

Lester Jones, director of the Coast and Geodetic Survey, wanted the modest sum of \$40,000 to enable him to complete wire drag work on the North Atlantic seaboard. General Lord, director of the budget, cut the item out of the appropriation bill, and now Representative Shreve, of Pennsylvania, chairman of a subcommittee on appropriations, declares himself incapable of overriding the decision of General Lord. This means that unless the maritime interests can bring sufficient pressure to bear on the committee on appropriations or General Lord or both wire-drag work extending practically from Newburyport along the Maine coast to the Canadian line must be abandoned. The Coast Survey has performed a remarkable service in clearing coastal waters of the boulders which infest them, most of them unknown, and yet many almost directly in the path of coastwise shipping. It will be recalled that a few years ago off Boston harbor one of the great battleships came within something like fifteen feet of striking a hidden rock that might easily have torn her side open and let her go down into one hundred feet of water. A little later it was necessary to wire drag Salem harbor to permit the entrance of another battleship, and twenty-five boulders were removed during the process. The work had proceeded as far as Newburyport harbor, and Colonel Jones estimated that with the new and improved drags he is using \$40,000 would enable him to clear the whole American coast. The work must be done eventually, and the appropriation officials may have a hard time explaining why it is being delayed."

## UNIVERSITY AND EDUCATIONAL NOTES

THE Philadelphia College of Pharmacy and Science is endeavoring to raise \$2,000,000 for expansion of its work, and has already raised the sum necessary for a building site, which has been purchased. It is planned to use the \$2,000,000 for a group of buildings, with equipment, and in providing an adequate endowment. Rear Admiral W. C. Braisted, formerly surgeon general of the Navy, is the president of the college.

BATES COLLEGE has received an anonymous

gift of \$60,000 toward its million-dollar endowment fund. Including the \$200,000 conditionally promised by the General Education Board, this brings the fund total to \$550,000.

THE University of Glasgow has received a gift of £25,500 from Mr. Henry Meehan, of Meehans, Limited, engineers and contractors, Glasgow, for the foundation of a new chair of public health.

ON the death, recently, of Mr. Gemmell, brother of the late Dr. Samson Gemmell, regius professor of medicine in the University of Glasgow, the fortune which passed to him on the death of Dr. Gemmell, amounting to approximately £100,000, has been bequeathed to various Glasgow institutions. The sum of £20,000 is left to the trustees of the university for the purpose of endowing a chair in the faculty of medicine or science, to be known as the Samson Gemmell chair. The choice of subject is left to the trustees.

AT Clark University Assistant Professor C. E. Melville has been promoted to a full professorship of mathematics.

DR. A. E. YOUNG, professor of mathematics at Miami University, has resigned to accept position with the Standard Oil Company at Pittsburgh.

DR. HUGH S. TAYLOR has been promoted by the trustees of Princeton University to a full professorship in the department of chemistry, with the title of professor of physical chemistry.

W. W. RUBEY, assistant geologist of the U. S. Geological Survey, has been granted leave of absence to accept an instructorship at Yale University for the current year.

## DISCUSSION AND CORRESPONDENCE

### A PROPOSAL FOR WILD PLANT CONSERVATION

THE state of Vermont, well noted for rare plants—ferns and flowers—in considerable abundance, recently awoke to the fact that its flora was threatened with extinction. Plants formerly abundant were becoming rare and some rare plants were disappearing from localities where they had been fairly frequent. This applied particularly to various species

of orchids and alpine plants with which Vermont had been rather abundantly supplied.

Investigation pointed to the commercial collectors of live plants as responsible. For such transplantation, it was suggested that the plants would beautify grounds and gardens, and would, perhaps, delight a greater number of people than if they remained in the Vermont woods. Against this, it is to be noted, first, that a high percentage, especially of orchids and alpiners, would die in moving. Even arbutus, one of the most difficult wild plants for transplanting, has been offered for sale. A second point lies in the fact that a considerable number of disappearing forms are capable of rather easy and economic artificial propagation. For example, the Goldie Fern and others may be readily grown from spores under cool greenhouse conditions, and the plants so produced are in much better condition for transplanting than specimens pulled up by the roots from the wild. In other words, it is not necessary to deplete the wild supply of such plants in order to supply the market.

In any event, Vermont decided that it wished to keep its own, to maintain its wild flora in approximately its original condition. Under the leadership of the Vermont Botanical Society, a first general game law for plants was drawn up, and in 1921 was passed by the Vermont legislature. This law provides that a specified list of rare plants shall be established as a protected list, and may not be collected for commercial exploitation. Further, botanists are restricted to two specimens per season of the plants named in the list.

The Vermont Law has been made the text of an article in the "American Fern Journal" for September, 1922, in which the action of Vermont is cited as an example worthy of imitation. Other states are also losing large numbers of their rare plants. It is suggested in this article that each state should first study its own situation and then draw up a list of the plants within its borders which seem most in need of protection.

