

habits of the ticks and animals in the Rocky Mountain and adjacent area; spotted fever treatment studies; and a long-term investigation under way for several years past, to determine the causes of variations in the virulence of the spotted fever virus all had to be greatly curtailed or altogether stopped. Only the vaccine production went on, but even this was hampered somewhat by the construction activities in connection with building a new laboratory and remodelling the old one.

*Science News Letter, January 19, 1935*

## PHYSIOLOGY

## Infant's One-Pound Weight Called Outstanding

**A**N infant that weighed sixteen ounces at birth and that lived to be forty-three days old with a gain of two ounces is an outstanding record."

This comment on the reported record-breaking one-pound baby of El Paso, Texas, was made to Science Service by Dr. Julius Hess, of the University of Illinois College of Medicine, who has made a special study of premature infants of small size and weight.

According to Dr. Hess, the El Paso baby breaks the record for small birth-weight by five ounces.

"To my knowledge the smallest infant recorded in the literature that lived through its third year weighed one pound and five ounces," Dr. Hess said.

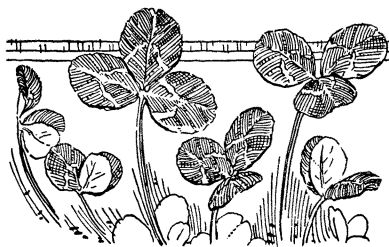
One other baby in this class, seen by Dr. Hess in Chicago, weighed one pound, three and one-half ounces at birth and lived twelve days.

Such so-called "midget" babies are not dwarfs in the true sense of the word but are infants who are born prematurely. Babies weighing two pounds or less at birth have a very small chance of surviving. At the premature infant station at Michael Reese Hospital, Chicago, there have been cared for over a period of a few years some 83 infants whose weights at birth or shortly thereafter were under 1000 grams (about two pounds). Of these 65, or three-quarters, died.

When these tiny babies do survive and grow up, they usually become perfectly normal persons both physically and mentally.

*Science News Letter, January 19, 1935*

Letters by George Washington show that he recognized the bad effects of soil erosion on his own farms and took steps to "bind together and prevent the earth from gullying."



### One Acre: One Man

**T**HE TINY peasant-owned farms of France, meticulously cultivated to the last centimeter by the patient labor of human hands—and backs—have long been standard subjects of travel-comment, whether in sympathetic admiration by the more discerning, or in derisive superiority on the part of victims of the common American disease of megalophilia. To all of us, however, it has seemed something alien, something quite out of our world, that any people should actually still be living by the ancient rule, "one acre, one man"; that there should have survived into the twentieth century a rural ecology which even in the eighteenth century Oliver Goldsmith lamented as already past for England:

"When every rood of ground maintained its man."

Yet even in our America, America of the mile-wide farms and Western rangelands still resentful of any fences at all, the land averages out to something like the old-time, Old-World acre-man ratio, at least so far as first-class land is concerned. So says Dr. Isaiah Bowman, director of the American Geographical Society and chairman of the National Research Council, in the current issue of the *Geographical Review*.

"Today there is only one acre of first-class land per inhabitant of the United States, and only one additional acre of second-class land," he states. "Marginal, submarginal and doubtful land amounts to five acres per person and desert or otherwise useless land, six acres."

Nevertheless, the crux of the farm population problem, in Dr. Bowman's opinion, is not lack of land but maldistribution of population on the land. He says:

"The federal government has embarked upon a scheme for the purchase of submarginal land. Anyone who has examined at first hand some of the precarious homesteads in the semi-arid and arid West will agree that it is better to buy out a family and subsidize it for a fresh start than to supply it with food four years out of five as a measure of charity.

"When whole counties are in distress and require state or national help for a period of years it is time that at least experimental efforts be made to improve the lot of the settler. Rural slums are as definite a menace as city slums."

*Science News Letter, January 19, 1935*

## MEDICINE

## Sheep Die of "Rabbit Fever," Carried by Ticks

**S**HEEP in the Northwest developed a highly destructive epidemic of tularemia or "rabbit fever" last spring, which Dr. Cornelius B. Philip, U. S. Public Health Service, told the American Society of Parasitologists was borne by the parasitic ticks common on the range.

Corroborative evidence included the death of many jackrabbits from tularemia at the same time, the discovery of tularemia bacteria in the bodies of some of the ticks, a case of tick-transmitted human tularemia, and bacteriological tests on the blood sera of diseased sheep.

Dr. Philip had as associates in the research William L. Jellison, Rocky Mountain Spotted Fever Laboratory of the U. S. Public Health Service, and H. F. Wilkins of the Montana Livestock Sanitary Board.

*Science News Letter, January 19, 1935*

Cranberry rye bread is a new bakery food, says Cornell University.

## ● RADIO

Tuesday, January 22, 4:30 p. m.

OUR STONE-PELTED PLANET, by H. H. Nininger, of the Nininger Laboratory.

Tuesday, January 29, 4:30 p. m.

DIGGING UP HISTORY, by Horace H. F. Jayne, Director of The University Museum, Philadelphia.

In the Science Service series of radio addresses given by eminent scientists over the Columbia Broadcasting System.