truck, flatcar or boat.

Science News Letter, August 7, 1943

Germany is reported to be using 42% of its potato crop to make motor fuel.



## NEW SCIENCE and WAR BOOKS

### Dictionary of Science and Technology

In English, French, German and Spanish by Maxim Newmark. Separate indexes permitting two way reference of any of these languages. Conversion tables and technical abbreviations. Including the very latest war terms. Intended for engineering, scientific and technical libraries, for English-speaking industrial and technical personnel in South America and Europe, for radio monitors and short-wave broadcasters to foreign countries, for modern language teachers, professional translators, importers, exporters, and others. **\$6.00**

**Encyclopedia of Substitutes and Synthetics** edited by Morris D. Schoengold with the collaboration of America's foremost chemical and industrial laboratories. Just out. Covers thousands of raw materials, chemicals, processes, substitutes, synthetics. Planned and laid out for war time needs. Not a mere listing of materials, but the whole story: Properties. Solubility, Substitutes, Uses, Processes. **\$10.00**

### Rehabilitation of the War Injured

Written by over 50 outstanding specialists. Edited by William Brown Doherty. Dealing not only with Neurological and Psychiatric aspects of rehabilitation of the war injured, but also with Orthopedics, Occupational Therapy, Vocational Guidance, Physiotherapy, Reconstructive Surgery and Legal and Social aspects of rehabilitation. A most important volume for all those interested in social work, public health, occupational therapy and vocational guidance. **\$10.00**

### Dictionary of Biochemistry

Edited by William Marias Malisoff. **\$7.50**

### From Copernicus to Einstein

by Hans Reichenbach. The story of the theories that led to the development of Einstein's Theory of Relativity. Told simply, still on a high scientific plane. **\$2.00**

### Conquest of Bacteria

By Frank Sherwood Taylor. The story of chemotherapy from salvarsan to sulfa. **\$2.00**

### Petroleum Encyclopedia

by D. D. Leven. Revised by S. J. Pirson. The most comprehensive book on the subject. **\$10.00**

### Twentieth Century Philosophy

Edited by Dagobert D. Runes. Including discussion of subjects as Philosophy of Science, Soviet Thought, Philosophies of China, etc., by such contributors as Roscoe Pound, John Elov Boodin, Bertrand Russell, Alfred N. Whitehead, Jacques Maritain, George Santayana, John Dewey, Wing-tsit Chan. **\$5.00**

### Dictionary of Sociology

Edited by Henry Pratt Fairchild. **\$6.00**

### IN PREPARATION:

**Twentieth Century Engineering** by C. H. S. Topholme. **\$3.00**  
**Twentieth Century Physics** by Pascual Jordan. **\$4.00**  
**Virus Diseases in Man, Animal and Plant** by Gustav Seiffert. **\$4.00**  
**The Chemistry of Synthetic Substances** by Emil Dreher. **\$3.00**

### PUBLISHED BY

**Philosophical Library, Inc.**

Science Division  
 15 East 40th Street, New York City, Zone 16