

MEDICINE

Influencing Sex of Baby

Experiments suggest that boys are conceived toward the end of the woman's fertile period of the month. Rat-breeding experiments pointed to this.

► PARENTS who want the next baby to be a boy might try timing the conception date as late as possible in the wife's most fertile period of the month. Scientists cannot guarantee that this will succeed, but a report to the American Medical Association in Atlantic City seems now to point that way.

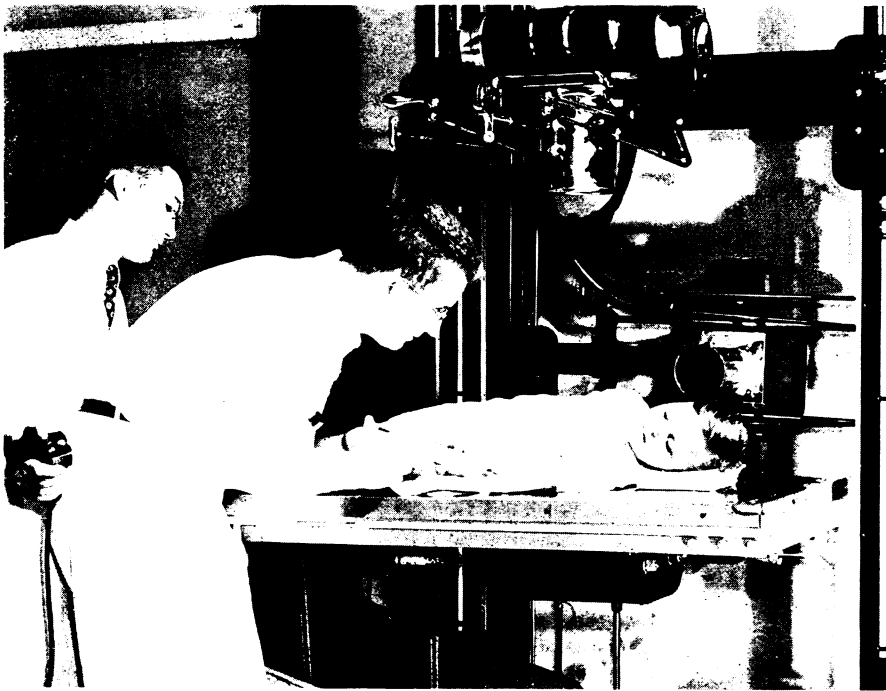
In experimental breeding of rats, the later in the fertile period the animals were mated, the greater was the number of male offspring, Drs. Deryl Hart and James D. Moody of Duke University reported. The percentage of male to female offspring was increased from a normal of 100 to percentages varying from 149 to 225. Because rats would not mate early when the female was in heat, it was not possible to vary the percentage to a female preponderance.

Hamsters, the Duke doctors found, were more obliging. But their time-sex ratio was just the reverse of that in rats. There were more male offspring when the animals were mated early and more females when

they were mated late.

The doctors think the human schedule will be like the rat schedule, though they have very little factual basis for this as yet. Actually it will be several years before they have enough evidence from human cases to be sure.

From U. S. vital statistics records of twins and triplets born in 1941, 1942 and 1945 comes some evidence that they are right in thinking that factors at different points in the fertility period predispose to one or the other sex. Among two-egged twins, they found, there is a constant ratio of 126 to 127 like-sexed twins, that is both twins boys or both girls, to 100 where one twin was a boy and the other a girl. This is more than could happen by chance alone. If, as they think, the time of conception determines sex, then it would be likely that both twins conceived at the same time would have the same sex. Twins conceived in the middle of the fertile period would, according to the theory, be of opposite sex.



NEW X-RAY PHOTOGRAPHING MACHINE—An opaque chemical is injected into the arm of this child so that a series of rapid, continuous X-ray pictures can be taken to follow the course of the chemical through the heart and lungs. This will show doctors where a defect in the blood vessel is located.

If it were only a matter of chance, then all two-egged twins would be divided evenly among boys and girls. This, the vital statistics records showed, was not the case.

Science News Letter, June 18, 1949

INVENTION

Solid Top for Convertibles Patented

► A CONVERTIBLE car with a solid top, instead of the fabric-over-hoops variety, has been invented by George E. Shilala, of Los Angeles.

The top, which may be of metal, laminated wood or plastic, swings back into the rear compartment when not in use. A reversible electric motor, powered from the battery, raises and lowers it. Weather-tight stripping prevents entry of rain at its lines of contact with the windshield and other parts of the body.

U. S. patent 2,471,378 has just been granted on this invention.

Science News Letter, June 18, 1949

MEDICINE

New X-Ray Machine Helps Spot Defects in Children

► CHILDREN born with defective hearts will be helped by a technique for taking rapidly a continuous series of X-ray pictures of the heart and blood vessels.

By adapting the magazine of an aerial camera to an X-ray photographing apparatus, the taking of a continuous roll of X-ray films was made possible, Drs. Wendell G. Scott and Sherwood Moore of the Washington University School of Medicine in St. Louis, explained to the American Medical Association in Atlantic City.

This development will be a special boon to children because at least two per cent are born with some type of malformed heart. It had previously been very difficult to keep them still or make them stop breathing when X-ray exposures were made to diagnose their condition.

First an opaque chemical is injected into the vein of the arm. As this chemical travels through the heart and lungs rapid X-ray shots at the rate of one every half second are taken. These pictures will show the doctor the size and location of an abnormality in the walls of the heart chamber or in the arteries leading to and from the heart. The machine works automatically.

To keep the children quiet during this procedure the doctors gave infants a little sugar water in a bottle and older children were given phenobarbital.

Drs. Scott and Moore predicted that it would be possible to operate on the inner sections of the heart sometime in the 1950's, basing their conclusion on the great strides made in surgery of the chest.

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