

When Baby Walks

Psychology

The ages at which a child takes his first step and utters his first word have always been matters of supreme importance to mothers and grandmothers. Scientists have decided that they are important, too, and have found, just as any mother might have told them, that the bright child learns to talk and walk earlier than a child of lower intelligence. That this is true was proved by a statistical study reported to the American Medical Association by Dr. Isaac Abt, world-famous child specialist of Chicago.

Records of 500 boys and 500 girls who had been referred to the Chicago Institute for Juvenile Research for examination were studied. The girls began to talk at an average age of 18 months and the boys at 19 months. The average age for walking was 16 months.

Science News-Letter, July 20, 1929

Meadow Mice Expensive Guests

Zoology

The meadow mouse looks soft and pretty and harmless, but he is a most expensive guest just the same. Vernon Bailey, of the U. S. Biological Survey, has been figuring his board bill, with rather startling results. A meadow mouse eats about 30 grams, or a little over an ounce, of green food every day. That runs up to 23 pounds in a year.

A hundred mice will stow away over a ton of green grass or clover in a twelvemonth. A hundred mice to an acre is not an unusual number in meadows favorable to their habits, while in "mouse years" the number has been estimated at thousands to the acre.

Mouse plagues, disastrous as they are locally, are of minor importance in comparison with the steady yearly drain on crops by the mice over the country at large in normal years.

Even as few as 10 meadow mice to the acre on 100 acres of meadow would take about 11 tons of grass or 5½ tons of hay a year. This number, on the 65,000,000 acres of hay raised in the 38 mouse states of the country, would cause a loss of over 3,000,000 tons of hay a year, or a money loss of some \$30,000,000 annually in hay alone.

The number of young in a litter ranges from two to nine, and one pair averages five to the litter. At this rate of increase, allowing equal numbers of males and females, and the young beginning to breed at 46 days old, the total increase from one pair, if all lived and bred, would be over 1,000,000 individuals at the end of a year. If all were confined to one acre of ground, this would mean over 20 mice to every square foot.

Science News-Letter, July 20, 1929

"Age of Speed" Hearing Disorders

Otology

The stresses and strains of existence in this "Age of Speed" may have a considerable influence on the hearing of patients who come into an ear specialist's office. This point was brought to the attention of the American Federation of Organizations for the Hard of Hearing at its annual meeting by Dr. Frederick T. Hill, of Waterville, Maine.

The automobile, for instance, may serve to increase some cases of deafness if, through fast driving with windows open, the membrana tympani are subjected to too much wind, he stated. Habits and routine of life thus play a part in determining the patient's condition, and such apparently slight matters warrant consideration by the specialist.

Dr. Hill decried unnecessary and excessive use of surgery in treating deafness and urged that patients should be thoroughly studied, not by one specialist, but by "team work" of a group of specialists before a plan of treatment is outlined. The otologist, or ear specialist, should have the assistance of an internist to discover physical defects, a dentist, a clinical pathologist with laboratory facilities for serum examinations, and an X-ray specialist, he said. Metabolism studies should be available, since probably ten per cent. of these cases have endocrine gland disturbances, he added.

"In order to do justice to the patient suffering from deafness, the otologist must really adopt the attitude of the old-fashioned family physician, rather than the self-sufficient specialist," Dr. Hill declared. "He becomes the guiding light after he has arrived at the aural diagnosis, directing the patient into whatever further channels may seem necessary. He will serve as the adviser, not merely for such surgical or medical procedures as may seem necessary, but for educational measures."

Science News-Letter, July 20, 1929

Acid Best For Trees

Ecology

Acid soil has long been decried as bad farm land for so many years that it has come to be considered by current thought as no good for anything. It may, however, be as good for growing crops of wood as it is bad for growing crops of grain, according to results of experiments recently performed by Henry I. Baldwin of Berlin, N. H. Mr. Baldwin sprouted red spruce seeds in water of varying acidity and alkalinity. He found that slightly acid water was better than any of the alkaline waters. He got the best results in pure distilled water, which is perfectly neutral; but of course distilled water is never found under natural conditions.

Science News-Letter, July 20, 1929

Right-Eyed Vision

Physiology

That most human beings are right-eyed has recently been demonstrated, but why a person sees better with one eye than the other is only now being ferreted out. Working under a grant from the Research Council of the American Medical Association, Paul E. Lineback has made microscopic studies of the central yellow-spot portion of the retinae of the two eyes of the same person or animal, with particular care in the measurement of the distance from the fovea or center of the yellow-spot of each eye to the outer edge of the optic disc.

He found that in every one of 18 pairs of human eyes the distance was shorter in the right eye than in the left. The differences are so slight that they must be measured in tenths of millimeters.

Mr. Lineback suggests that the right fovea being nearer its optic disc than the left would have some influence in bringing this eye more readily into the line of vision. Measurements on nine pairs of monkey eyes showed that eight of the pairs were like the human eyes so far as the retinal condition was concerned. But in the ninth monkey the reverse was true; that is, a shorter distance was measured between the fovea and the point of departure of the optic nerve in the left eye than was measured in the right eye.

Science News-Letter, July 20, 1929