

SCIENCE

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DeWITT BRISTOL BRACE.

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MARKED ability in devising experiments, in minutely observing phenomena, and in correctly interpreting the same, are of themselves sufficient to make a physicist of note. Add mathematical power and, unless circumstances are untoward, our physicist will come to stand among the very few. Such a one was Professor Brace. Nay, he was even more; for with him circumstances were most untoward. The battle was long and arduous before he could build up his department and make his work tell.

When he came to Nebraska the university was poor indeed, the equipment meager. The period when one man taught all the sciences had barely passed. That hither had come a man who could set up his apparatus and spend precious time in investigation was astounding. No wonder the chancellor, who caused to be torn down the shed that sheltered the apparatus, should have thought he did God service.

With the growth of the university came not a parallel growth of the means to carry on the work. The demands of the classroom grew more rather than less exacting. Nor was any work slighted. Those who have served with him on committees know how high were his ideals, how conscientious his purposes, how sane his judgments. Yet for his investigations he was able here and there to snatch a moment; so that, during term time, he was at least able to determine and plan the lines his work should follow during vacation. Gradually he gathered about himself enthusiastic students whom

he trained up as co-workers. Moreover, these would work with him through the vacations. Thus, all last summer, frequently till late at night, one could find, in the old basement laboratory, professors and students immersed in work.

More than once he had attractive calls to the east. Yet, because he felt that on going elsewhere he would have to begin all over again with great loss of time, these calls were refused. Had he known how long he would have to wait for the promised new laboratory; had he known that he was never to work in it: even then, I believe he would have stood by the work he had entered upon here.

In spite of all difficulties he was turning out several papers yearly. This summer he was just able to finish and send to *The Philosophical Magazine* a paper on 'Fizeau's Method in Ether Drift.' This will probably rank with a former paper 'On the Resolution of Light into Circular Components in the Faraday Effect.' In the November number of *The Physical Review* he will have a paper 'On Anomalous Dispersion and Achromatic Systems of Various Types.'

Thus did he work to the very end, 'without haste, yet without rest.' Need it surprise us then that those with him caught his inspiration and that the publications of the department, mostly prepared during vacations, should number some forty or more papers?

When can we Americans learn that 'in universities truly worthy of the name,' place should be made for investigation throughout the year; that those fitted for investigation should be untrammelled, perhaps even encouraged to engage therein. Might it not be better to reserve for vacations solely the command 'thou shalt not investigate'?

But it is something that the laboratory

he has done so much to create may be named in his honor; and it is more that the band of devoted workers he had gathered about him will therein have the opportunity, as they have the absorbing purpose, to carry to complete and perfect fruition his pregnant ideas.

Cut short in the beginning of his triumphs he will, nevertheless, be ranked among our physicists along with Gibbs and Rowland.

ELLERY W. DAVIS.

THE UNIVERSITY OF NEBRASKA.

EDUCATIONAL PROBLEMS AT YALE UNIVERSITY.¹

THE recent history of our large universities shows the growing importance of providing land for museums and bureaus of research.

A university has to deal with two classes of problems—those which arise out of its relations to its students, and those which arise out of its relations to the general public. Most discussions of university work concern themselves chiefly with the relations of the institution to the student body. We try to arrange a course which shall meet the needs of the students; we organize the work of the professors with the same end in view. Three quarters of the time of the corporation and more than nine tenths of the time of the faculties is occupied with the consideration of problems involving the welfare of the students primarily or exclusively.

But this is not the whole work of a university. It must care for its students in this way; but it must do something far more than this. Its relations to the general public are, I believe, quite as important as its relations to its students. It is something more than a large school or group of schools. Its professors can be occupied with something better than the discussion of student discipline. The noble definition

¹From the annual report of President Hadley.