

Suggests T. B. Tests for Poultry

Here are reported some of the proceedings of the Third International Poultry Congress, held at Ottawa, beginning July 27.

The application of the same principles of disease protection to the humble hen that have proved successful in treating human beings and the larger domestic animals was foreseen by Dr. John R. Mohler, chief of the U. S. Bureau of Animal Industry, in his speech before the Third International Poultry Congress, held in Ottawa recently.

The day when it was cheaper and more expedient to destroy a diseased bird or even a whole flock than to call in a veterinary is past. So important is the health of the hen that the extent of such major infectious diseases as tuberculosis among fowls has been mapped out throughout the United States through the cooperation of Federal inspectors and sanitary officials, Dr. Mohler explained.

To check the inroads of avian tuberculosis which threatens not only poultry but the hog industry as well because it is readily communicable to swine, Dr. Mohler suggested the feasibility of the tuberculin testing of fowls. In this way tubercular fowls would be eliminated from a flock in much the same way that infected cows are now tested and dropped from dairy herds. The method is being used to some extent at the present time, he declared, and has no harmful effects on normal healthy birds.

Science News-Letter, July 30, 1927

Setting Hen Back Number

Hatching eggs at home will become practically obsolete in the near future, T. S. Townsley of the Ohio Poultry Improvement Association predicted at the Third International Poultry Congress meeting held in Ottawa recently. Commercial hatcheries are now producing more than one-fourth of the baby chicks of the nation, and there is every reason to expect a rapid increase in their numbers, he declared.

Swapping eggs with a neighbor, buying a new rooster or one setting of eggs are no longer methods on which up-to-date flock owners depend to introduce new blood and keep up the quality of their stock. More and more poultrymen are making a complete change of stock each year by buying their entire supply of chicks ready hatched.

The only job a poor hen has left, with her maternal duties taken away

from her, is to lay eggs and yet more eggs. More than 30,000,000 are required, according to the poultry expert, to furnish the one and one-quarter billion hatching eggs necessary to produce the next generation of 568,000,000 chickens raised in the United States every year.

Science News-Letter, July 30, 1927

Shows Egyptian Incubator

The replica of a clay incubator oven that hatched chickens in Egypt centuries ago is one the sights seen at the Third International Poultry Congress, Ottawa, Canada, July 27 to August 4.

The incubation of eggs is an old art in Egypt where the secret of the operation of the great clay ovens was handed down from generation to generation, according to Dr. M. A. Jull, of the U. S. Department of Agriculture, who is already on the ground making arrangements for the American delegation. The oven that will be exhibited has been sent over for the occasion by the Government of Egypt.

Originally the incubators were enormous structures with mud walls several inches thick with holes here and there for ventilation. The interior was divided into "rooms" high enough to admit an attendant to come in to handle the eggs which were placed in layers on the floor around walls and sometimes on ledges half way up. Heat was furnished by fires built in the center of each egg chamber which were regulated by the attendant, who, from living almost constantly inside the oven, became sensitized into a sort of human thermometer needing no other instrument than himself to tell when the air was too hot or too cold for the incubating eggs.

Science News-Letter, July 30, 1927

A Russian chemist has developed a cheap method of extracting iodine from waste waters from oil drillings in Baku oil fields.

Two French scientists have developed a machine which is said to drive a rotor at the dizzy speed of 11,000 revolutions per second.

A commercial process of coloring steel so that it can be used for furniture and ornaments has been invented by an Englishwoman.



FREDERICK GARDNER COTTRELL

Smoke Precipitator

As a dissipator of haze, the activities of Dr. Cottrell have extended far beyond the stacks of the chemical plants that have been robbed of obnoxious fumes and smoke by his process of electrical precipitation.

Chemistry, mining and metallurgy, agriculture and industry have felt the breath of his genius. With characteristic far-sightedness, he has interested himself in the great problem of an international auxiliary language to allow mute civilizations to talk to each other.

Dr. Cottrell's discovery of electrical precipitation was made one evening while working in his laboratory. He was carrying on experimentation that began with a forgotten experiment of Hohlfeld in 1824 who accidentally found that an electrically charged wire caused smoke in a jar to disappear. With the lights out, Cottrell discovered that cotton-covered wires strung across the room to conduct high-tension current were luminous. This showed that the electrodes should be covered with innumerable fine hairy points and led to the construction of a small laboratory precipitator which successfully conquered sulphuric acid fumes. Commercial installations followed which have multiplied so extensively that there is hardly an industry troubled by dust, smoke, fumes, etc., that has not been aided.

Foregoing most of the financial fruits of his invention, Dr. Cottrell formed the Research Corporation from whose profits research work in many fields have been supported.

In the U. S. Bureau of Mines before, during and after the War, and now as director of the Fixed Nitrogen Research Laboratory, Dr. Cottrell has directed, inspired and accomplished the application of chemistry to industrial and agricultural problems.