

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.

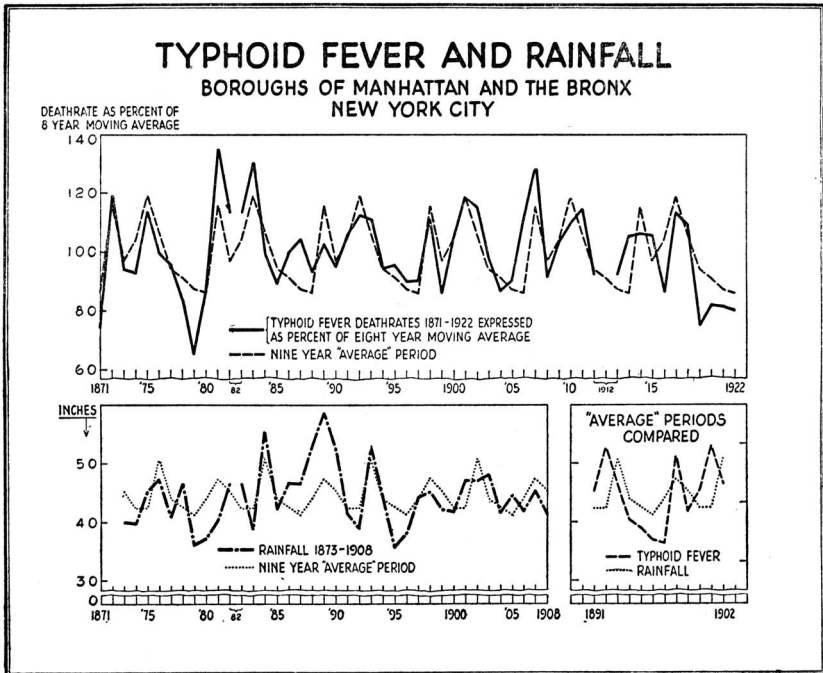
In his book, *The Life of the Caterpillar*, Fabre tells how he came to think that this organ had the power to detect changes in pressure. It is the habit of this caterpillar to feed only at night and in the winter time, but inclement weather in the form of rain, snow or high winds, makes feeding difficult, 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

the actions of the herd. When the pressure rose, out would come the caterpillars even though the storm outside were still continuing. When it fell they remained at home even though the evening without was clear and calm.—*N. H. B.*

**TYPHOID FEVER AND RAINFALL**

In the October, 1925, issue of this *Bulletin*<sup>1</sup> we presented a number of graphs of the deathrate from typhoid fever in certain cities of the Union. These graphs brought out very clearly a periodic alternation of crests and troughs spaced about eight years apart.

Since then the corresponding figures for the Boroughs of Manhattan and the Bronx in New York City have been analyzed with interesting results. We find here a clear picture of a nine-year wave, rising to a crest in 1872, 1881, 1889, 1898, and 1907, and dipping to the trough of the wave in the years 1879, 1888, 1897, and 1905. There is also a clearly marked secondary crest at the years 1875, 1883, 1892, 1901, and 1909, and a secondary trough at the years 1874, 1882, 1890, 1899, and 1908. It will be seen that the intervals between corresponding crests are 9, 8, 9, 9 years for the primary crest; 8, 9, 9, 8 for the secondary crest; 9, 9, 8 for the primary trough, and 8, 8, 9, 9 for the secondary trough. Thus,



<sup>1</sup> *Statistical Bulletin*, Metropolitan Life Insurance Company.