

for X-ray movies, but softer rays allow scientists to record the internal workings of creatures too delicate in structure to be caught by the ordinary hard X-rays. An X-ray view of a worm's digestive process was recently filmed at Rochester.

Slow motion pictures allow the dissection of what happens in less than the wink of an eye. High speed cameras with film moving 70 miles per hour and

taking 1500 pictures a second (ordinary movies are about 16 per second) are in almost routine use in ballistic and other researches.

And movies, both sound and silent, give psychologists an undisputable way of recording the results of the experiments whether they are on monkeys or babies.

Science News Letter, July 24, 1937



Pedigreed Trees

PEDIGREED cattle graze in the farmer's pasture, pedigreed grains grow in his fields, pedigreed fruits ripen in his orchard. Far removed from Neolithic Europe, or pre-Columbian America, are stock-raising, agriculture, horticulture.

But in the farmer's woodlot are trees no whit different from those his ancestors knew in the foggy forests of Saxony and Britain. Our timber trees are wild trees still, even when we plant and tend them. Alfred or Charlemagne would stare in wonder at what we have done to wheat and hogs in a thousand years—But Adam himself would recognize our oaks and pines unchanged.

It is natural that we should have thus neglected to breed improved timber trees. We domesticated wild animals, crop plants and fruits, only when the wild kinds began to become more difficult to obtain. And we early learned that by increasing size and abundance of yield per unit we could get our daily bread with less work.

But it has been easy to gather wild trees. Vast virgin timber stands still exist, but accessible ones have been badly depleted.

So we are giving thought to future timber harvests. We still plant wild trees; but breeding for improvement is already being undertaken. Hopeful experiments have been under way for some time in New York, California, and elsewhere.

Newest project is a program of tree genetic and physiological researches provided for by a \$615,000 endowment at Harvard University, the Maria Moore Cabot foundation. The terms of acceptance specify that the work must be carried on for at least 50 years. That should provide time enough for even slow-breeding trees to show some good beginnings.

Science News Letter, July 24, 1937

MEDICINE

North Carolina Quintuplets Diagnosed by Use of X-Rays

THE North Carolina quintuplets, prematurely born last November but who died at birth, will go down in medical history as the first quintuplets ever diagnosed as such before birth.

An X-ray picture was taken of the mother when she entered the Duke Hospital, Durham, to have her baby. The film showed four heads and five bodies.

Next day the babies were born and, like the Dionnes, all were girls. Four were normal, and the fifth was a headless freak. Two of the babies survived as long as 30 minutes.

Now physicians throughout the country will for the first time read and argue over this quintuple pregnancy, which brings the total of reported quintuplets in all medical history up to 35.

Once in 40,000,000 births is the expectancy of quintuplets.

Not only were the North Carolina births the first instance of a diagnosis of quintuplets being made prior to delivery, but because the babies died in a hospital it was possible for the physicians to make a complete anatomical

study of the fetuses, placenta and membranes.

Drs. E. C. Hamblen, R. D. Baker and G. D. Derieux report the case and their findings. (*Journal, American Medical Association, July 3.*)

What will provoke the most discussion among physicians, upon reading this report, is whether these babies sprang from one egg cell or from several. Were they identical or were they not?

The Duke Hospital doctors are themselves perplexed, after presenting all their findings, but are inclined to the opinion that the five babies may well have been derived from a single ovum.

Science News Letter, July 24, 1937

Pollen from some fruit trees can be kept in cold storage for several years, for use in crossing fruit varieties.

A physician has invented an instrument similar to a stethoscope, with which he can detect simultaneously various body sounds indicating disease conditions.

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