

Do You Know?

Guests in one St. Paul hotel, at least, may sleep under electrically heated blankets if they wish.

Ethyl alcohol has been successfully made from the milk sugar in whey, a by-product of cheese manufacturing.

A big game hunter states that when you are attempting to kill a beast, you must expect that it will in turn try to kill you.

Scientists conducting research on the nuclear energy that powers atomic bombs are attending summer school at the Oak Ridge, Tenn., plant.

Muskellunge, a large American freshwater pike, often reaches five feet in length and a weight of 60 pounds; it eats other fish, young ducks, muskrats, frogs, snakes and other animals.

A South American buyer recently gave an order in the United States for a large number of flatirons to a manufacturer who puts red handles on them instead of the customary black.

Unlike poisonous snakes, Gila monsters and the beaded lizard of Mexico have their fangs in their lower jaws; these are the only two of nearly 3,000 known saurians in the world that are venomous.

In nature many non-carnivorous animals fraternize; in the old days in America, deer, elk, antelope and bison often migrated together and, in East Africa today, antelopes and zebras associate in great herds.

YOUR HAIR AND ITS CARE

By O.L. Levin, M.D. and H.T. Behrman, M.D.

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VETERINARY MEDICINE

Heavy Pheasant Losses

"Horse disease" caused many deaths among artificially reared pheasants. Vaccination has had only partial success as counter-measure.

► EQUINE encephalomyelitis, a serious disease of the nervous system so named because it was first observed in horses, caused disastrous losses among artificially reared pheasants in three outbreaks in New Jersey, Drs. F. R. Beaudette and J. J. Black of New Jersey Agricultural Experiment Station stated at the meeting in Cincinnati of the American Veterinary Medical Association. One of the outbreaks killed 3,757 birds out of a population of 5,094.

Vaccination has been attempted as a counter-measure, but apparently has had only partial success. Carrier of the disease has not yet been identified, but it is suspected to be something other than an insect.

Baby pigs have been dying at an alarming rate of a mysterious disease, in many parts of the Midwest. Dr. George A. Young, Jr., of Austin, Minn., offered a hypothesis that appears to convict sows as unwitting killers of their own offspring, with the milk of their first nursing as the weapon.

The course of events, as sketched by Dr. Young, includes, first, an infection of the brood-sow, then transmission

of a sensitizing substance resulting from this infection through the circulation to the unborn pigs, and finally the concentration of an antibody to this substance in the milk glands. When the sensitized baby pigs first suckle their mother and receive her colostrum or first milk they get along with it this antibody, which produces an allergy-like reaction known as anaphylactic shock. In a large proportion of cases the outcome is fatal.

Dr. M. S. Shahan of the U. S. Department of Agriculture, who is in command of the American scientific forces fighting foot-and-mouth disease in Mexico, reported to the meeting on progress in the campaign. Because the necessary measures for eradication cause serious dislocations in the lives of the people, it involves much more than a straight-out onslaught of scientists against a pest. Social, economic, legal, educational, even religious factors have to be taken into account, the speaker said. He praised the Mexicans, both officials and the people at large, for their cooperation.

Science News Letter, August 30, 1947

MEDICINE

Deaths From Clots Cut

► DEATHS from pulmonary embolism, or clot in the main artery from the heart to the lungs, have been cut almost in half by an operation on veins in the legs, a Massachusetts General Hospital team of physicians and surgeons reports in the *Journal of the American Medical Association* (Aug. 23).

The doctors are Jacques Carlotti, French Government research fellow in medicine, Irad B. Hardy, Jr., Robert R. Linton and Paul D. White.

The operation consists in interrupting the femoral veins in the thighs. The object is to keep the clots, which usually originate in the calves, from travelling up the leg veins to the heart and pulmonary artery where they so often become fatal.

The operation was performed in only

one patient in the period from 1936 to 1940. But it was done in 60 patients during the next five years. The mortality dropped from 50.7% in those without operation to 28.3% in those operated on.

