

AGRICULTURE

Acorns, Horse Chestnuts Feedstuffs in Britain

GATHER acorns, horse chestnuts and beechnuts to eke out the feedstuff supply for farm animals and thereby release tonnage for other needed imports, is (*Nature*, Sept. 21) the suggestion of Dr. R. Melville of the Royal Botanic Gardens at Kew, near London. Both oaks and horse chestnut trees have borne bumper crops this year, and in the present national emergency they should not be permitted to go to waste, Dr. Melville points out.

Horse chestnuts are slightly bitter, but most farm animals soon come to like them, the botanist reports. Only pigs persistently refuse them. They can be fed "as is," but it is considered best to gather them in central depots where they can be dried and ground.

Acorns can be stored in underground pits, where they will keep very well for a long time, if they are not permitted to get wet. They can be fed fresh or dried, but it is not recommended that they be given to young animals, which are sometimes poisoned by them.

Science News Letter, November 2, 1940

CHEMISTRY

Fluorescent Plastic Tees Are Easy To Find Again

GOLF TEES, made of a cellulose acetate plastic, now are molded with a yellow fluorescent pigment. The invisible ultraviolet rays of the sunlight cause this to glow brilliantly, making the tee easy to find after it is used. (*American Molded Products Co., Chicago*)

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PHYSIOLOGY

Twins Face Unusual Hazards Before and After Birth

ARE twins desirable? If you happen to be hoping—or fearing—that the next addition to your family will be twins, triplets, or a larger number of babies, you will be interested in the answer to this question given by Dr. H. H. Newman, of the University of Chicago in a new book, *Multiple Human Births* (Doubleday, Doran).

Mothers want twins and frequently ask how they might go about it to have twins. A remarkable number of people are interested in twins. A fine pair of twins is usually the focus of family affection.

But nevertheless, Dr. Newman says, biologically speaking, twins are not desirable.

Among animals in general, the more primitive method of reproduction is the wasteful one of producing an enormous number of young and letting them shift for themselves without parental care. Only a few live to grow up and have young of their own.

The more modern and more effective way is to produce only a few or one offspring and take the utmost care of them or it.

Man has specialized for the production of but one baby at a time. For this reason, twins face hazards to which a single baby is not exposed. Most of these dangers must be faced before birth.

No one knows, Dr. Newman says, what proportion of the twins who start life ever succeed in being born, but estimates range from 20% to 50%.

Lack of room is likely to force the babies into positions in the mother's body that make birth hazardous.

Premature birth is extremely prevalent among twins and almost universal among triplets. And the baby born before its time is very delicate and easily injured. Especially vulnerable is the brain, for the skull is less completely ossified and is a less efficient protection.

Even after they have safely arrived in the world, twins are not free from special dangers, for not more than half of twins born prematurely live to reach school age.

A peculiar hazard is the lot of identical twins, those who develop from a single egg cell, for these babies before birth must share the same arrangement for blood supply. One twin, in these circumstances, may get more than his share of the blood. The other suffers as a result and may even have his heart stop.

So twins who live to go to school and finally grow up have lived through many dangers. They are a picked lot and are to be congratulated.

But maybe the mother will give up her idea about wanting to be sure to have twins.

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INVENTION

Ice Cream Cones Can Be Filled Down to Tip

ICE CREAM cones can now be filled clear down to the point with a new filler recently introduced. (*Feller Cone Scoop Co.*) It is a scoop, which is dipped into the ice cream, and the cream comes out as a cone, point downwards.

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IN SCIEN

INVENTION

Electric Coffee Maker Has Automatic Turnoff

AN electrically operated glass coffee maker has an automatic switch which operates when all the water has passed to the upper bowl. (*General Electric*) The current is then reduced so that merely enough heat is applied to keep the coffee hot. Thus, one does not need to watch the device, but can start it and leave it if desired.

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GENERAL SCIENCE

British Science Committee Similar to Defense Group

ANNOUNCEMENT from London that the British government has formed a committee of prominent scientists to aid in defense brings attention to the parallel committee here. This is the National Defense Research Committee, established last June under the chairmanship of Dr. Vannevar Bush, president of the Carnegie Institution of Washington. But while the British committee was organized after more than a year of war, ours was created to help avoid war.

The six members of the British group are outstanding in their fields, and include two Nobel prize winners. One is Sir William Bragg, director of the Royal Institution and President of the Royal Society, who won the Nobel award in 1915 jointly with his son, W. L. Bragg, for their work on crystal analysis by X-rays. Another committeeman, Dr. A. V. Hill, physiologist, received the Nobel prize in medicine in 1922. He is Foulerton Research Professor of the Royal Society, as well as its secretary.

Other members are Dr. E. V. Appleton, secretary of the Privy Council for Scientific and Industrial Research, known for his work in radio and electricity; Sir Edward Mellanby, honorary physician to the King, an expert in nutrition; Sir Edwin Butler, secretary of the Agricultural Research Council; and Dr. A. C. G. Egerton, professor of chemical technology at the Imperial College of Science.

