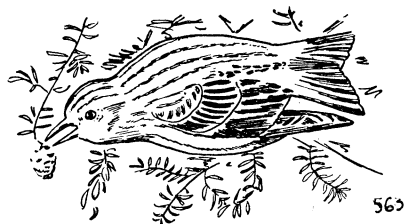


NATURE RAMBLINGS

By FRANK THONE

Two Winter Neighbors



56

To see a pine siskin is a very good test of one's persistence as a bird lover and of one's ability as a bird observer. For the siskin is a most fickle fowl in the matter of its choice of a winter range, or even of a summer breeding ground, often deserting a region altogether for four or five years on end, and then suddenly re-appearing in considerable numbers. And at best it is never so numerous that you can catch a half-dozen with a sweep of your hat. Siskins stick pretty faithfully to places where there are plenty of evergreen woods, and if you want to see them you will have to go into such places to find them.

They are very attractive little birds, marked over head and throat and back with close longitudinal stripes of light and dark brown, as shown in the illustration, with deep chocolate or black wing and tail feathers touched up at the bases with bits of canary yellow. That color bears the tale of their kinship, for they are closely allied to the finches, and like all of their tribe they are fond of indulging in two things; long stretches of trilling melodious song, even in winter, and a heavy diet of seeds. Their little beaks are sharp and strong, and are well adapted to digging and tearing into the tough cones of the evergreens to get at the meaty seeds among the scales.

"Bark-inspector-extraordinary-with-powers-of-extradition." That is the nuthatch. He is one of the cheerfulness, sauciest, topsy-turviest of our winter birds, and withal one of the most useful. "Frllip!" he alights against the side of a tree trunk, and he sticks in whatever posture he alights, whether rightside up or upside down or sideways. Immediately he begins inspecting for hidden cocoons or hibernating insects or their eggs, and what he finds he pulls out and devours. His strong little toes are fitted for the wide variety of grips they must take, better than those of the

(Just turn the page)

Parents Lend Immunity

Will the solution of the measles and whooping cough problems be found right in the home?

When either of these diseases make their appearance in a German family it is the current practice to prevent those diseases or to forestall serious complications by inoculating the exposed children with blood from their parents, according to Prof. Rudolf Degkwitz, European authority on measles. Prof. Degkwitz is director of the children's clinic at the University of Greifswald in Germany and is engaged at present in measles research at the U. S. Public Health Service.

In the densely populated countries of Europe, he explained, the chances of reaching full-grown manhood or womanhood without contracting measles or whooping cough are very small. It has been established, he said, that the periodic subsequent exposures to both diseases resulting from the contacts of every day life stimulates during the whole life production of antibodies in the blood. Consequently the blood of most of the adult population of Europe or of any big city in any country is a convenient immunizing agent that can be used to prevent those diseases or to mitigate their severity in children.

"When a German child 'comes down' with either whooping cough or measles," said Prof. Degkwitz, "the physician uses the blood of the father or mother to inoculate the other children in the family. When this is done early enough in 50 per cent of the cases treated the diseases are prevented and an immunity for several months is established. In the other 50 per cent very mild forms of the disease ensue that confer as lasting an immunity on the young patient as a severe case. Measles and whooping cough in such cases are so mild, that as a rule the children do not feel ill at all and cannot be kept in bed. Since the efficacy of this method depends on its early use, German health authorities are endeavoring to teach this vital point to parents through propaganda distributed to school children." The health section of the League of Nations likewise advocates this mode of treatment, he added.

Prof. Degkwitz has been working with an animal serum to be used as a measles preventive and curative which is made from the blood of

(Just turn the page)

Helium Shortage Exists

America faces a helium shortage. And helium is the unburnable gas that, although undiscovered on earth before 1895, is used to inflate dirigibles and thus keep them from exploding as those filled with hydrogen are likely to do.

The natural gas from the Petrolia, Tex., field which has provided helium up until now is playing out. Since Congress has authorized the construction of two giant dirigibles, each 6,000,000 cubic feet capacity, to cost \$8,000,000, lack of helium is worrying government officials. The Navy and the U. S. Bureau of Mines are asking Congress to appropriate money to pipe to the Fort Worth, Tex., helium extraction plant, built during the war, the helium-bearing natural gas of Nocona, only 25 miles from Petrolia.

The appropriation desired is \$500,000 which is needed to construct the necessary pipeline and pressure plant. The bill is now awaiting action by the Senate. Once the money is appropriated it will be a matter of only six or seven months before the helium supply can be increased.

The Nocona field was discovered in 1922 but natural gas, although burned in the field, has never been drawn away. The life of the Nocona supply is about 15 years and it will probably produce from 10 to 12 million cubic feet of helium a year during that time.

More helium is essential with the construction of two giant dirigibles in view. There was never enough helium to float the Los Angeles and the Shenandoah simultaneously. With the destruction of the Shenandoah the world's largest single store of pure helium was lost. Each of the projected giant dirigibles will need three times the helium now being used by the dirigible Los Angeles.

Science News-Letter, February 19, 1927

GEOLOGY

Kilauea Growing Uneasy

Kilauea volcano, the largest of known active peaks, is showing signs of uneasiness, according to Director T. A. Jaggar of the Hawaiian Volcano Observatory. The seismographs at Volcano House are recording frequent earthquakes, there has been a marked increase of avalanches into Halemaumau Pit, and there are yellow sulphurous patches on the slopes which are increasing in area.

Science News-Letter, February 19, 1927