

## MEDICINE

# Having Baby Is Problem

About one out of ten marriages in U. S. has the problem of infertility to overcome. Percentagewise, about the same numbers are found around the world.

► HOW TO have a baby is of much greater concern to most married couples than how not to. About one out of ten marriages in America has the problem of infertility to overcome.

The First World Congress on Fertility and Sterility in New York accented human reproduction instead of birth control. Inability to have children has many causes. Medical practitioners of this relatively new specialty have found many ways to bring fruitfulness to childless couples.

Sterility, which may be either of the man or woman, is worldwide. Even in India, on the average 12% of the couples are infertile, which is a little higher than the 10% figure for this country. Among the workers of India the figure is 8% but among the white-collar population it is 16%, actually probably higher than for similar people in America. Information brought to the meeting from Argentina and Peru shows that the figures are about 10% in those countries.

Even among rats the figure is also about 10%.

While the males almost universally feel that they are "pretty good" when it comes

to sex, there are about as many husbands of low fertility as wives. The male potency or urge is not necessarily related to the ability to be a father, for male reproductive element may be lacking or defective.

Many of the cases of sterility are caused by lack of hormones in the proper sequence that create the complex cycle that produces ovulation in the woman. The hypothalamus in the brain influences the pituitary which in turn controls ovarian action. Thus endocrine therapy is one method of treatment.

Surgery is used to correct mechanical barriers or congenital abnormalities in both male and female.

There are also clear cases of psychosomatic infertility, such as fear in a woman who has had a Caesarean birth. Emotion can sometimes cause barriers to conception.

The doctors who have special interest in these matters have had their national organization, the American Society for the Study of Sterility, for only the last nine years. While many general practitioners do handle such cases, in the larger cities sterilization treatment is becoming a specialty.

Science News Letter, June 20, 1953

## SEROLOGY

# Tell Blood Differences

► SCIENTISTS AT Rutgers University recently placed a new tool in the hands of crime fighters when they added to the long list of scientific tests on the docket of the Federal Bureau of Investigation, a method of determining the difference between human blood and that of the chimpanzee.

News of the visit of Dr. Briggs J. White of the FBI came to light during a CBS "Adventures in Science" interview of Dr. Allen Boyden by SCIENCE SERVICE Director Watson Davis. It seems that no scientist in the world had been able to distinguish human blood from that of the chimpanzee. To the FBI, the ability to tell the difference between the two blood samples was of paramount importance.

Given the samples, Dr. Boyden of Rutgers not only identified them correctly, he also showed the Federal agent how the test could be made in the FBI laboratories.

This interesting facet of the work of Dr. Boyden is only a small part of the long record of achievement of the Serological Museum begun by him at the State University back in 1925.

The Serological Museum now has in stor-

age some 3,500 different types of blood sera from animals, insects and reptiles.

One of the notable services the Museum has performed is in connection with the Belgian Congo. By examining the blood taken from the stomach of a malaria-infected mosquito, it was determined by Dr. Boyden's organization that the host on which the insect had fed was the common African antelope. This revelation disclosed an unsuspected carrier of malaria that enabled African authorities to combat the disease.

The work of the Serological Museum has only begun, according to Dr. Boyden. About a million species of animal and insect blood yet remain to be classified. Asked which specimen of blood he would most like to add to his collection, Dr. Boyden replied: "The blood of the coelacanth (the living fossil fish) recently discovered off the coast of Africa."

Dr. Boyden added that amateur zoologists interested in adding to the Rutgers collection may obtain information on how to prepare samples for the laboratory by writing him at the Rutgers Serological Museum.

Science News Letter, June 20, 1953

# Questions

ENTOMOLOGY—What is the best way to stop Army worms? p. 376.

• • •

GENERAL SCIENCE—How many mountains are over 26,000 feet high? p. 385.

• • •

HORTICULTURE—What is air-layering? p. 382.

• • •

MEDICINE—How can encephalitis victims be cured? p. 378.

• • •

METEOROLOGY—How many tornadoes have struck in the U. S. this year? p. 377.

• • •

PSYCHOLOGY—How can harmful emotions affect an unborn child? p. 376.

• • •

Photographs: Cover, U. S. Navy; p. 375, National Institutes of Health; p. 377, U. S. Weather Bureau; p. 378, Flight Refueling, Inc.; p. 379, American Medical Association; p. 382, U. S. Department of Agriculture; p. 385, University of Wisconsin; p. 388, International Allied Industries.

## PEDIATRICS

# Babies Should Take Rough First Steps

► WHEN BABY learns to walk, do not let him take those important first steps on the smooth waxed floor of your living room, the linoleum of the kitchen, or the flat plywood bottom of his playpen.

That is the advice a Washington physician, Dr. Maurice H. Herzmark, gives in the *Journal of Pediatrics* (April).

If you can, you should take the baby out in the yard and let him curl his tiny toes around the rough clods and pebbles as he tries to get a firm footing.

Dr. Herzmark was led to make a study of causes of bad feet when he realized the great number of young men who are unfit for military service because they have weak and painful, or flat feet. Indians and other primitive people who got into the Army, by contrast, had excellent feet.

The Indian baby, Dr. Herzmark found, takes his first steps barefoot on rough, pebble-strewn ground in front of the family tepee. The man who was a city baby and learned to walk on smooth, polished or rug covered floors is the one who as an adult suffers most from his feet.

For the benefit of apartment-dwelling parents, Dr. Herzmark has devised a special sponge rubber pad that can be put in the playpen. This pad is studded with knobs around which the baby can curl his toes and arch his foot.

Even if the baby has already learned to walk with a flat-footed gait, this pad will correct the fault and allow him to develop proper habits of standing and walking.

Science News Letter, June 20, 1953