



Tufted Titmouse

*HE little tomtit has been a funny bird ever since the days of Gilbert and Sullivan. Why Mr. Gilbert should have chosen this dapper little bird as the subject of his comically lugubrious ballad there is no telling. Possibly it was merely that the word "tomtit" looks rather funny per se. Or maybe the poet, with the humorist's flair for jibes at dignity wherever he finds it, was having his little fling at the bird's dapperness; for dapperness is the dignity of the small. However that may be, the little tomtit has had to sit on the bank of a river for a couple of generations, with a problematical tough worm in his little inside, singing a song that he never really sings.

For the song of the tomtit, or tufted titmouse as he is better known in this country, is not "tit-willow," but something that sounds much more like "peto." In some rural communities he is known as the "Peter-bird." In addition to his song he has another note which he uses when excited: "De-de-de-de-de," indefinitely; more or less like a chickadee scolding.

But there need be no mistaking him for a chickadee, though he is about the same size, for both sexes are ornamented with conspicuous head-crests, like the cedar waxwing. There need be no mistaking him for the latter bird, either, for he is much smaller, and lacks the conspicuous red and yellow markings on wings and tail. He is in general a grayand-white bird, dark above and light below, in the orthodox fashion of socalled protective coloration, with a touch of warm red-brown on the sides to prevent monotony.

Science News Letter, January 3, 1931

A new rayon fabric resembling linen has appeared on the German market.

MEDICINE

Two Scientists Divide Award For Conquest of Fatal Anemia

FOR their conquest of pernicious anemia by the feeding of liver to its victims, Dr. George H. Whipple of the University of Rochester and Dr. George R. Minot of the Harvard University Medical School were awarded jointly the Popular Science Monthly's first annual award of \$10,000 for the "current achievement in science of greatest benefit to the public." The selection was made by a committee of scientists.

Until Dr. Whipple discovered that liver was a powerful stimulator of the red blood cells that are lacking in pernicious anemia patients, and Dr. Minot applied this observation to human patients with life-saving results, pernicious anemia was a hopeless malady that killed in two to three years from the time the symptoms became obvious.

The success of the liver treatment for anemia was as marked as the use of insulin for diabetes, which a few years earlier had emphasized the importance of the internal glandular secretions in the body's mechanism.

Dr. Whipple did not apply to human beings his discovery of the effect of liver on blood cell formation, but Dr. Minot, who had been searching for an effective anemia treatment for several years, perfected the treatment clinically.

Dr. Minot's first patient was treated in 1924 but he did not announce his success until 1926. Physicians began to prescribe liver to their patients, thousands of lives were saved and liver that had been the "poor man's beefsteak" or used as dog food on account of its low price, skyrocketed in price.

Concentrated Liver Substitute

But some people find it very difficult to eat half a pound of liver a day. For them a potent liver extract has been developed by Dr. E. J. Cohn, also of Harvard Medical School. The extract, however, is costly, and most of the sufferers must keep on with their liver diet.

Medical scientists, interested in the purely scientific as well as the practical problem, wanted to know exactly what it was in liver that was so effective in treating pernicious anemia.

Part of the answer has now been

given by Drs. R. West and H. D. Dakin and Marion Howe of Columbia University College of Physicians and Surgeons and Presbyterian Hospital, New York City. From liver they have isolated a crystalline salt which is active in pernicious anemia. Analyzing this salt, they found two chemicals, betahydroxyglutamic acid and hydroxyproline, which are probably fragments of the active material. How these two are combined in liver, and whether any other substances are combined with them has not yet been determined.

The practical application of this work is still in the future, but it seems possible that the synthesis of the active principle of liver may eventually be effected. When that has been accomplished, large-scale manufacture of a relatively cheap product may be expected.

Science News Letter, January 3, 1931

