THE University of St. Andrews will celebrate its five hundredth anniversary in September, 1911.

An exchange of professorships and students between universities and academies among all the American republics has been proposed by Secretary Knox. The suggestion has commended itself to the governing board of the International Bureau of American Republics, which has recommended that the proposed interchange shall figure in the program of the fourth Pan-American Congress to be held at Buenos Ayres next summer.

MR. WALTER GEORGE SMITH, a Philadelphia lawyer, has resigned as a trustee of the University of Pennsylvania owing to the election of Dr. L. P. Lichtenberger as associate professor. He objected to Dr. Lichtenberger's views on divorce expressed by him at a meeting of the American Sociological Society in Atlantic City last year.

A NEW department of economic entomology has been organized in the College of Agriculture of the University of Wisconsin, and Mr. J. G. Sanders, of the U. S. Bureau of Entomology, has been appointed assistant professor in charge.

PROFESSOR H. G. BELL, of the Iowa State College, has been appointed professor of agronomy at the University of Maine.

MR. DONALD F. MACDONALD, junior geologist, U. S. Geological Survey, is this winter in charge of the work in geology at Tulane University, New Orleans.

DISCUSSION AND CORRESPONDENCE

NATIONAL LEADERSHIP IN EDUCATION

THE recent communications to SCIENCE of Mr. E. C. Moore and Mr. Theo. B. Comstock open a field that can not fail to be of interest to specialists in education, and of great importance to the country generally.

It is a good suggestion that the significance of the nation's work in education would be more adequately indicated by having a secretary of education than it ever could be by the office of commissioner of a bureau. If it should become a question of room in the President's cabinet, it might be entirely feasible to

combine the functions of the Departments of War and Navy, or gradually to do away with them altogether. This would be especially appropriate, and in the line of just recognition, since no factor in our national life bids fair to do more to render these departments useless than education itself.

In our system of state independence as opposed to national unity, it is very difficult to say what could be done were the nation to assume definite control of general education. The already established departments of the executive branch of the national government vary in the degree of control of the field assigned to them. The existence of absolute control of the Postmaster General and the divided control of the Attorney General may be explained on the basis of the fact that one has organized a system for every one's convenience at small cost, while the other may threaten to encroach on certain "inalienable rights." The degree of control in either and all cases would also vary with the confidence inspired by the acts of the department. The mind of the nation shows signs of moving strongly to those factors in its life which are obviously affecting the general welfare. Here would lie the great hope of a Department of Education.

There are certain phases of the possible work of a Department of Education that seem to the writer to be of paramount importance. The west, the east, the north and the south have developed antagonisms through isolation and through variety of locality interests. In all these regions magnificent work in constructive ideas in the field of education is being done in spots. But except for the evanescent results of educational conferences and the poorly circulated printed page, there is nothing to help a great idea to stick. If in the state of New York an educational leader formulates the idea that the schools and colleges should train their students to be intellectually honest, there should be some central authority to recognize the far-reaching application that idea might have in curing us of the habit of indirection in official and business dealings, and in removing sectional prejudice. If an able essay is written in the state of California showing that morality is a social obligation, there should be some means of bringing that idea to the notice of all the people. How could these things be done? For answer we may ask, how does the Department of Agriculture utilize the ideas of scientific men? If we establish experiment stations to discover means of conserving our material resources, why should we not establish experimental schools to test the usefulness of ideas directed toward the problem of social betterment?

Experimental schools under the supervision of a Department of Education would certainly be more productive of good from the very first than the occasional model school here and there through the country, for at least these three reasons: because the literature of all previous experiments in all countries would be at their immediate command, because the ideas of a nation's teachers would flow to it naturally, and because the successes and, equally important, the failures could always be matters of public knowledge.

We need better and more productive methods of school administration than those commonly employed. To this end national experimental schools could "try out" the various ideas along democratic lines that have come in our effort to free ourselves from the autocratic domination of one or a few strong or unprincipled men in control of systems of schools. Moreover, the classical, the scientific and the "practical" subjects must be analyzed as to the character of subject-matter, and experimented with for results. We have the dictum of the middle ages that the classical languages bring culture to the mind of the learner. Are there not other subjects which may yield the product of culture? Again, teachers of the natural sciences have long claimed a monopoly of material which on being studied trains students to think. We who are in the work must soon acknowledge that we have not proved our case. The explanation of failure may lie in the possibility of our not knowing how to handle our material. There can be no question that the natural sciences do present the opportunity for training to thinking. National experimental schools could take up the discoveries in methods made by isolated teachers of science, and make them productive of good to great numbers of the younger generation of citizens. The help to a nation of generally non-thinking people might be enormous.

National experimental schools covering all the work from kindergarten to college should be established in various parts of the country, for the benefit of the local schools and to the profit of the national schools themselves. For administrative as well as for pedagogical and social reasons, these schools should offer, for example in the secondary grade, *all* the subjects now taught in the classical or special high schools. Only through the organization of this, a cosmopolitan high school, could comparative results be obtained.

In this connection we should not fail to consider the expense of possibly a score of national schools. For that we could draw on the credit of the future to the extent of the cost of a few "dreadnoughts."

JAMAICA, N. Y.

THE ASSOCIATION OF AMERICAN CHEMICAL RESEARCH LABORATORIES

HENRY R. LINVILLE

To the Editor of Science: Permit me, Sir, to correct an error in my letter printed in SCIENCE, issue of November 5, 1909. Among the laboratories which had, at the Clark University celebration meeting on September 16, joined the newly formed Association of American Chemical Research Laboratories, my letter mentioned that of Harvard University. This is due to a misunderstanding. Professor Richards, the chairman of the department, while "believing most heartily in the spirit and idea" of the association, had not explicitly pledged the Harvard laboratory to join it, and now the director of the laboratory, Professor Sanger, who has charge of all business matters, has definitely decided against adding the laboratory to the association list, in the belief that this would be contrary to "the terms under which our chemicals and apparatus are imported duty free."

I have thought it scarcely necessary to point out that the borrowing of supplies by educa-