

# New Machines And Gadgets

## Novel Things for Better Living

Glass and fire are no longer enemies, states a glass manufacturer. The fireplace hearth may now be made of glass instead of dingy tile. The glass will reflect the firelight and add to the brightness and cheerfulness of the scene. Fluted glass may also be used around the fireplace as a frame.

Pure sponge chromium, a powdered form of the metal, can now be obtained to 99.8% purity even from low-grade domestic ores by a new process recently developed. Its high purity makes it valuable in the manufacture of special steels and in alloys subjected to high temperatures, such as electrical heating elements.

Cellulose sponges, in these days of shortages, may replace rubber and natural sponges. They are said to be just as good—even better. They are highly absorbent, tough, durable, and resistant to chemicals and abrasives. They are soft and pliable when wet, and withstand repeated cleaning and sterilizing.

Bombs are now being produced faster than before by a new process resembling that of the potter and his wheel. But instead of a lump of whirling clay being formed into a vessel by the potter's hands and fingers, a white-hot spinning tube of steel is formed by metal arms and fingers into the nose and main body of a bomb. The tail portion is formed in the same way on another machine.

This is not a piece of blackout material the young lady in the illustration is holding over her left eye. It is a piece of glass as transparent as that of the spectacles she is wearing. In fact, it is precisely the same sort of glass. If she turned it around a quarter turn in its own plane, you would see that her left eye is just as good-looking as her right eye. Thus two transparent pieces of



glass combined in a certain way become as opaque as a blackout shade. The explanation is that this glass allows only light vibrating in one plane, polarized light, to pass. The glare reflected up from the street is vibrating the wrong way to pass the lady's spectacles. But everything else is plainly visible—more visible when the glare is cut out. The glasses are ground to prescription.

Rips and tears in your tablecloths, sheets, shirts or what-nots are easily and quickly mended without lifting a thimble—or needle either—by use of a new resin-treated mending material now on the market. Cut out a piece to size, lay it under the torn place, press it for a few seconds with a hot iron, let it cool—and the job's done. The mending material is practically invisible and will withstand any amount of washing and ironing.

Electric ears as well as electric eyes now protect some of our great war production plants. The wires of an "acoustic fence" are the ears that listen 24 hours a day, guarding every foot of the fence in all kinds of weather, storm, fog or blackout. These ears hear the snip of a wirecutter, the sound of a pick, even the whisper of a person, and transmit the sounds to a watchman who may be located at a central station inside the plant. The fence may also be

used by a watchman to call for help. He has only to tap on the wire and his call will be heard at headquarters. There are no receivers to pick up—the line is always open.

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, D. C., and ask for Gadget Bulletin 101.



## SCIENCE CLUBS OF AMERICA

### NEWS OF CLUBS

PAYNE, Minn.—In this "backwoods" settlement, about 40 miles from Duluth, Harold Stenbock, teacher, WPA Adult Education, was requested to conduct a class in astronomy in the fall of 1937. Shortly thereafter, "Amateurs of Science" was organized and incorporated under the laws of the state. Early in 1938 work was started on building a six-inch reflecting telescope, and completed about a year later. Then the members of this club cut their own logs in the forest, made their own lumber, built their own observatory.

Today this club has a debt-free observatory with a lecture room seating about 40 people. The building is completed except for the revolving dome for which the members have not yet been able to raise the necessary funds. Conservative estimates value the club's building, as it now stands, at \$700.00. Astronomical studies occupy only part of the time of the members. During the past winter a very extensive program of conservation has been undertaken. Here in a settlement where money is scarce, drama has been unfolded. Here dreams of accomplishment and the will to carry on are rife in spite of adversities. A great deal of credit must go to Harold Stenbock who continues to sponsor this club.

MOREAUVILLE, La.—Immediately after receiving information about forming a science club, the aid of the science teacher was enlisted and the proposition put to the science classes. "It went over with a bang," reports Reginald St. Romain, president of a newly organized "Experimental Science for Youth" club at Moreauville High School. This group has elected Elaine Gremmilion as reporter; she regularly supplies news to the three local newspapers read by the students. Levette P. Doufour, science teacher, is the sponsor.

Every science club can readily justify the office of "reporter" or "public relations council". It is a good practice to let others know what you are doing; tell others that science club work is serious, educational and likely to prove essential to America's war program. You are doing something of which you justly can be proud.

