Earthquake Waves Clocked

➤ EARTHQUAKE waves can travel along the surface of the earth at more than cannonball speeds, a paper by Ralph R. Bodle of the U. S. Coast and Geodetic Survey disclosed. Just before the war broke out, a special seismograph was installed at St. Georges, Bermuda, to catch crustal waves moving over the bottom of the Atlantic and measure their speed. Velocities of such waves, measured not only at this station but at one in Norway, averaged about 4.5 kilometers (2.79 miles) per second.

Science News Letter, May 1, 1943

Mississippi's Flow Data

➤ DURING the century from 1839 to 1938, the Ohio river poured approximately 280,000 cubic feet of water into the Mississippi River every second. In the same period the mean flow of the Mississippi, just below the junction of the Red River, was about 635,000 cubic feet per second. These figures were presented by Dr. Clarence S. Jarvis of the U. S. Soil Conservation Service. The data are taken from government records.

"Fortunately for the science of hydrology, and for all to which it relates, the rainfall, temperature, and other climatological data, including daily river stages and daily forecasts, had become entrenched as essential parts of the U. S. Weather Bureau records," Dr. Jarvis stated.

Science News Letter, May 1, 1943

Recorder for Wind Data

➤ A PHOTOGRAPHIC recorder used to replace previous methods of obtaining a series of wind velocity measurements was described at the meeting by Dr. Leonard B. Corwin of the U. S. Soil Conservation Service.

Dr. Corwin stated that the recorder was developed to secure simultaneous measurements of wind velocity at several different levels where electrical power was unavailable. The dials or faces of several counters were photographed as the simplest and surest way to obtain multiple records. By adjustments, photographic observations could be obtained at intervals of one minute up to an hour or more.

Dr. Corwin stated that the photographic recorder "appears to offer a means of obtaining an autographic record of many if not most meteorologic

and climatic values." Further simplification of the apparatus is contemplated.

Science News Letter, May 1, 1943

MEDICINE

Fish Oils May Be Source Of Blood Pressure Remedy

➤ COD LIVER OIL and other fish oils may prove to be a source of a high blood pressure remedy, it appears from a report by Dr. Arthur Grollman and Dr. T. R. Harrison, of the Bowman Gray School of Medicine at Wake Forest College, to the Society for Experimental Biology and Medicine. (*Proceedings*, March)

Fish body and liver oils, they discovered, contain a substance which is effective in reducing high blood pressure in rats. The substance is not the same as vitamin A, which is contained in fish liver oils and which some scientists have believed has a blood-pressure reducing effect. It is, however, similar to the kidney extract hailed a few years ago as a potential remedy for high blood pressure.

Both the kidney extract and the fish oil substance can be given by mouth. Both reduce the blood pressure slowly and have a relatively prolonged effect compared to other substances that reduce high blood pressure.

The blood-pressure reducing substance, however, is present in only small amounts in animal kidneys. Fish oils, on the other hand, are relatively potent in reducing blood pressures and are readily available. Therefore, in the opinion of the investigators, they "offer greater promise than kidneys" as a source of a blood pressure remedy.

Further experiments are in progress to learn the nature of the substance in fish oils which reduces high blood pressure in rats.

Science News Letter, May 1, 1943

Sugar-beet farmers are advised to plant a new variety of *potato* named Pawnee because it matures and can be dug before the beets are ready to harvest.

The U. S. Bureau of Mines has undertaken a greatly expanded search for bauxite, alunite, and aluminous clays to make the country independent of imported bauxite for *aluminum*.

Tight oak or gumwood barrels may be used for the transportation of cottonseed and linseed oil, soap, lubricants, and strong alcohol, if coated internally with a solution of sodium silicate.





The Merry Month

➤ EASTER, just past, has a few very ancient, pre-Christian practices lurking behind its orthodox ecclesiastical decorations and observances (See SNL, April 24). Many persons praise as wise the traditional policy of the Church, of not attempting to suppress all heathen observances by a converted people, but permitting the retention of those that are innocent or unobjectionable. Thus, relics of the old equinoxial, seed-time festivals survive in Easter customs—rather badly dislocated in time this year because of the unusual lateness of Easter.

The new religion writes a thinner palimpsest-script over the old in May Day celebrations. For one thing, there is no important Church feast-day on May 1, so that observance of the day can be much more frankly secular.

May Day is what even its attenuated modern form indicates, primarily a flower-time feast, as the pagan festival supplanted by Easter was a seed-time celebration. It marks the advance of the year, the growing of hopes for a good harvest of fruit from the blossoming boughs, of grain from the soil that has sent forth bright promises in the form of violets and anemones and buttercups.

