preventable deaths. The patients themselves were responsible for more than a third of these deaths and midwives for about two in every hundred.

Lack of judgment, lack of skill or careless inattention to the demands of the case were faults of the physicians that contributed to the large number of maternal deaths. The patients' fault was failure to take advantage of those facilities which are at hand for safeguarding them during and before the birth of children.

The committee believes that the number of deaths can be reduced by reducing the amount of surgical interference during the birth of the child. At present surgical procedures are resorted to four or five times oftener than actually necessary. The death rate when childbirth is assisted by operative measures is five times as high as in spontaneous births.

Comparing the number of deaths when the child is born at home and in a hospital, the committee found that the increase in hospitalization failed to reduce sickness and deaths among the mothers as much as had been hoped for. However, it was observed that only normal, uncomplicated births take place in the home, as a general thing.

Contrary to generally accepted opinion, the midwife is an acceptable attendant for properly selected cases of childbirth. The committee recommended provision for proper training and supervision of these assistants.

ITEMS

BIRDS are frequently so sensitive to climatic factors that slight differences in temperature or moisture will keep two related species separate, although their range boundaries touch and even overlap. An illustration of this principle, in the case of the two American species of magpie, was given before the meeting of the American Ornithologists' Union by Dr. J. M. Linsdale, of the University of California. The common black-billed magpie of the West has a wide range, extending roughly from the Missouri to northern and central California. Here it gives way to the much less numerous yellow-billed magpie, whose range is limited to the valleys of central and southern California and adjacent southwestern states. No insuperable physical barriers separate the territories of the two species. The only thing that keeps them from mingling is a slight difference in choice of climate on the part of the birds. Seasonal changes in climate work in such a fashion that in some places the two species occupy the same territory, but never at the same time. When it is moist enough for the black-bills to come down into yellow-bill country, it is too cold for the yellow-bills and they retreat toward the lowlands. Then, when it is warm enough for them to come back the drought is too much for the black-bills, which vacate before their cousins can return their call.

UP in the stratosphere twelve miles above the North Pole, proverbially a cold place, it is 25 degrees warmer than at the same height over the equator. Dr. G. C. Simpson, director of the British Meteorological Office, explained in connection with the results of the British Polar Year Expedition to Fort Rae, Mackenzie, Canada, that the cause of this greater warmth over the pole is not known. The curious fact that it is warmer over the North Pole than over the equator in the upper air has been studied at some length in the United States. Dr. Hurd C. Willett, of the Massachusetts Institute of Technology, in a report to the National Research Council some years ago observed that the higher the earth's atmosphere is probed, the colder it gets, until a point is reached where there is no more decline. Above this there may even be a slight warming. An explanation of this upper-air reversal of the temperature relationships at the surface of the earth involves, according to Dr. Willett, the way in which the sun's heat is received in the atmosphere and the mechanism of the general circulation of the atmosphere.

FERTILIZERS help plants to form more foodstuffs, but they do it by increasing the total area of the leaf surface and not by raising the efficiency of the individual leaf as a synthesizing unit. This conclusion was reached by E. Basyrina and V. Tchesnokov, of the plant physiological section of the Russian Academy of Sciences, as a result of their experiments with oats grown in culture solutions. Given varying rations of phosphorus, nitrogen and potassium, the plants responded by varying their leaf areas, but unless the leaves became deficient in chlorophyll, the amount of food formed by a given unit area did not change.