

NATURE RAMBLINGS

By FRANK THONE



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Spruce

During what the heavier-handed of our humorists sometimes refer to as "the late unpleasantness," spruce figured largely in the day's news. It was the all-necessary wood for airplane construction, and the logging crews of the Northwest were hailed as heroes. Spruce served another war-time purpose even more important than carrying bombs into the enemy's territory; as newsprint paper it formed the wings that carried propaganda much more devastating than TNT.

Now spruce appears in another highly important role. Properly treated with acid and spun out into threads, it is rayon, the fabric that is clothing us all in silken garments such as Solomon in all his glory never knew. "A spruce appearance" is henceforward to be taken much more literally than its unknown originators ever imagined it would be. One reason why the cotton mills of New England and the cotton planters of Old Dixie are having such a hard time is that the rayon weavers of New Jersey and the spruce loggers of Canada are conspiring together to put them out of business. The snowy cotton fields of the South are threatened by the snowy forests of the North.

Spruces are attractive trees, but they seem to prefer most unattractive climates; for their several species—black spruce, Colorado spruce, Norway spruce, and the rest—either cling to the rugged slopes of the loftiest mountain ranges or stretch across the continent in the lonely reaches up toward Hudson's Bay. Beyond the mountains, where the rugged islands of the coast string up along the Panhandle of Alaska, there is one of the lordliest of all spruces, the giant Sitka spruce or tidewater spruce, the only one of its race that grows near salt water. It will supply us with hosiery and reading matter when we have gobbled up the last of its inland kin and are waiting for a new crop to grow.

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Less Measles This Year?

New York City and some other large cities this winter will be comparatively free from measles, judging by records of recent years. Last winter was a heavy measles year in New York and, from the findings of the Health Department, the city alternates its measles ratio from year to year. A year in which many children catch measles is followed by one in which most children escape the disease.

The reason for this variation is explained by Dr. William H. Park, director of the Bureau of Laboratories of the City's Health Department. During an epidemic year, he says, a moderate number of the city's school children catch measles. They carry it home to their younger brothers and sisters. Those who are old enough to run around spread it to others. The city is ravaged with the disease. The next year these children are immune to measles. Those who lack immunity are mostly babies from six to twelve months old. The number of cases developing falls sharply, and the city escapes a heavy epidemic. But the following winter changing population in a great city brings a new crop of "run-arounds" who have never had measles. In the schools there will be a certain number of pupils from out of town who likewise have never had the disease. Another measles year is due. And so the process repeats itself.

So far this winter, New York City is averaging twelve cases of measles a week. Last winter it averaged more than 200 a week. In 1925, the previous year of immunity, there was only one death from measles in the city during January. Last January there were fifty-nine deaths.

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Ambitions Not Sure Guide

The interests of a boy or girl who is beginning to think about a career are far from being a sure guide post to the work for which he or she is best suited. This is the conclusion of Dr. Douglas Fryer, psychologist at New York University, who has conducted an investigation to see how well budding ambitions fit together with abilities. Interest may be closely allied with ability in particular cases. But in general a student's interest in a vocation or a course of education is only slightly suggestive of ability in that particular vocation or course of study.

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75-Mile Gun Mile Out

A powerful gun, with a range of seventy-five miles, similar to that which bombarded Paris during the war, might shoot as much as a mile away from the place where it is aimed, simply because the earth is turning, according to Prof. William H. Roever of Washington University, St. Louis.

"If we lived on a turning table," said Prof. Roever, "we would observe phenomena which are different from those to which we are accustomed. For instance, a level surface, i. e., the surface of a body of water, would be a paraboloid of revolution instead of a plane.

"Since the earth is a turning body, the phenomena which we observe on it are different from those which would take place if it did not turn. Because of the slow rate of turning the difference between the phenomena for these two states is not noticeable unless a sufficient degree of precision is used in observation. For example, on account of the rotation of the earth, a projectile in the Northern Hemisphere deviates to the right of its initial direction on the horizon. While this deviation is negligible for small velocities, it can be shown that for a gun having a range of seventy-five miles it may amount to nearly one mile.

"On the other hand, the rotation of the earth causes the level surfaces to deviate from the spherical form. The proximity of mountains, or of heavy mineral deposits, produces similar effects in a given locality. Small though this difference is, it is now possible to measure it by means of a very simple, though delicate, apparatus, known as the Eotvos torsion balance, named after its inventor, Baron von Eotvos, a Hungarian physicist.

"By means of the Eotvos torsion balance remarkable work has been accomplished, since by its use not only a very accurate determination of a level surface in a given locality is made possible, but also because it indicates positions of mineral deposits."

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The stegosaurus, one of the great dinosaurs, had a brain weighing less than three ounces.

Spanish topaz, a yellow quartz, is sometimes so like topaz that only gem experts can tell the difference.