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MARINETTE, Wis.—The Nucleus, a Biology Club at the local High School, in its lighter moments, sponsors a school dance, candy sale and a terrapin derby (turtle race to you). Considerable experimental work is being done with soilless gardens and earthworm culture. The plants and aquaria in the classroom are attended; and insects are mounted and preserved. Club members also study fresh water biology and take numerous field trips for experimental material. This group is sponsored by E. Gertrude Wagner, biology teacher.

ASHTABULA, Ohio—Before a candidate can be accepted for membership in the Park Science Club at Park Junior High School, the individual must submit a scientific project for approval. Projects thus submitted are used as the basis for future programs of the club. Maintaining the school's decorations, scrapbooks and exhibits, are important duties of the members. In addition, trips to local industrial plants and field trips are made. Further to encourage an interest in science, assembly programs are contemplated and apparatus for use in the science classroom will be made. The club is sponsored by Richard G. West, science teacher.

PERU, N. Y.—The North Pole Science Center Fair will be held at Peru Central School on Saturday, April 18. One of the features will be a model airplane contest; another is a Nutrition essay contest. Science demonstrations and exhibits will play an outstanding role; many commercial and non-competitive exhibits also will be displayed.

The Peru Science Center is very active. The science teachers of the Northeastern Zone of the State of New York are sponsoring a weekly science broadcast entitled "Modern Alchemists", featured on station WMFF. Science club members desirous of furnishing materials for this program should communicate with Merton Bromley, Director of the Peru Science Center, Peru Central School.

Club members who would like to furnish programs which can be recorded for use on station WRUL should make arrangements with the New York office of Science Service where recording facilities have been installed.

(N.B. Peru is not the farthest north for members affiliated with Science Clubs of America. There are several clubs in Alaska.)

Clubs are invited to become affiliated with SCA for a nominal \$2 for 20 members or less. You can become an associate of SCA for 25 cents. Address: Science Clubs of America, 1719 N St., N.W., Washington, D. C.

Science News Letter, April 25, 1942

#### MEDICINE

### Swallowed False Teeth Found Three Years Later

HALF a lower set of false teeth lost three years ago by a Detroit dental patient was found recently—in the patient's stomach. According to a report in the *Journal of the American Dental Association*, (March) the patient was even more surprised than surgeons who removed the teeth.

He told physicians he had dropped his lower set of false teeth three years ago, breaking it into two pieces. He had picked up the pieces, fitted them together, and put them back in his mouth. Sometime later he noticed one section was missing, but he never thought he had swallowed it.

Pain from an infected appendix brought him to the hospital where the missing teeth were discovered by X-ray and removed by surgery. The patient recovered. His teeth were covered with

a "peculiar ebony-like coating. All jagged and sharp edges had been rounded off by this coating and the crevices filled in," the Journal report by Dr. David F. Heron, Detroit dentist, states.

"Whether this (coating) was an attempt on the part of the body to cover the sharp edges by a method such as is used by the oyster in forming a pearl or merely the result of the action of hydrochloric acid on the vulcanite of the denture-base is speculative," Dr. Heron adds.

Science News Letter, April 25, 1942

#### MEDICINE

### Sending Medical Supplies To Polish Refugees

A SHIPMENT of 322 tons of medical supplies, blankets and clothing from the American Red Cross stockpile at Cairo, Egypt, is on its way to Polish refugees in northern Iran, Red Cross officials have just announced.

The stockpile consists of material on a relief ship originally intended for Greece. The ship did not reach that country before its fall to the Nazis, so

was diverted to Cairo, and the material has been held there by the Red Cross for other uses, such as the relief of the refugees in Iran.

These refugees, largely aged people, women and children, travelled thousands of miles and suffered great hardships. About two-thirds of them arrived suffering diseases due to malnutrition, lack of clothing and shelter. American Red Cross headquarters in Washington have been informed by a Polish Red Cross organization in northern Iran which requested supplies from the American Red Cross.

Exactly what medical supplies are on their way to Iran is not yet known at Red Cross headquarters. The original stockpile included anesthetics, such as chloroform and ether, iodine and antiseptics, quinine, sulfa drugs and aspirin. It is believed that blankets made up a large part of the shipment.

Science News Letter, April 25, 1942

The original ancestor of the elephant was about the size of a pig.

Human skin is from 1/16 to 1/8 inch thick.

## NEW POLAROID\* KIT

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