reasons for the failure of the insect to establish itself here are biological.

With definite examples of this sort before us, those of us who are unconvinced of the value of the plant quarantines—except as a substitute for a tariff—may be pardoned a certain amount of reluctance to concede that presumption of effectiveness to which the supporters of these measures are prone to appeal. We may with equal justice claim that in all probability there are other cases where biological factors and not the quarantine officers have been the effective barrier.

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THE DISTRIBUTION OF PAUROPUS

PAUROPUS HUXLEYI, a minute centipede-like animal with nine pairs of legs in the adult, was described by Sir John Lubbock. Specimens were found in England in 1866. Since then they have been reported from the continent of Europe, in the eastern states of this country and many other places. Actual records are from Sweden, Denmark, Germany, Austria, Italy, Chile, Paraguay, Argentina, Australia and Siam.

It was not until November, 1927, that I found them in California. Earlier records than this were of specimens in the New England region, Long Island, near Philadelphia and Indiana. The last record that I have found was by S. R. Williams and R. A. Hefner from Ohio.

In the summer of 1928 I found them in southern New York state. Since then I have collected them from a number of places. My first records were from southern California not far from Claremont in the college park under the live-oak trees, but I also found them in abundance in my own back yard or about a mile from the first location. I also found them near Laguna Beach in Orange County and in several situations in the San Gabriel Mountains, including one place among the pines at seven thousand feet altitude.

Two places in Mexico furnished specimens, although many other places were searched. One of these was from Lower California about a hundred miles below the border. Another lot was found not far from Mexico City. Several places were searched in Cuba without success. Neither were they found in Florida or other southern states, but in these last, at least, conditions were not favorable. Ideal places were found in many parts of California, Washington, Oregon, Utah, Montana, Wyoming and Idaho, but no specimens. However, several were collected in the deep coniferous forests on the slope of Mount Hood, Oregon, and some were found on Catalina and Santa Cruz Islands off the southern California coast.

Often, under certain conditions, it is not possible to find them in given localities, even though they are known to occur. If it is very wet or very dry they may not be seen, however abundant they may be at other times. We have not found them easily by means of funnels or sieves, and this may account for their apparent infrequency. The under-sides of stones or logs slightly dampened by recent rains seem to be the best situation to see them. Here they may be found among the more numerous small white Collembola.

After studying a considerable number of specimens from one place and comparing them with others of distant regions I at first came to the conclusion that there were about as many differences between individuals in one place as between specimens from widely separated localities, but more detailed study has convinced me that at least two distinct forms are in my collection. These, according to the descriptions of Hansen and others, are distinct genera. There is, then, a good chance of a number of species in my collection.

They are difficult to study in detail as they are neither small enough nor large enough for the usual methods to be employed in determining the distribution of the setae, proportions of the joints or other characters which aid in distinguishing one species from another. These that I have at present belong to the genera Pauropus and Stylopauropus.

I wish to have further material, and I should be glad if any collectors who may find specimens of these interesting forms will communicate with me as soon as possible.

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AN UNBOUND TEXT AND NOTE BOOK

THE writer has been trying an experiment which has worked out so satisfactorily in one direction for him that it has seemed others might be interested in trying the same thing, if they have not already done so.

At the time of publication of a recently issued book the publishers were requested to furnish one unbound copy with holes punched at appropriate places on the left hand margin. The intention was to use this copy in loose-leaf form for work in the classroom in a course involving material covered by the book. In such a case the primary advantage of a loose-leaf book lies in the fact that one can readily insert blank pages for notes concerning corrections, new material or anything else of value for the work in hand. In fields of science experiencing rapid developments and changes this seems particularly desirable. Such an