

## WILDLIFE

**Ibex Being Re-Established In Germany, Austria**

► THE IBEX, heavy-horned wild goat of the Alps, is being re-established in the mountains of Germany and Austria, where it was exterminated by overhunting many years ago, states Dr. Lutz Adolf Heck, Munich zoologist, in the German scientific journal, *ORION* (July). A good beginning has already been made in Switzerland.

The start for the new ibex population of the Bavarian Alps was made by penning a small colony of the animals in a special high-walled enclosure near Berchtesgaden, Hitler's old playground. Some of them came from the great zoological garden of Hellabrunn, near Munich. Zoologists in charge kept up the program even during the war.

By 1944, the colony had grown to 27 head, including a number of kids that had been born in the enclosure. Half of the animals were liberated then, and the remainder shortly after the end of the war. Some of the ibex have been seen from time to time, and prospects for the re-establishment of this element in the natural fauna of the Alps seem hopeful.

Medico-magical superstitions were partly responsible for the extermination of the ibex population of the Swiss, Austrian and German mountains in early modern times. Wild ideas prevailed regarding the powers of bezoar stones, which are hardened hairballs sometimes found in the animals' stomachs, and of a cross-shaped bony concretion from the heart region. Such extravagant prices were paid for these objects that protective legislation was disregarded by the black-market hunters.

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## CHEMISTRY

**Oil Wells Yield Nearly Half of Our Iodine Supply**

► NEARLY half the 1,500,000 pounds of iodine used annually in America now comes from oil wells, *INDUSTRIAL AND ENGINEERING CHEMISTRY*, a publication of the American Chemical Society, says. The iodine is obtained from a brine that comes up with the oil.

Obtaining iodine from oil-well brine is not new. Its first recovery from this source was in 1926 in Louisiana. Oil wells on the West Coast, however, are now supplying the widely used chemical in large amounts, decreasing greatly the amount that must be imported.

The chief use of iodine is as a germicide. It is a familiar medical for cuts and bruises in many households. It is also used as a vital element in cattle feed, in photographic films and in dyes. It is used in methyl iodide, one of the newer gases employed in fire extinguishers, and in a number of other important iodine compounds.

Much of the iodine used in the United

States comes from Chile, where it is found as an impurity in saltpeter. Some comes from Japan where it is obtained from the ashes of seaweed. There is considerable iodine in ordinary seawater, but not enough to make its recovery economical.

In the process of recovering iodine from oil-well brine, the chemical is literally blown out of the oil brines in huge towers built with acid-proof bricks, this article states. It is then captured from the air and solidified. The report, prepared by Frederick G. Sawyer, of the Industrial and Engineering Chemistry staff, in collaboration with M. F. Ohman and Fred E. Lusk of the Dow Chemical Company, asserts that sufficient quantities of oil-field brine are available in this country so that in an emergency the entire iodine requirement could be obtained from domestic sources.

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## PHOTOGRAPHY

**Early Camera Will Be Displayed at Museum**

► ONE of the earliest cameras in the U. S. will be displayed at the photographic museum at George Eastman House, Rochester, N. Y., when the house is opened to the public in a few months.

The camera is one of the first Daguerre cameras sold in this country. It was sold to Dr. Samuel A. Bemis, a Boston dentist, by Francois Gouraud, April 15, 1840. Gouraud was agent in the U. S. for the famed Louis Jacques Mande Daguerre, inventor of the daguerreotype. Dr. Bemis paid \$51 for the camera.

In addition to the camera, the museum will also exhibit the bill of sale and Dr. Bemis' first picture, a view of King's Chapel Burying Ground in Boston.

"Even to our eyes," declares Beaumont Newhall, curator of Eastman House, "it is a good photograph."

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## AGRICULTURE

**Fluorescence May Help Solve Soil Problems**

► FLUORESCENCE, the visible light given out by some substances when irradiated with invisible ultraviolet light, may become a useful tool in the scientific study of soils. This suggestion is offered by Prof. P. H. Gallagher of University College here, in a letter to the editor of the London science journal, *NATURE* (Aug. 13).

