wonderful that we want one just the same, it couldn't be better."

Both the law and the church have mixed feclings about donor babies. The matter has not been taken to the law courts very often. No sensational cases have yet arisen, and the physicians in this medical practice might be a bit hesitant to take as patients parties to a marriage that involved large fortunes.

Among the couples aided by Dr. Kleegman there has been a divorce, but the donor child had nothing to do with it. The father loved the child "more than anything else in the world," and is still devoted and attentive to the child.

Legally it might be charged that a donor baby is illegitimate and the wife has engaged in adultery. The court decisions are largely in the future, although in a case that got to a New York court a donor baby was declared legitimate.

In an English case involving artificial insemination, the child was ruled illegitimate, although in this case the semen of the husband was used and the child was not a donor baby.

In Canada, a judge, although he did not rule on the status of the child, declared that if he had it would be declared illegitimate.

No one is likely to know in the case that might cause international complications. The donor was in New York and his semen was flown within hours to Canada and produced a new young Canadian citizen. Or is the baby legally an American by paternity?

Religious opinions are not too heated, al-

though the Catholic Church in America and the Lutheran Church in Sweeden are in opposition. So is the Church of England, but not the Episcopal Church in the United States.

The first case of human artificial insemination goes back to 1890 and the late Dr. Robert L. Dickinson was a pioneer in developing this new branch of gynecology and obstetrics. At a time when there was even greater taboo and opposition he developed the methods used, and those who are practicing therapeutic insemination in this country at the present time were taught by Dr. Dickinson.

Artificial insemination in animal and stock breeding began many years ago and is now such a vital part of the industry that stock breeders would be appalled if anyone suggested they go back to the old methods that nature uses. A prize bull can father literally thousands of progeny all over the world.

In the practice of human medicine the scientific research and experience involved in the field of animal husbandry has not been applied. Banks of the male hereditary material have not been established as yet.

Can man use for the enrichment of the human population the same methods that he uses in his breeding of animals? Will there be established banks of human semen with vital supplies of the hereditary material that might be used even years after the death of the great or unusual men who have made such contributions to posterity? This is for the future.

Science News Letter, September 26, 1953

METEOROLOGY

"Brain" Predicts Storms

➤ UNEXPECTED STORMY weather can be predicted before it begins, using an electronic "brain," Dr. Jule Charney of the Institute for Advanced Study, Princeton, N. J., reported to the weathermen attending the Toronto Meteorological Conference.

More accurate local storm forecasts are expected to result from this discovery, since weathermen now will be better able to select the causes leading to sudden and unexpected high winds and rains.

Using a three-level model of the atmosphere, Dr. Charney has predicted two severe storms before there was any evidence on weather maps that they might start.

After the conditions that cause the high winds and rains have become evident, local weathermen can track and forecast the storm's future path. However, spotting the conditions that lead to an unexpected storm and predicting the bad weather before it starts have previously stumped the meteorologists. Dr. Charney makes his storm forecast using a simplified model of the earth's atmosphere, charting conditions across the country at three levels, one near the ground, one about two miles high and

one about five miles high. Information on conditions at these three levels is fed into the Institute for Advanced Study's electronic computer, which then predicts the conditions to be found 12 or 24 hours from the starting time, doing his millions of calculations on an hour-by-hour basis.

To predict the "great storm of 1950,"

To predict the "great storm of 1950," considered to be about the worst on record for the eastern United States, Dr. Charney sliced the atmosphere at 3,000, 10,000 and 25,000 feet. The computing machine, in about an hour's working time, then gave him an almost exact model of what actually had happened 24 hours later, he reported to the joint meeting of the American Meteorological Society and the Royal Meteorological Society in Toronto.

Dr. Charney is now working on a sixlevel model of the atmosphere, and with this, expects to get even more accurate predictions of the occurrence of unexpected storms.

Science News Letter, September 26, 1953

The tomato is the most popular garden vegetable in this country.

Practical Taxidermy

JOHN W. MOYER, Chicago Natural History Museum

LATEST METHODS for mounting fish, birds, mammals, and reptiles. Step-

by-step instructions, complete with photographs and detailed drawings, demonstrate the preparation of lifelike specimens, game heads, and fur rugs, with modest equipment. Explains modern museum techniques and includes a history of taxidermy. "Most complete work on the subject."—JAMES L. CLARK, American Museum of Natural History. \$3

Ways of Mammals

 In Fact and Fancy CLIFFORD B. MOORE,

Forest Park Museum (Mass.)

FOR EVERYONE with an interest in animals, here are the facts—in contrast to the myths and superstitions—about the world of mammals. From domestic animals to beasts of the jungle, this book describes the often misunderstood habits of many kinds of mammals, based on observation by noted zoologists. Includes several sections by authorities on particular aspects of animal behavior.

Boy's Book

of Snakes

PERCY A. MORRIS

Peabody Museum of Natural History

THE TRUTH about snakes, showing how useful many of them are. Explains how to tell one kind from another, and how to catch the harmless ones for pets. Also, how to recognize poisonous snakes—including first-aid for snake bite. "... well-written account, with emphasis on the species common in the United States."—Quarterly Review of Biology. 62 ills. \$3

Camping -- A Guide to Outdoor Safety and Comfort

ARTHUR S. DesGREY

College of the City of New York

FROM SELECTING a campsite to safe-guarding the food supply, this book will help the camper get the most out of outdoor living. Suggestions—from experience—on fuel and water, fire-making, cooking, sanitation, first-aid, camp handicraft, recreational activities, etc. "Practical, handy guide."—Nature Magazine. 53 ills. \$3

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