

THE RESPIRATION CALORIMETER.

OWING to the lack of knowledge of the greater part of the student body concerning the construction and workings of this unique apparatus, and since our province is to give news, we herewith present an abstract from the description of it given by Dr. Armsby :

An apparatus is now approaching completion at the Agricultural Experiment Station of the Pennsylvania State College, which is not only of great scientific interest, but is one of the only two instruments of the sort in the world, and the only one designed for experiments on domestic animals. It is called a respiration calorimeter, and by its use it is expected that much light will be thrown on some of the problems of animal nutrition and stock feeding.

The construction of it was assigned by Secretary Wilson, of the U. S. Department of Agriculture, to the Bureau of Animal Industry, Dr. D. E. Salmon, Chief, and the Director of the Station, Dr. H. P. Armsby, was commissioned as expert in animal nutrition in that bureau. Subsequently there were associated with him in the work I. Thornton Osmond, Professor of Physics in the College, and Messrs. J. August Fries and C. W. Norris, assistant chemists of the station, Mr. Fries having immediate charge of the details of the construction.

Dr. Armsby spent several weeks in Europe during the summer of 1898, visiting the more important centers of this kind of research in Germany, France and England. After a careful study of all that these countries could offer, however, it was decided that an American apparatus, devised by Professors Atwater and Rosa, of the Wesleyan University, at Middletown, Connecticut, for experiments on man, was far superior for the purposes in view to any foreign apparatus. Accordingly, plans were at once begun for an apparatus of