Prof. Gallagher has done some preliminary work along this line. He reports that humus in its most advanced stage has a yellow fluorescence, and that a waxy substance sometimes found in mucky soils fluoresces bluish-white. Living things found in the soil, such as earthworms and young roots, have their own specific modes of fluorescence.

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**IN SCIENCE**

## BIOCHEMISTRY

**New Vitamin Factor In Yeast Discovered**

► A NEW vitamin factor has been isolated from yeast by cooperative efforts of scientists in research laboratories of Sharp and Dohme, Philadelphia, and Merck and Co., Rahway, N. J. The vitamin, called biocytin, was announced by Dr. Lemuel D. Wright of Sharp and Dohme at the First International Congress of Biochemistry in Cambridge, England.

No medical use for the new vitamin factor is known yet, Dr. Wright pointed out, but clinical studies to determine its role in human metabolism are now under way.

Biocytin occurs in nature only in infinitesimal amounts. Yeast extract, with a concentration of about one part of biocytin per million of dry matter, was selected for the isolation work.

Thus far, more than eight tons of yeast extract have been processed since isolation work began and less than a thirtieth of an ounce of the pure material has been produced.

Participating in the studies besides Dr. Wright were E. L. Cressen and H. R. Skeggs, of Sharp & Dohme, and Drs. Karl Folkers, T. R. Wood, R. L. Peck and D. E. Wolf, of Merck.

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## BOTANY

**"Bachelor" Honey-Locust Desirable as Street Tree**

► A "BACHELOR" honey-locust tree, which bears male flowers but no female ones and hence produces no seed-pods, has been bred by John D. Siebenthaler of Dayton, Ohio. Absence of seed-pods is considered desirable when this tree is planted as a street tree, since the heavy crops of pods borne by ordinary honey-locusts mess up pavements and parkings and require a great deal of raking and sweeping to clear away. The tree has the further advantage of being wholly without the long, branching, needle-pointed thorns that make most honey-locusts a fair plant-kingdom equivalent of porcupines.

Mr. Siebenthaler describes the growth-habit of his tree as "vase-shaped". This is the shape that has long made the American elm a favorite for street planting. The tree can be propagated by grafting or by hormone-treated cuttings.

U. S. plant patent 836 has been issued on this thornless, podless honey-locust.

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# E FIELDS

## GENETICS

### Study of Freak Births in Mice May Help Humans

► **STUDY** of freak births of genetic origin in laboratory mice will, it is hoped, eventually help to prevent or at least remedy similar occurrences in human babies, Prof. L. C. Dunn of Columbia University stated at the celebration of the twentieth anniversary of the Jackson Laboratory in Bar Harbor, Me.

Most such abnormal developments result from mutations, or sudden evolutionary shifts, Prof. Dunn told his audience. They include such things as forked tails, no tail at all, harelip, cleft palate, and "dead end" digestive systems. One such mutation, loss of the tail, may explain what is now the normal condition in man and the higher apes, the speaker pointed out; but some of the others are far from being matters of self-congratulation. Babies with closed digestive tracts invariably die soon after birth, so that study of the heredity of this fatal trait in human beings is not possible. However, since mice reproduce much faster and in larger numbers, it is possible to make parallel genetic studies on mouse families showing the same trait, with some hope of eventually obtaining data useful in human applications.

Sometimes non-hereditary changes arise which exactly resemble those due to hereditary causes, Prof. Dunn continued. Such non-hereditary changes are known as phenocopies. Study of phenocopies, and of the environmental factors that may have helped to produce them, often throws light on their hereditary "opposite numbers".

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## PLANT PATHOLOGY

### New Disease Is Killing British Sycamore Maples

► **A NEW** fungus disease is killing sycamore maples in England, and plant pathologists are on the lookout for its possible appearance in this country. The sycamore maple is native to the Old World, but is used in Washington, D. C., to a considerable extent as a shade tree.

The fungus works its way in between bark and wood. Eventually the bark peels off, leaving a dark, velvety surface exposed. The velvety appearance is due to billions of deep-brown spores, which float through the air to spread the disease farther. When the fungus has worked its way all around the trunk, girdling the tree, death ensues.

