

With some reports of weather conditions on Mt. Tamalpais and with the pilot balloon observations and those expected from Mt. Hamilton, as well as increasing radio reports from ships at sea, the daily weather forecaster will have such aids as can be obtained at present.

Climatologists will view with regret, however, the loss of more than a year of record at this important mountain observatory, which until the time of its closing was in operation for twenty-three years.—*C. F. Brooks.*

H. MERRILL WILLS of Springfield, Ill., has just gone to Dubuque, Ia., as official-in-charge of the U. S. Weather Bureau station there.

The Precipitation and Humidity folio of the Atlas of American Agriculture has just been published by the U. S. Department of Agriculture.

THE CO-OPERATIVE OBSERVER.

What the doughboy was to the A. E. F., and more, the co-operative observer is to the U. S. Weather Bureau. Very little is said about him, but the work could not be carried on without him. While the doughboy was fed, clothed, and provided with such equipment as was necessary, the co-operative observer works for nothing, boards himself and is provided, in most cases, with a very meager equipment.

In these days, when so much has been written and said about the high cost of government, it is enlightening to learn that the Weather Bureau has on its rolls the names of 4,500 workers whose only compensation is the satisfaction of having rendered an important public service. These observers sometimes receive letters of thanks from the officials, but letters from those officials are more likely to contain requests for additional data, or to call attention to items omitted from the reports. At one time they received expressions of good will at the holiday time, but this has been declared illegal. From the public at large they hear no word of commendation.

This being the case it is not surprising that an occasional one becomes discouraged and drops out, but the fact is that most of them, despite the lack of reward or appreciation, continue to serve loyally and efficiently year after year. In many cases the keeping of the weather record becomes a matter of family pride, and the office of co-operative observer is handed down from father to son.

The character of the records kept is showing constant improvement, and it is remarkable that without pay and with so little supervision these observers continue to render such efficient service.

Upon the records furnished by these observers is built the system of published reports and from them is obtained the mass of data now available for the use of the student of climate.

Every year these data are being more widely used in connection with engineering, construction, transportation, manufacturing, commerce, agriculture, homeseeking, health-seeking, recreation, and education, and it is hoped that with increasing use there may come such a sense of appreciation as will result in some adequate recognition of the service rendered by these unpaid workers.—*Edward L. Wells, Portland, Ore.*