



#### COLD-BLOODED MATERNITY

*The joys of motherhood are too often thought of as a monopoly of warm-blooded creatures: we think altogether of the woman in her home, the lioness in her den, the brooding bird on her nest. Yet even the alien creatures in the cold-blooded phyla are not shut out from a knowledge of maternal solicitude. If they cannot keep their offspring warm, and nourish them with milk, many of them jealously guard their eggs, or even attach them to their bodies and laboriously carry them about during the time of incubation. In this picture Cornelia Clarke shows the personal "nursery" of a crayfish.*

worked flints and other artifacts associated with the bones of long-extinct animals has roused much speculation and discussion, said Prof. A. S. Romer, of the University of Chicago. Bones of elephants, ground-sloths, giant bison and other ice-age animals have been found in geological formations belonging to the last days of the glacial period, so that finding these with relics of human occupation presents no special difficulties. But human traces have also been found with the bones of extinct species of camel, horse and other animals, and about these there seem to be difficulties aplenty. For these latter beasts are supposed by some scientists to have been extinct for half a million years at least, while the human bones are like those of modern Indians and the flints and other implements are also "modern" in type.

In Prof. Romer's opinion the apparent discrepancy in age between man and animals whose remains are found together is not to be sought by supposing the men to have been as ancient as 500,000 years, but by adopting the idea that the animals lived on a good deal longer than they were at first supposed to have done. Thus we might have man on this continent hunting humpless camels and giant ground-sloths as recently as 20,000, or perhaps only 10,000 years ago.

#### Gypsum Cane Discussed

The significance of the human and animal remains in the now famous Gypsum Cave in Nevada was discussed by M. R. Harrington, of the Southwest Museum, Los Angeles. Deposits in this

cave indicated successive occupations by ancient men at a time when horses and camels roamed the country, as a den by giant ground-sloths whom other ancient men hunted, by Basket-Maker Indians of some three thousand years ago, by early Pueblos and finally by the modern southern Paiute Indians.

The presence of extinct horses and camels indicates a fairly moist, rainy climate, quite unlike the aridity of the region at present, Mr. Harrington said. This was followed by a drier time, when the region was invaded by the great sloths, and this in turn by the full desert conditions of modern times. The rainy epoch, he believes, coincided with the last days of the glaciers on this continent.

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#### PHYSICS

## New Slow Electron Compass Points East Instead of North

A NEW compass using no magnet has been devised for airplanes by Dr. Ernest Brüche of the Technical University of Dantzig. A stream of electrons scintillating on a screen is used in this device and differences in the way the apparatus is pointed are shown in changes of the trace of the electrons on the screen.

The device is similar to the electric vacuum-discharge tube invented by Sir William Crookes in which the existence

#### MEDICINE

## X-Rays Relieve Baby's Stomach Obstruction

X-RAY TREATMENT relieves obstruction of the lower opening of the stomach in new-born infants, Dr. Orville Barbour of Peoria, Ill., told members of the American Medical Association. He reported that the method was successfully used in 33 out of 37 cases during the last five years.

This condition, known by the medical term of pyloric stenosis, is extremely serious. The obstruction prevents the food from passing through the infant's alimentary tract in the normal way and severe vomiting occurs.

Special diets, drugs, and surgical operation to remove the obstruction have all been found effective methods of relieving the condition in many cases. The advantage of the new method which employs X-rays is the saving of time. The radiation takes effect within 24 hours if it is effective at all, whereas if medical treatment is tried it may require a week or two to be effective. By that time, if it is not effective, the child may be so weakened that he cannot stand an operation, if one is considered necessary.

Dr. Barbour and associates discovered the effects of the X-rays accidentally. They were making an X-ray photograph preparatory to an operation when they noticed that after the exposure to the rays, the vomiting ceased. This cessation was temporary at first, but became permanent in response to subsequent application of the X-rays.

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of the electron was first discovered. It has been known since the time of the German physicist, Wilhelm Hittorf, that a horseshoe magnet placed near such a tube will bend the stream of electrons out of their straight course. However, the magnetic forces of the earth which cause a mariner's magnet to swing towards the north are much too small to show any effect on the electrons of the Crookes tube.

The reason for this is that the elec-