The article further suggests that another type of protection will be necessary in the case of particular species which grow in swamps or other regions threatened by agricultural or industrial development. For ex-

ample, the climbing fern, common in a few places in Connecticut, and for which the first law protecting plants was passed thirty or forty years ago, is now threatened by the fact that its habitats are desirable places for the cultivation of tobacco. The rare hart's tongue fern, in its best locality in central New York, is threatened by quarrying interests. The only way by which such plants as these can be protected is by the establishment of reservations or sanctuaries of the nature of wild natural gardens.

The "Fern Journal" article, above mentioned, has been reprinted for general distribution throughout the country in the hope that it may reach organizations and individuals in various states who would be interested to start action in their states similar to that taken in Vermont. For this purpose the original article has been somewhat revised and has been reprinted with cover pages, and with additional illustrations of rare plants. Sample copies will be sent to those interested by application to Dr. R. C. Benedict, Brooklyn Botanic Garden, Brooklyn, New York. The type of the reprint has been held for reprinting so that any organization interested may be able to order additional copies at printer's prices. Arrangements have been made to deposit the type plates with Mr. P. L. Ricker, secretary-treasurer of the Washington chapter of the Wild Flower Preservation Society, and future orders will be procurable through him as required.

It may be objected by someone that such a law, without enforcing machinery, is useless and even undesirable, but the fact remains that the original climbing-fern law, to which the same objection might have been raised, was apparently effective in protecting the plant from extinction. Again the necessary community action incident to the study of the situation leading to the proposal of such a law would be highly educative to the people at large, and if a number of states should undertake joint or simultaneous action, the desired result of restricting a mischievous and unnecessary depletion of rare native wild plants would probably be achieved. The Brooklyn Botanic Garden is cooperating with the Fern Society to the extent of ordering and

distributing one thousand copies of the first reprinting of the article.

C. STUART GAGER

### THAT CHEMICAL SPELLING MATCH AGAIN

So much has been said and written about this subject since my first note appeared in *SCIENCE* September 29, that I am going to make a further suggestion along the same line.

Requests have come from different universities for details regarding the match, as well as for a list of chemical formulæ which we used in connection with our spelling match. Only one such list could be supplied, however, but if enough interest is aroused in the matter, I shall endeavor to prepare a much larger and more comprehensive list, which might eventually be published in book form.

Much valuable information about a substance is contained in its chemical formula. Therefore, the ability to ascribe the right formula to a given substance, without consulting the literature, is an accomplishment coveted by all chemists.

Formerly competition was the life of trade, but this desirable quality has gradually disappeared as the combining power of the traders developed. Competition, however, remains the motive power in the life of nearly every student, and the chemical spelling match offers one of the best opportunities for spectacular competition in the field of intellectual pursuits.

There is no danger of ever exhausting the supply of formulæ in any chemical spelling match. Even if the "walking encyclopedias" that we hear so much about should get into the contest they would doubtless be spelled down before the hundredth part of the words had been pronounced. Nevertheless, it would be interesting to know who the All-American champion chemical speller is.

Should the subject elicit sufficient interest the country could be divided into twenty-four or more districts and all higher institutions of learning within each district compete for first prize; and then for the semi-final contests the winners in the northwest districts would assemble and spell for the championship of the

northwest, and in like manner a champion would be selected from the southwest, one from the southeast, one from the northeast, one from the north central, and one from the south central districts. These six winners in the semi-finals should then meet for the national championship battle.

Should the contests prove as interesting and valuable as anticipated, Canada, Great Britain and Australia might want to send representatives to the final matches. Eventually we might even go farther than this. The chemical formula is the same the world over, and there is no reason why chemistry students all over the world should not have an opportunity to compete for so unique an honor.

The general establishment of these contests would stimulate the study of chemistry everywhere, and would therefore mark a long step toward greater efficiency in teaching as well as research. The details of these spelling matches would of course be worked out as the subject develops. It would appear that, in the selection of the winners in both semi-final and final matches, no one should be declared a winner who had not won at least three out of five contests with his opponent.

We have our world's champion boxers, tennis players, scullers, runners, jumpers, vaulters, etc., and would it not be in keeping with the march of events to establish an intellectual event of this sort which combines the elements of sport and usefulness.

Spelling matches could not be supported by the gate receipts, and in order to defray the expenses of the contestants, other means of support would have to be provided. This and numerous other details would be handled by a committee. As chairman of such a committee I know of no one who would be more suitable than Dr. Edwin E. Slosson, of Washington, D. C.

If he would consent to serve in this capacity I should confer upon him this high office, with all the honors, rights and privileges thereunto appertaining.

Make the reward for this championship large enough and contestants will come from all the leading countries of the world. Aye, they would come