Nowadays May Day is almost altogether a children's holiday, except where colleges and girls' schools choose and crown their May Queens. However, this enthronement for a day of the prettiest young woman in the community isn't merely a momentary stretching-out of childhood; it is actually a closer approach to the original form of the old festival. For May (as young people don't need to be told) is a time for romance and love-making, and the Queen of May was the village's living image of the

Goddess of Love—one of whose classic names was Maia.

The late Medieval and Renaissance times, when not merely children but young grown-ups danced around the May-pole, all this was better remembered. That accounts for the stricter attitude of the moralists of the times, and the eventual attempts at total suppression undertaken by the Puritan government of England during Cromwell's reign.

It probably also accounts for the lesser observance of May Day in this country, since the cultural atmosphere of at least the northern states was largely established by the descendants of Puritan settlers. Only as their austerity has relaxed with the passing of generations have May-baskets and the May-pole returned.

Science News Letter, May 1, 1943

PUBLIC HEALTH

New Aid to Workers' Ears By Plastic Ear Molds

A NEW aid to protect the hearing of workers in noisy industries, such as shipbuilding, and which promises to be "the solution for certain industrial ear problems" is reported by Dr. David A. McCoy, of Boston (Journal, American Medical Association, April 24).

It consists of an ear mold of transparent plastic lucite, made to fit each worker's ear. This custom-made feature provides a good fit with no leaks of noise and one which is comfortable to wear all day.

The ear mold reduces the intense and high-frequency noises, which are distressing, painful and deafening, but lets the wearer hear people talking without trouble.

A further advantage of this plastic ear mold is that it shuts out the flying balls of hot slag which are a danger to the ears of welders and chippers.

The new ear molds were tried for two weeks by 30 welders, chippers, burners, buffers and other workers in the California Shipbuilding Corporation, Dr. McCoy reports. All the workers found them satisfactory and about 500 have now bought them without any advertising by the ear mold company.

Workers who used them report not only that the molds shut out the intense noise but also that as a result of not being distracted by it, they can do more work in a day.

Science News Letter, May 1, 1943

New Machines and Gadgets

A NEWLY designed high-speed scoop for earth excavation is said to cut cost by half. Mounted on four rubbertired wheels, it can travel on pavement. The device is considerably lighter in weight than the former cast steel model.

Science News Letter, May 1, 1948

SELACK-OUT PAINT has been developed which can be easily applied to windows with brush or spray. It can be removed readily with a rag dipped in turpentine. Forming an opaque semi-soft flexible film, this non-cracking paint expands with the glass. A special white paint can be put over the black paint to lighten up the interior of the building.

Science News Letter, May 1, 1943

WASTE TRIMMINGS of plastic used in a commercial laboratory are molded as heads on common tacks or small metal studs. These are being used in the laboratory as stick pins to replace hard-to-get metal thumbtacks.

Science News Letter, May 1, 1943

A COLLAPSIBLE BED that can be attached to and folded within an office desk has recently been patented. The telescopic frame can also be used with other types of furniture such as a radio cabinet in an apartment or automobile trailer.

Science News Letter, May 1, 1943

THE NEW AIRPORT runway light, which an engineer is viewing through a filter glass in the picture, is strong enough to withstand the impact of giant

planes. The guiding light continues to burn under a 50-ton load, nearly three times the strength of former lights. Designed in about the size and shape of a fire hydrant, the unit is buried underground except for the top three inches. Science News Letter, May 1, 1943

ALUMINUM WELDERS using hydrogen torches are now protected by new goggles which filter out all glare, relieving eyestrain and permitting a better view of the work.

Science News Letter, May 1, 1943

BOX-CAR oil carriers are a future possibility. A model now under test is a standard automobile-type steel box-car into which has been fitted four steel tanks encased in wooden boxes. The car has a capacity of 12,200 gallons, considerably more than the ordinary tank car.

Science News Letter, May 1, 1943

WINDOWS made of the metal beryllium are used in a new X-ray outfit for testing materials for bombing planes and other war machines. Beryllium is opaque to ordinary light but it is more transparent to certain kinds of X-rays than glass. A very thin disk of pure beryllium is sealed in the wall of a vacuum X-ray tube by a special process.

Science News Letter, May 1, 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, D. C., and ask for Gadget Bulletin 154.

Spots on clothing are removed more effectively by several short applications of cleaning fluids than by single long treatments.

There are more than 20,000 seeds in an ounce of lettuce, carrot or tomato seed, it is reported.



OUT OF PRINT

U. S. Publications at low prices:

Smithsonian Institution
National Museum
Bureau of Standards
National Advisory Committee
for Aeronautics
National Herbarium
Write—

JAMES C. HOWGATE BOOKSELLER

120 South Church Street Schenectady, N. Y.