tigation without materially curtailing effort in either; it cannot do all.

Though waning, much evil to true experiment is centred about an idea based upon the much abused words practical and popular, i.e., the farmer should see from the results, good crops, fine stock, etc., that the station is practical — it must be popular. Such a condition is well, but may be a delusion so far as experiment is concerned. It is not enough for an experiment station to show that it has been able to raise an average of forty bushels of No. 1 hard wheat per acre, for a period of ten successive years. It is not enough to compile facts merely for educational (popular) effect. The farmer who is looking for properly initiated experiments, the man who is able to appreciate such and profit by them to the enlightenment of his less able, less active neighbors, while he may be interested in such evidences of capability, rightfully expects more. The station management which, after a decade, has only succeeded in well accomplishing work similar to that indicated will nevertheless be in logical position to answer the question: In how much have you augmented the aggregate of working principles of agriculture?

H. L. BOLLEY.

Government Experiment Station, Fargo, N D.

NOTES AND NEWS.

MISS AMELIA B. EDWARDS, who died recently, has in her will endowed a Chair of Egyptology. Her library, which is very valuable, she has bequeathed to Somerville Hall, Oxford.

— Professor Liversedge, of Sydney, in a recent paper, states that iron rust is usually considered to be an hydrated sesquioxide of iron; but, on examining a very large number of specimens of rust from many different places and formed under a great variety of conditions, he found that in almost every instance the rust contained more or less magnetic oxide, in fact, in some cases the rust, though presenting the usual rust-brown color and appearance, was, when powdered, wholly attracted by a magnet.

— In addition to the Grand Honorary Prize placed at the disposal of the Boston Society of Natural History, by the late Dr. William J. Walker, "for such investigation or discovery as may seem to deserve it, provided such investigation or discovery shall have been made known or published in the United States at least one year previous to the time of award," which has been unanimously awarded to Professor James D. Dana, referred to in *Science* of April 29, the Society has awarded, from the annual Walker Prizes, a first prize of one hundred dollars to Baron Gerard de Geer of Stockholm, for an essay entitled "On Pleistocene Changes of Level in Eastern North America," and a second prize of fifty dollars, to Professor William M. Davis of Cambridge, for an essay on "The Subglacial Origin of Certain Eskers."

— Mr. James M. Macoun of the Canadian Geological Survey Staff, who accompanied the British Commissioners to Behring Sea last year as secretary, has left Ottawa *en route* for Alaska, to observe the habits of the fur seal during the present season. It is proposed that he shall go over the same ground which the Commission traversed last year, to examine specially whether there is any variation in the numbers of the seals. Last year the photographer of the expedition succeeded in obtaining a large number of excellent views of the rookeries, which will furnish a good basis for comparison with a similar set to be taken this summer. Mr. Macoun expects to spend the early part of the season on the Aleutian Islands, proceeding to the Pribyloff Islands only when the seals gather there for the summer.

—It is well known that serious loss is caused in the various Australian colonies by the ravages of the rust fungus in wheat. An Intercolonial Conference, as we learn from *Nature*, met to consider the subject in 1890, and this body has since held two other meetings, the third having taken place at Melbourne last month. Many experiments have been made, and it has been clearly shown that there are several varieties of wheat which, except under very unusual circumstances, are never seriously attacked by rust. It has also been shown that in many districts early sown wheats of a rust-liable kind generally escape damage by rust, when the same wheats sown late suffer seriously. In view of these facts the Conference has directed attention mainly to encouraging the growth of varieties less liable to be attacked by rust, and also to early sowing. At the March meeting it was recommended that a practical system for the production and distribution of rust-resisting wheats suitable to different districts should be immediately established, and that this system should, subject to modifications needed by each colony, be conducted on the following lines: A central station for each colony for the preliminary testing of new wheats introduced into the colony; for the production of new varieties by cross-fertilization and by selection; and for the distribution of suitable wheats thus obtained to representative districts of the colony, to be there subjected to a sufficient test, and, if necessary, fixed in their characters by farmers and others competent for the work; and that such wheats as pass satisfactorily this test should then be distributed to the farmers around in such a manner and by such agency as would be most suitable to the conditions of each colony. A committee was appointed to take steps for the proper naming of the different varieties of wheat.

— At the meeting of the Royal Meteorological Society, the 20th of April, a paper was read on "Anemometer Comparisons," by Mr. W. H. Dines. This was a report on a valuable series of experiments which have been carried out at the request of the Council of the Society with the view of obtaining a direct comparison of the various anemometers in common use, so that some opinion might be formed as to which type of instrument is the most suitable for general purposes. The Meteorological Council have defrayed the cost of the work. The anemometers which were compared were: 1, Kew-pattern Robinson; 2, self-adjusting helicoid; 3, air-meter; 4, circular pressure-plate (one foot in diameter), and 5, a special modification of tube anemometer. Most of these instruments are of the author's own invention, as well as the apparatus for obtaining automatic and simultaneous records from all the instruments upon the same sheet of paper. It appears that the factor of the Kew-pattern Robinson is practically constant and must lie between 2.00 and 2.20. The helicoid anemometer is quite independent of friction for all excepting light winds, and different sizes read alike, but it is not so simple in construction as the cup form. The air-meter consists of a single screw-blade formed of thin aluminium, and made as nearly as possible into the exact shape of a portion of a helicoid. A similar instrument with a larger blade and with the dial protected from the weather would probably form a useful and correct anemometer. It would be light and offer a very trifling resistance to the wind. The oscillations of the pressure-plate must have been considerably damped by the action of the floating weight, but as it was they were sufficiently violent. It seems probable that the remarkably high values sometimes given by the Osler pressure-plate may be due to the inertia of the moving parts. The tube anemometer appears to possess numerous advantages. The head is simple in construction, and so strong that it is practically indestructible by the most violent hurricane. The recording apparatus can be placed at any reasonable distance from the head, and the connecting pipes may go round several sharp corners without harm. The power is conveyed from the head without loss by friction, and hence the instrument may be made sensitive to very low velocities without impairing its ability to resist the most severe gale.

— In *The Studio* for May 7, Mr. Gaston L. Feurardent has an article reviewing the one written by Mr. Edward Robinson of the Museum of Fine Arts of Boston, Mass., and published in the *Century Magazine* for April: "Did the Greeks Paint their Sculptures?" Mr. Feurardent, while giving Mr. Robinson full credit for the research and learning so amply shown in his article, finds himself unable to accept his conclusions so far as they relate to the painting of marble statues of the higher class.