pressed that more fundamental considerations are being overlooked. The words of Edwin T. Meredith, former Secretary of Agriculture, may, then, serve as a timely warning. In a statement published under the title "My Year in the Department," in the Country Gentleman for February 26, 1921, he points out as requisite for the successful prosecution of research in a large organization these fundamentals: Securing the right kind of men; providing them with adequate appropriations for research; freeing them from irksome restrictions in the expenditure of those funds; and providing for adequate publication of their results. That Mr. Meredith speaks with full appreciation of the importance of research, is shown by his administration and by its straightforward statement in the same article.

Research is the foundation of agricultural progress. Without it most of our agricultural activities could not exist. Our most important methods are based on the results of years of patient investigation. There is no real progress without scientific study applied to everyday problems. So much had been accomplished through research that many people may fall into the error of thinking that not much more work of this character is needed and that the requirements of the day relate merely to the application of knowledge already in hand. Research is more essential now than ever before, and the need does not relate wholly to taking care of the future. We are confronted today with serious problems of the most pressing nature, about which we know very little. . . .

Without minimizing in any degree any of the activities of the department or the other suggestions that have been made for strengthening certain features of the work, I place particular emphasis at this time on the importance of personnel, the value of research and the need of the most intensive study possible of marketing problems.

I place the problem of personnel first. It is the corner stone, you might say, of the whole structure. To secure the right kind of men the department must be able to pay higher salaries, and it must be free from some of the limitations which are now imposed on the expenditure of its appropriations. I am not decrying legal safeguards, which always must be imposed on the expenditure of public money, but I do deplore unnecessary re-

strictions which result in subordinating good judgment and business-like management to routine and fiscal control.

Appropriations for research are the equipment of the worker, and unless he is properly equipped he can not be expected to get results. And in this connection I regard, as a part of his equipment, funds for publishing the results of his work. Nothing is more discouraging to a scientific worker than to be denied the right to publish the facts he has learned after years of patient investigation.

So much has been written recently of the alleged inefficiency of government workers that it is inspiring to hear, from an executive officer on the eve of his retirement, a quite different statement.

The work of the department, taking it all the way through, is done by as earnest and as able a lot of men and women as any with whom I have ever come in contact. On the whole, they work as many hours a day and as efficiently, I believe, as employees in most private establishments, and they are paid less. Large numbers of them are held to their work by their love for it. Many formerly with the department were offered so much more money in private employment that, in justice to themselves and their families, they could not refuse to go.

In a single year 8,000 of these workers left the department. Those who left last year received from private concerns and other institutions an average increase in salary of more than 50 per cent.; and there are instances of increases running as high as 500 per cent. If the men and women in the department were not efficient private industry would not be offering them such increases in salary. Those remaining are as efficient as those who have gone, and many of them have declined just as tempting offers. They have said in spite of low salaries and high living costs they are going to stay where they render the greatest service to the nation.

SCIENTIFIC LEGISLATION

The Journal of the Washington Academy of Sciences notes the following matters of scientific interest in the third session of the Sixty-sixth Congress convened on December 6, 1920:

Under a special rule adopted on December 14, the joint resolution (S.J. 191) to create a

joint commission on reorganization of the administrative branch of the Federal Government was brought up for two hours' debate on that date and passed by the House, having already passed the Senate on May 10. The bill became Public Resolution No. 54 on December 30 without executive approval. The resolution requires the committee to make a report in December, 1922. Mr. Smoot announced in February that the committee would do the work personally and would not turn it over to the Bureau of Efficiency or any other governmental agency. Considerable shifting and rearrangement of the scientific bureaus has been predicted as a probable outcome of the reorganization movement.

The House Committee on Patents recommended on December 10 that the Nolan Patent Office bill (H.R. 11984) be sent to conference, but unanimous consent for such reference was refused in the House. Later, on December 14, the bill was sent to conference, and hearings were reopened by the conference committee in January. Section 9 of the bill, providing for the issuance of patents to Federal employees, continued to meet with opposition from commercial and industrial interests, but was retained in the bill. The House agreed to the conference report on February 16. Opposition developed in the Senate, and the bill did not reach final action before the end of the session on March 4.

The bill for Federal supervision of the nitrate plants (S. 3390), including provision for research on the fixation of nitrogen, was made the unfinished business in the Senate on December 15. After several debates and the adoption of a number of amendments, the bill passed the Senate on January 14. The House took no final action.

The American Society of Zoologists, at its annual meeting on December 28–30, 1920, passed resolutions protesting against the passage of that part of H.R. 7785 (the scientific apparatus tariff bill) which abolishes the "duty-free privilege" to educational institutions. Occasional protests against this feature of the bill have been discussed in current scientific and technical periodicals. This feature of the bill was brought up in a hear-

ing on the Fordney emergency tariff bill before the House Committee on Ways and Means on February 14, and the sentiment of the committee seemed to be strongly in favor of eliminating the duty-free privilege on chemical glassware, chemical porcelain and apparatus. The Fordney bill passed both houses, but was vetoed by the president.

As for the special bill for a tariff on scientific supplies (H.R. 7785), although it had passed the House as long ago as August 2, 1919, the Senate took no final action and it lapsed with the adjournment on March 4.

A bill "to fix the metric system of weights and measures as the single standard for weights and measures" was introduced in the House by Mr. Britten on December 29 (H.R. 15420), and in the Senate by Mr. Frelinghuysen (by request) on December 18 (S. 4675). The bills are said to have been "fathered" by the World Trade Club of San Francisco. They were referred to the respective weights and measures committees and no further action was taken.

The Smith-Towner bill to create a Department of Education (S. 1017 and H.R. 7) after lying dormant through nearly the entire life of the Congress, was reported in the House on January 17 and in Senate on March 1, but progressed no further.

A step toward the erection of the proposed building for the National Academy of Sciences was taken in the introduction of S. 4645, "to authorize the Commissioners of the District of Columbia to close upper Water Street between 21st and 22d Streets, N.W." The bill pased the Senate on February 24, but advanced no further.

With the adjournment of the Sixty-sixth Congress at noon on March 4, various other bills and resolutions which are of interest to scientific men either perished in committees or at an intermediate stage of progress.

LECTURES BEFORE THE SIOUX CITY ACADEMY

THE Academy of Science and Letters of Sioux City, Iowa, arranged for the present year a weekly lecture program as follows: