

necessary. We are in face of industrial struggles, and we must utilize both science and art to supply the wants of our own and other countries, and to provide commodities made in England, besides handling

"Things of beauty, things of use,
That one fair planet can produce,
Brought from under every star."

We are in face of a struggle for existence in which we know full well that only the fittest will survive. How are we going to carry on the struggle? What are our weapons? Our first line of defence in this direction can only consist of our universities and our teaching centers. Have we enough of them? We know already that we have not enough of them, because we have already lost several important engagements in these industrial battles. Are there no means by which we can judge of their sufficiency? In those less peaceful struggles among nations which must sometimes arise we have a first line of defence of another kind—our Navy. In that case we have the well-understood and generally acknowledged principle that our fleet must be equal to the fleets of any two other possibly contending nations. This principle, I think, should be applied to our first line of defence in these industrial conflicts the results of which are more enduring. Do our teaching and research centers at present outnumber in the same proportion, as do our ships, those of any two nations which are actually contending with us in peaceful enterprise? And, also, are they equally efficient in every respect? I believe, and I know that this view is held by many representative men of science, that until our universities, our science schools, our art schools, and our technical institutions bear the same relation both in number and efficiency to those of other nations as do our battleships, cruisers, and small craft, we shall not be justified in regarding the future of the empire with that freedom from care which is the attribute of a strong man armed.

UNIVERSITY AND EDUCATIONAL NEWS.

MR. JAMES MILLIKEN of Decatur, Ill., has offered \$200,000 and land for the establishment of a college under the auspices of the Cumberland Presbyterian Church of that place. It is

said that the citizens will give over \$100,000 toward the college.

NEW YORK UNIVERSITY has received \$20,000 and Rutgers College \$10,000 by the will of the late Robert Schell of New York.

A SCHOLARSHIP in New York University has been endowed with \$2500 by Dean and Mrs. Edward R. Shaw in memory of their son, a member of the class of 1900, who died last year.

THE Ohio Institute of Mining Engineers has undertaken to defray the cost of a scholarship of \$100 annually at the School of Mines of the Ohio State University.

THE first meeting of the Court of Governors of the Birmingham University was convened for the 31st inst. The donations to the endowment fund which have already been promised amount to \$327,000.

AT Harvard University Dr. R. DeC. Ward has been promoted to an assistant professorship of climatology, and Mr. W. C. Sabine to an assistant professorship of physics.

THE following promotions have been made in the Philosophical Department of the University of Michigan: Mr. George Rebec, Ph.D. (Michigan), instructor in philosophy, to be assistant professor of philosophy; Mr. W. B. Pillsbury, Ph.D. (Cornell), instructor in psychology, to be assistant professor of philosophy and director of the psychological laboratory.

GEORGE H. LING, now instructor of mathematics at Wesleyan University, has been appointed a professor at the Cincinnati University.

PROFESSOR PIERRE DE PEYSTER RICKETTS has resigned from the chair of analytical chemistry of Columbia University.

DR. AUGUST TÖPLER, professor of physics at the Technical Institute of Dresden, will retire on the first of October.

DR. FRANZ KOSSMAT, assistant in the Austrian Geological Survey, has qualified as docent in the University of Vienna, and Dr. Paul Ehrenreich as docent in ethnology at Berlin.

DR. ARTHUR WRESCHNER has qualified as docent for philosophy and psychology at Zurich. The subject of his inaugural address was 'The Influence of Leibnitz on pre-Kantian Psychology and Æsthetics.'