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CE FIELDS

CHEMISTRY

Iodine Losses From Salt Prevented By Coating

LOSSES of iodine from "iodized" table salt and from iodine-treated livestock feeds can be minimized through the use of finely ground calcium stearate, it has been discovered in the course of researches at the Mellon Institute of Industrial Research, by Frederick F. Johnson and Edward R. Frederick.

Calcium stearate is technically a soap, although no housewife would recognize it as such. In an impure form, it is the troublesome, insoluble scummy stuff that develops when ordinary soap is dissolved in very hard water. To chemists, any compound of a metal with a fatty acid is a soap, whether it will dissolve or not.

As a matter of fact, the very insolubility of calcium stearate is one of its advantages as a stabilizer of iodine in table salt and cattle feeds, because it covers the salt grains over with a nearly impermeable coating that prevents the valuable but volatile iodine from escaping.

One sample of iodized table salt treated with the calcium soap lost less than 1% of its iodine in four months of storage, while an untreated control sample lost 15%.

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ASTRONOMY

Cunningham Comet Will Be Brightest Since Halley's

CONCLUSIVE evidence that the new comet discovered recently by Leiland S. Cunningham, of the Harvard College Observatory, will be the most conspicuous since 1910 is contained in his latest calculations of its path. (See *SNL*, Sept. 28) These have been made public by Dr. Harlow Shapley, director of the Harvard Observatory.

They show that in early January, the comet will be easily visible in the western sky for an hour or two after sunset, as it passes south of the bright star Altair in the constellation of Aquila, the eagle. At that time, it will be about as bright as Altair, and possibly even more bril-

liant, though it is somewhat uncertain just what brilliance it may attain.

Its distance from the earth, at the beginning of 1941, will be about 60,000,000 miles, and from the sun about 50,000,000 miles. It will be at its closest to the earth about Jan. 10, when some 54,000,000 miles away, and to the sun, with 33,000,000 miles, on Jan. 16. Between these dates it will be at its most brilliant. However it will then be so close to the sun as to be seen, if at all, only in the evening twilight. Consequently, it will not be as conspicuous as earlier, when it has a dark background. In the closing days of December, the moon, in a crescent phase, will pass to the left of the comet.

Though several comets in recent years were just barely visible when one knew where to look, this will be the first conspicuous naked eye comet since 1910. In that year there were two: Halley's, making one of its 75-year visits, and another which appeared earlier in the year, and was so bright that it was discovered independently in the southern hemisphere by a number of persons. Later it was visible in North America.

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ORNITHOLOGY

Smithsonian Receives Birds From Indo-China

FROM Indo-China, now menaced by the possibility of Japanese invasion, has come a large collection of birds, just received by the Smithsonian Institution. The birds were obtained by Dr. Joseph F. Rock, well-known American scientist-explorer, who has worked for many years in western China. When the war made conditions too difficult for further operations, he shifted his base into Indo-China.

In the new collection are many large birds, which earlier collectors did not like to handle, because of the difficulty of preparing and transporting large specimens through the wild country. Prize specimens are three giant ibis, a large gray wading bird.

The Smithsonian Institution has also received about 1,000 bird specimens from the state of Vera Cruz, Mexico, collected by M. A. Carriker, former associate curator of birds at the Philadelphia Academy of Natural Sciences. Under the auspices of the U. S. National Museum, Mr. Carriker continued the collecting work in this region started last winter by Dr. Alexander Wetmore, assistant secretary of the Smithsonian Institution.

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MEDICINE

American Hospitals Plan Care for Civilian Injuries

AMERICA'S hospitals are preparing for the double defense job of caring for casualties among both civilian population and fighting forces in the event of war.

Albany, N. Y., Hospital, for example, has, on the request of the Surgeon General of the Army, agreed to organize and sponsor U. S. Army General Hospital No. 33, its director, Everett W. Jones, announced at the hospital standardization conference of the American College of Surgeons.

This means getting ready a staff of 42 physicians and surgeons, a chief nurse and possibly other nurses, X-ray, laboratory and other technicians to serve the 1,000-bed General Hospital. At the same time, understudies must be trained to take over at any time the duties of the men and women who will staff the Army hospital, so that the hospital at Albany can continue to care for civilian patients.

In the event of war such as is being waged in Europe now, civilian hospitals will have to care for many war casualties. They should prepare now for such an emergency, Mr. Jones said, by starting to train extra laboratory and X-ray technicians and nurses and by giving refresher courses to graduate nurses who have not been nursing for some years but who may be called in emergency.

Expansion of the hospitals to care for war casualties must also be planned. By evacuating tuberculosis patients to state hospitals and converting to hospital wards several floors of the nurses' home and the outpatient clinics, Mr. Jones said, the Albany Hospital is ready if necessary to expand from its normal capacity of 600 beds and 50 bassinets to 837 beds.

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RADIO

"Translator" Will Convert Your Old Radio To FM

WHEN frequency modulation radio comes into extensive use, it will not be necessary to scrap your old radio set to take advantage of the new static-free reception.

A "translator" has been introduced which can be connected to any good receiver of the older type. (*General Electric*) It is 9 inches high, 15½ inches wide and 8 inches deep. A shielded cable is used to connect it to the old receiver.

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