The disease has been under observation

in England since 1945, but is given its first description in the London scientific journal, *NATURE* (Aug. 13). The report is presented by P. H. Gregory of the Rothamsted Experimental Station, T. R. Peace of the Forest Research Station at Wrecclesham, Surrey, and S. Waller of London.

The causal fungus has not yet been identified, and it may be a hitherto unknown species. The report states that the disease has some resemblance to one disease of American hard maples and another of the London plane or sycamore cultivated in the United States. The causal fungi of both these diseases have been identified.

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## MEDICINE

### Involuntary Sterility of One Year Needs Treatment

► **ONE YEAR** is long enough to wait before seeking treatment for sterility if a couple has discontinued birth control and still does not have a baby, a team of Baltimore doctors conclude from a study of 2,000 expectant mothers.

This applies to families using birth-preventing methods who wish to space the birth of their children over a two- or three-year period. The common practice at present is to wait two or three years before the physician will attempt remedial measures.

The report by Drs. Alan F. Guttmacher and Dr. Samuel Rubin of Johns Hopkins University School of Medicine and of the Sinai Hospital, Baltimore, and Dr. Christopher Tietze of the National Committee on Maternal Health, Inc. appears in the *JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION* (Aug. 20).

Their suggestion is based on the results of the study which showed that three-fifths of the patients became pregnant within three months of their decision to have a baby. And 90.8% were pregnant within the first year after birth control was discontinued.

Not all of these were wanted babies. The physicians pointed out that 374 or 18.7% of the pregnancies were due to failure of the birth control methods. This, they warn, may not be a true picture of the situation since it is impossible to determine how many of these women will have abortion or will not come to the physician.

Moreover, the figures are somewhat distorted by the fact that there are many couples who practice birth control successfully throughout their married life and it is impossible to make a statistical study including them.

In this group 1,653 women became pregnant who had previously used contraceptives. In over 85%, the condom and diaphragm were the methods practiced for birth control. The physicians concluded that these two methods were the most effective of any of those used.

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## MEDICINE

### Twins May Prove Ulcer Predisposition Inherited

► **THE** possibility that a predisposition to peptic ulcers is inherited is to get further scientific investigation in the study of twins.

Dr. A. C. Ivy of the University of Illinois, in the *JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION* (Aug. 20), appealed to doctors to send him reports of twins in which one or both had peptic ulcers.

He pointed out that twins have in the past helped to establish the fact that predisposition to tuberculosis, diabetes, tumors and intelligence are inherited.

So far, there are only six cases of peptic ulcer in twins on record. He is certain there are many that are not reported since twins are born in one of 86 births and identical twins in one of 344 births.

Dr. Ivy hopes to receive further evidence from practicing physicians, which might help to support this theory.

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## CHEMISTRY

### Turning Negroes White by Chemical Is Impractical

► **THE** scientist who first investigated over a decade ago the strange phenomenon of Negroes turning white, is authority for the fact that the chemical treatment, given publicity in a national magazine, is impractical and dangerous.

He is Dr. Louis Schwartz, a retired skin specialist of the U. S. Public Health Service living in Washington.

He recalled that Negroes in a tannery at Waukegan, Ill., found that their arms and hands were turning white. The cause was traced to a hydrocarbon in the rubber gloves they wore.

This effect has been the subject of hope exploited many times that the color line might be broken, but applications on the skin are slow and patchy and not satisfactory. No one has dared take the chemical internally, as it would have to be administered to produce a uniform effect, because the chemical is poisonous.

The chemical, the monobenzyl ether of hydroquinone, is a bleach that is used as a preventive of oxidizing of rubber (trade name Age-Rite-Alba). It bleaches not Negro skin alone, but any dark pigment. It has been used medically to bleach liver spots on white people.

Dr. Schwartz recalls that when it was proposed to feed the chemical to Negroes experimentally he could not secure any suitable volunteers.

It takes a month or two to produce the local bleaching of skin and the effect produced is a deathly white, which may nevertheless be spotty.

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