

Upon occasionally adding to the ration the usual amount of oil the cough ceases, and complete protection is afforded.

Rabbits have a certain form of snuffles known as nasal coccidiosis. This type has not been known to occur in the colony here and therefore it can not be stated to what extent the oil would act as a preventive.

For the past three winters the addition of the oil to the grain ration of guinea-pigs has been found very beneficial. The losses from pneumonia have been cut down very appreciably and there has been a general improvement in vitality. In previous years the animals were fed sprouted oats in addition to their grain and hay, but this was not sufficient. The sprouted oats is high enough in vitamin C to prevent scurvy but is either lacking or very low in vitamin D. When the latter was supplied by means of cod-liver oil the ration became comparatively perfect.

The feeding of liberal quantities of green alfalfa to guinea-pigs makes them practically immune to pneumonia. It would seem from this that for guinea-pigs the above green feed has sufficient vitamin D for protection. Either green alfalfa is higher in vitamin D than sprouted oats or, if it is not, protection is afforded because it is fed in much larger quantities.

There is still another possibility and that is that green alfalfa may be entirely or almost entirely lacking in vitamin D but contains some other substance which acts as a good substitute in building up resistance to either pneumonia or snuffles.

The present report is not intended to represent experimental work in nutrition but merely the observations of one interested in raising healthy animals for experimental work in other lines; in this particular case, genetics.

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THE SCIENTIFIC PAPERS OF WILLARD GIBBS

DURING the last few months I have been trying in vain, both in this country and in London, to acquire a copy of Willard Gibbs's "Scientific Papers" (Volume I). It is certainly a sad commentary that in this age of cheap printing, when tons of printers' ink flow daily to record and disseminate the most trivial incidents, the scientific papers of the greatest physical chemist America has produced should be unavailable to those who need them.

It can not be said that Gibbs's papers are of historical interest only. Unlike most scientific publica-

tions of fifty years ago, his writings on thermodynamics are as useful to-day as they were when first published. Those who have patiently labored through his admittedly difficult writings are agreed that we are far from having exhausted the valuable material which lies hidden therein.

The publisher who would bring out a reprint of the old edition of Gibbs's papers would certainly perform a service to science. In the meantime, I shall be greatly obliged if any reader can inform me where a copy of the old edition can be bought.

Since writing the above, I have obtained from Professor R. G. van Name, of Yale University, through the kind offices of Dr. A. W. Kenney, a copy of the German edition of Gibbs's "Thermodynamische Studien" edited by Wm. Ostwald in 1892. I understand that Professor van Name, who is a near relative of Willard Gibbs, will bring out next year a new edition of Gibbs's Scientific Papers.

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AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

A SPECIAL FEATURE OF THE SECOND NASHVILLE MEETING: SCIENCE FOR THE PEOPLE

INCREASINGLY from year to year we witness the further correlation of isolated scientific facts into broad "laws" of economic value and the application of these "laws" to the welfare of the people as a whole. Curious phenomena not known outside of laboratories twenty years ago combined with others equally uncanny are found to form broad basic principles which in one way or another influence the daily lives of each and every one of us. With this development there has arisen in the public mind a keen desire for enlightenment in regard to science as a whole, as well as in regard to each of the various branches into which it is divided.

In order to progress science must find support. A century ago science was supported chiefly by the scientific men themselves, because they alone appreciated the importance and the potential value of scientific work. Then others became interested, and still later industry took a hand, while at the same time the people as a whole began to accord generous support to scientific institutions, especially to those of their own creation. At the present time science in this country, and indeed everywhere, is very largely supported by the general public, either through money derived from taxes or by numberless direct donations.