

efficiency. Most striking are the rotary plows, of which (again according to incomplete statistics) about 150 were in use last year.

In the cities the street-cleaning agencies are getting ready for a similar campaign. A generation ago a proposal to appropriate \$25,000 for a winter of snow-removal work in New York City was pronounced too extravagant for serious consideration. During the winter of 1925-26 the same city spent \$4,500,000 for such work.—*C. Fitzhugh Talman, in Why the Weather? a Science Service Feature.*

CLINE'S "TROPICAL CYCLONES"

"Dr. Cline states that the omission of Monthly Weather Review Supplement No. 24, containing Mr. Mitchell's contribution to tropical hurricanes from the Bibliography of his book, 'Tropical Cyclones,' was due to the fact that the matter for his book had been completed and submitted for publication before Supplement No. 24 appeared, otherwise it would have been in the Bibliography."

A FAMOUS STORM

The destructive gale in the British Isles, late in October, has brought out the following account of an earlier severe storm.—ED.

One of the most celebrated weather events in all history was the "Great Storm" of November, 1703, which raged over much of Europe, and was especially severe in and about the British Isles. Daniel Defoe wrote a book about it, and it is referred to in the well-known lines of Addison—

So, when an angel, by divine command,
With rising tempests shakes a guilty land,
Such as of late o'er pale Britannia past.

Throughout the south and west of England the destructive effects of the wind were quite without precedent for that part of the world. Hundreds of buildings were ruined, and there was vast destruction of trees. Defoe places the loss of life on land at 123, while hundreds more were injured. The losses at sea were far greater. More than 8,000 seamen perished, including some 1,500 men of the Royal Navy. The first Eddystone lighthouse was destroyed in this storm. Its architect, Winstanley, had expressed the hope of being in the building during the worst gale it should ever experience, and his wish was tragically accomplished. He had gone to the lighthouse the day before to superintend some repairs, and he never returned.

Much information concerning the storm has been gleaned by an English meteorologist, Henry Harries, from an examination of contemporary log-books of British men-of-war. It appears to have been quite comparable in violence to the worst hurricanes of the tropics.—*C. Fitzhugh Talman, in Why the Weather? a Science Service feature.*

A CATERPILLAR WEATHER PROPHET(?)

One of the most familiar kinds of caterpillar is the larva of the moth *Isia isabella*. It is part black and part yellow. You will find a colored

picture of it in Frank E. Lutz's "Field Book of Insects," p. 168, with the following description:

"The larva of this species has caused much comment. Kellogg calls it the 'woolliest woolly bear,' and notes that 'hedgehog' is a popular name. Holland connects the phrase 'to caterpillar' in the sense of quickly yielding to unpleasant circumstances with this species, because, when disturbed, the larva curls up and lies motionless; while Comstock recalls the 'hurrying along like a caterpillar in the fall' when speaking of the larva's apparent haste to find a snug place in which to curl up for the winter. The relative amount of black in the larva's 'fur' varies greatly, and is said to foretell weather."

Do you know this alleged weather prophet? In some rural districts he is anxiously examined in the autumn because his coloration is supposed to betoken the character of the succeeding winter. The black parts are said to mean cold weather, and the yellow mild. If the front part of the caterpillar is black, the beginning of winter will be cold—and so on.

Of course this is an idle superstition. Lutz tells us that the coloration is related to the moisture conditions of the weather that has gone before. It has nothing whatever to do with the weather that is coming after.—*C. Fitzhugh Talman, in Why the Weather? a Science Service feature.*

ANOTHER METEOROLOGICAL CATERPILLAR

According to J. H. Fabre, the French naturalist, the Pine Processionary Caterpillar possesses an organ so sensitive that it can detect changes in atmospheric pressure, and hence is able to foretell the approach of bad weather. This organ, situated on the back of the caterpillar, is a protuberance formed of a soft, pale, hairless membrane, of infinite sensitivity.

In his book, *The Life of the Caterpillar*, Fabre tells how he came to think that this organ had the power to detect changes in pressure. It is the habit of this caterpillar to feed only at night and in the winter time, but inclement weather in the form of rain, snow or high winds, makes feeding difficult, and is apt to break the line of communication with the nest; hence the caterpillar stays in its nest on stormy nights. Fabre had two colonies of Pine Processionaries under observation, one in his garden, the other in his greenhouse. Those in the greenhouse were not subjected to violent temperature changes, nor were they annoyed by rain, snow or high winds, yet Fabre noticed that there were certain nights when they failed to leave their nests. Almost always on those nights rain or snow occurred. The colony outside was guided, of course, by the actual weather conditions, but how did the colony on the inside know about the conditions? A study of the atmospheric charts showed that on the nights when the caterpillars stayed in, a barometric depression was passing over France. In fact Fabre claims that there was a fairly accurate agreement between the oscillations of the barometer and