years, is not intended to prepare teachers for their profession. The plan is to offer an opportunity to do college work to the 5,000 teachers or more of Chicago. The College will not concern itself with methods of instruction, but only with the subject-matter.

MT. HOLYOKE COLLEGE has received \$100,000, bequeathed some time since by the will of the late Charles P. Wilder; one-half of this sum is to be spent in the support and extension of scientific work.

THE new buildings of the medical department of the University of California, built by the State on land presented by the late Adolf Sutro, were formally opened on October 22d. The site, though somewhat remote from the present center of the city of San Francisco, commands a magnificent view, and the laboratories and lecture rooms are excellently equipped.

WE noted last week that eleven architects had been selected in the final competition for plans for the buildings of the University of California instituted by Mrs. Hearst. It appears further that the traveling expenses of these architects are to be paid by Mrs. Hearst in order that they may proceed to California and spend six months in adjusting their plans to the magnificent site of the University.

A CHAIR of physical geography, not yet filled, has been established in the University of Zurich.

THE University of Paris has been given anonymously a fund to allow a French student to study mathematics in Germany.

AT Magdalen College, Oxford, Mr. Horace Middleton and Mr. Harold Hilton have been given fellowships, the former in reference to work in physiology and zoology, the latter with reference to work in mathematics.

M. BOIRAC has been appointed professor of philosophy at Dijon.

THE Council of the University of Paris has nominated for lecturer in experimental psychology as its first choice M. Pierre Janet and as its second choice M. Georges Dumas.

DR. R. LORENZ, electrochemistry, and Dr. K. Keller, zoology, have been made full professors in the University of Zurich.

DISCUSSION AND CORRESPONDENCE.

THE 'BIPOLARITY' HYPOTHESIS.

I HAVE read with interest Dr. Ortmann's remarks in *SCIENCE* for October 14th on Sir John Murray's views as to the distribution of marine faunas. I agree with Dr. Ortmann that in most cases the supposed 'bipolarity' does not exist, and I may refer him to some remarks of my own published last June, which show very much the same for the Tunicata as he does for the Crustacea. The statements in question appear in a paper on Simple Ascidians from Puget Sound (*Trans. Biol. Soc., Liverpool, Vol. XII., p. 248*), in which, while pointing out the close similarity between the Tunicata faunas of the west coast of Europe and North America and their possible relation to a northern circumpolar fauna, I criticised Murray's 'bipolar' lists and gave as my opinion that "the distribution of Tunicata as a whole does not lend any support to the bipolar hypothesis." I further stated that "this matter must be settled by specialists in each group of animals stating their opinions as to the genetic affinities of the northern and southern faunas in their own groups, quite apart from and uninfluenced by general lists containing other groups." I am glad to see that this is what Dr. Ortmann and others are now doing.

I would add: There is one thing more we need, and here I am sure Sir John Murray and other naturalists will concur, and that is, more facts, further investigations. There is every prospect now, with the various Antarctic expeditions in the field or proposed, that we shall shortly be in possession of more information from the far South. It is to be hoped that American and British naturalists will see to it that our own polar seas are more thoroughly explored in the near future, both by dredge and tow-net. In advocating Antarctic expeditions we must not forget how much still remains to be done within the Arctic Circle.

W. A. HERDMAN.

UNIVERSITY COLLEGE, LIVERPOOL,
October 22, 1898.

PERIDINIUM AND THE 'RED WATER' IN NARAGANSETT BAY.

DURING the last two months the inhabitants of Rhode Island witnessed the following remark-