Pulmonary embolism has generally been considered a frequent complication and cause of death after operations, broken bones and childbirth. Actually it is more frequent among medical patients, the Boston doctors found. More than half of all the patients with this condition in 10 years at the Massachusetts General Hospital were medical patients.

Most of the patients had heart disease. The great majority were over 40 years of age and men predominated.

Pain in the chest was the commonest

but not the earliest symptom. A simultaneous rise in temperature, pulse rate and breathing rate is often the first sign of the condition, sometimes occurring hours before any other change.

Doctors should constantly keep in mind the possibility of pulmonary

embolism in medical patients, especially those with heart disease, the Boston doctors warn. When discovered, it should be treated by surgical interruption of the femoral veins in both legs, to prevent recurrence of the clots which could prove fatal.

Science News Letter, August 30, 1947

The United States has several all-jet and combination jet-plus-propeller planes, but they are all military craft and comparable with Britain's jet fighters. The first was the war-developed P-59 Bell Aircraft. Others include the Lockheed P-80 Shooting Star, Republic P-47 Thunderbolt, Douglas Skystreak, Ryan Fireball, and now the six-jet Martin XB-48 bomber. Also there is the Bell Aircraft XS-1, rocket powered, a special plane to beat the speed of sound.

The Martin XB-48 bomber is said to be the first six-jet airplane ever completed. It can carry a bomb load of over ten tons. Its six General Electric turbo-jet engines produce 24,000 pounds of thrust, and give the craft a speed of over 480 miles an hour.

The Ryan Fireballs are jet-plus-propeller planes. The newest Fireball, the Navy XFR-4, has a Westinghouse axial-flow engine near the rear, and a Wright Cyclone to drive the rotating propellers. The Douglas Skystreak is powered with General Electric TG-180 turbo-jet engines.

Science News Letter, August 30, 1947

AERONAUTICS

England's Jet Planes

► ENGLAND is stepping forward with jet propelled planes, but America is not lagging. The British have announced what is claimed to be the first jet-propelled flying boat in the world, a fighter craft, and the first all-jet civil airliner.

The fighter flying boat, with two Metro-Vick jet engines housed within the hull, has made its first flight. It is a single-seater, with one large air intake right in front. Under reasonable conditions, this provides a minimum danger of water being picked up to enter the machine.

The Tudor Eight, a civil airliner

powered with four Rolls-Royce Nene turbo-jets, is about ready for flight tests. England already has a plane, the Lancasterian, which made successful flights a year ago, but it has a combination of conventional propeller power and jet propulsion.

The earlier seven Tudor planes are all powered by propeller-driving engines of the conventional type, and vary in size from 12-passenger to 60-passenger craft. The first Tudor Four, a long-range 32-passenger plane, is now undergoing testing under tropical conditions in South America.

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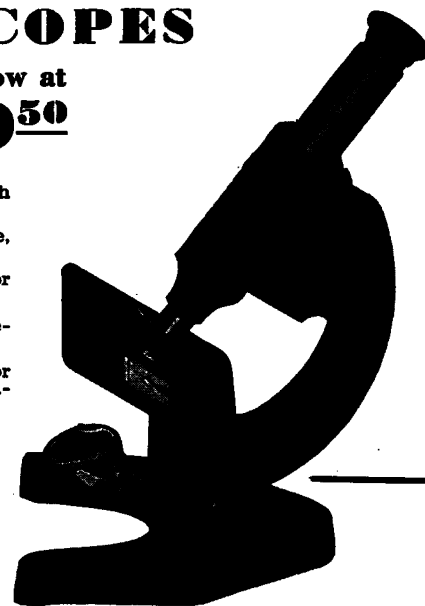
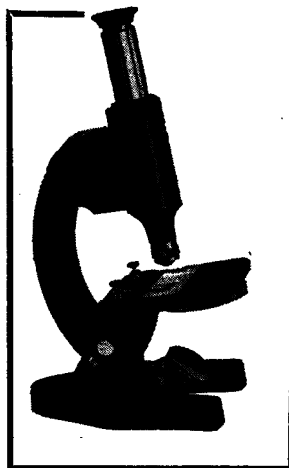
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