

good way to locate this star is to imagine that the curve of the handle of the Great Dipper extends around to the south, and you come right to it. Between Boötes and Lyra appear two constellations that are easily seen in the summer evenings, because they are almost directly overhead. One is the semi-circle of stars forming the northern crown, Corona Borealis, and the other, larger and more prominent, is Hercules, the famous strong man of mythology. Just below him is another giant, Ophiuchus, the serpent carrier, sometimes identified with the famous physician of antiquity, Aesculapius. The serpent which he holds is divided into two parts, one to the east, between Ophiuchus and Aquila, the other to the west, near Boötes.

Low in the east may be seen part of the constellation of Aquarius, the water carrier. Later in the evening, as the earth turns in its daily motion from west to east, it rises entirely into view, and in it can be seen the fourth planet of the July evenings, Saturn. Pegasus, the winged horse, is north of Aquarius bearer.

*Science News Letter, June 29, 1935*

#### MEDICINE

### New Drug May Save Lives Of Mothers in Childbirth

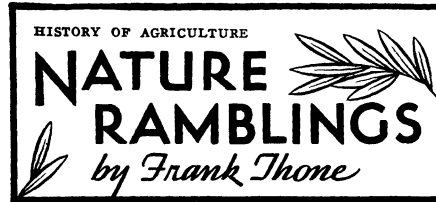
**L**IVES of mothers in childbirth may be saved by means of ergotocin. Ergotocin is the newly isolated active principle of ergot, old-time childbirth medicine. For their research leading to its isolation in crystalline form, Drs. F. L. Adair, M. Edward Davis and associates, of the University of Chicago, received the gold medal award of the American Medical Association.

A very small amount of ergotocin injected into the veins will stop dangerous bleeding following childbirth. Because the new substance is poisonous only in enormous doses, it may also be given by mouth if the emergency is not acute. Besides checking bleeding, the new drug hastens contraction of the uterus. For this reason Drs. Adair and Davis believe it should be given routinely for a few days following childbirth.

Other preparations of ergot have been used to check bleeding and to hasten contraction, but results have not always been satisfactory because the amount of the previously unknown active substance in ergot preparations varied.

Besides isolating the active principle of ergot, the Chicago scientists have obtained its chemical formula and are "on the verge" of preparing it synthetically.

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#### A Corridor For Corn

**C**ORN, tobacco, other Indian crops of pre-Columbian times: how did they get into eastern America?

To this riddle, one of the most baffling in the history of agriculture, Dr. Melvin R. Gilmore of the University of Michigan Museum offers an answer. Over the arid belt that separates the moist, arable lands of the eastern United States from Mexico, an earlier home of Indian agriculture, there stretches in one place a narrow zone of land where primitive agriculture was possible.

This "Gilmore corridor" consists of a belt of oak-hickory forest that reaches westward along the scarp of the Edwards Plateau almost to Del Rio on the Rio Grande, linking this region with the mountain valleys of eastern Mexico where there was rainfall enough to invite agriculture, and toward the east widens out into the southeastern and middle-eastern woodlands and the tall grass region of the Plains where cultivation was no longer precarious.

The Jamestown settlers and the Pilgrims found Indians cultivating corn, beans, squashes, pumpkins and tobacco along the Atlantic coast; and the French missionaries and explorers found inland Indians farming by much the same method. In the Southwest, the exploring Spaniards found the Pueblo tribes growing corn by an entirely different method, using irrigation. Without much question, both types of cultivation had come from Mexico, where agricultural civilizations were older and more advanced than they were in the North. If corn did not originate in Mexico, it certainly at least passed through that country.

The northwesterly migration of corn culture went into progressively drier lands, so that irrigation had to be practiced. But the tribes of the central Texas

area lived in a land that was moist enough to grow trees, and hence easily moist enough to grow corn. The "Gilmore corridor" was a narrow bridge, but it sufficed for the introduction of corn-beans-pumpkin agriculture to the Indians of the tall grass prairies and the Eastern woodlands.

The proposal to give the name "Gilmore corridor" to this one place where a fairly rich woodland outflanks the arid plains and plateaus of the Southwest originated with Dr. Dmitri Borodin, Russo-American plant physiologist now working as a guest of the Biological Laboratory, Cold Spring Harbor, New York.

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#### ENGINEERING

### New Freight Ships Have Boilers On Deck

**B**OILERS on deck, instead of in the conventional position in the hold, characterize two new Norwegian coal-burning freight ships recently put into service on an African route. (*Umschau*, May 19).

While the main idea was to gain more cargo space in the hold, several other advantages have developed. The "black crew" is delivered from the infernal heat of the ordinary stokehold in the tropics. Unloading ashes is no longer a problem: a slanting pipe simply discharges them into the sea as fast as they are raked out. Getting the boilers away from the bottom of the ship has done away with the rapid rusting of the bottom plates, always a troublesome factor in steamship operation.

Finally, officers declare that the ships behave much better in a rough sea, even when running empty or only partly laden, than do ships of like tonnage with the boiler weight far down on the keel.

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## ● RADIO

Tuesday, July 2, 3:30 p. m., E.S.T.

THE PUBLIC HEALTH LABORATORY  
—ITS VALUE TO MR. AND MRS.  
CITIZEN, By Dr. Fred O. Tonney, Director, Technical Service and Research, City of Chicago, Board of Health.

Tuesday, July 9, 3:30 p. m., E.S.T.

THE GEOLOGY OF THE DIAMOND,  
By Dr. F. L. Ransome, Professor of Economic Geology, California Institute of Technology.

In the Science Service series of radio addresses given by eminent scientists over the Columbia Broadcasting System.