

News and views

The Astin Case

Prompt Public Clarification Urged

A packaged mixture of epsom salt and Glauber's salt, with a pinch of barium sulfate and other unidentified substances in minute quantity, has rocked the scientific community, created a new political uproar in Washington, and led to the forced resignation of the Director of the National Bureau of Standards, a man whose considerable scientific contributions to the nation during his 23-year career in government service are a matter of public record. The product in question, a commercial preparation advertised as capable of prolonging the useful life expectancy of lead storage batteries, had originally been the subject of a controversy only between the manufacturer and the Bureau of Standards, which had declared the mixture to be useless for the purposes claimed. By March of this year, however, it had become the center of a storm involving not only the original parties to the dispute, but also the Secretary of the Department of Commerce and numerous members of Congress. There was every indication that the number of active participants would continue to increase.

Allen V. Astin, 49-year-old physicist who joined the Bureau as a research associate in 1930 and later served as chief of the NBS Electronics Division before being appointed Director by former President Truman in October 1951, submitted his letter of resignation to the White House last March 30th, pointing out that he had been informed by Craig R. Sheaffer, Assistant Secretary of Commerce for Domestic Affairs, that Secretary of Commerce Sinclair Weeks planned to study and possibly reorient some of the operations of the Bureau, and in that connection would like to have a man of his own choosing in charge of NBS. President Eisenhower accepted the resignation two days later, stating that it would become effective April 18th.

On March 31st Mr. Weeks informed the Select Committee on Small Business of the U. S. Senate that one of the reasons for deciding to change the Bureau's administration was that NBS had not been sufficiently objective in its manner of dealing with the case of the battery preparation, an "additive" marketed under the name AD-X2 by Pioneers, Inc., of Oakland, California. He stated that the company's business had "suffered severely at the hands of certain bureaucrats" and implied that NBS has been favoring the interests of the big battery manufacturers, who would dislike seeing

their sales drop because of a powder that would make their batteries last beyond their normal lifetime. The Bureau has said flatly on several occasions that repeated tests have shown no valid technical evidence for believing that AD-X2 or any other battery additive might have any beneficial action on normal storage battery operation. Mr. Weeks, however, stated that "controlled field tests" of AD-X2 by the U. S. Testing Company of Hoboken, New Jersey, had "rendered credible" the enthusiastic testimonials of consumers and suggested that further tests of the product at the Massachusetts Institute of Technology had put "believability" into the U. S. Testing Company's report. Although Mr. Weeks and his associates are reported to have indicated in the course of press interviews that Dr. Astin would have been asked to resign even if there had been no additive dispute, the Secretary's public statement dealt almost exclusively with the controversy over AD-X2.

According to the Bureau it has run tests on one hundred different commercial battery additives during the last quarter of a century and without exception has found them to be worthless and in some cases harmful to batteries. NBS does not generally engage in the testing of commercial products unless asked to do so by other agencies of the government. Consequently, although the Pioneers, Inc. product was first put on the market in 1948, the first Bureau tests of AD-X2 were not carried out until the spring of 1950, when they were conducted in response to a request by the Federal Trade Commission. The results were reported simply to have confirmed previous findings on other additive mixtures that, like AD-X2, were composed primarily of magnesium sulfate and sodium sulfate. Test results of the AD-X2 study were included in NBS Circular 504, issued the following January, which provided a summary of the Bureau's findings with respect to all of the additives that had been tested, but in keeping with Bureau policy no mention was made of the brand name until the issue was subsequently forced by allegations that NBS had never tested the product and that the uniformly negative results reported in Circular 504 therefore did not apply to AD-X2.

During 1951, numerous criticisms of the Bureau's position on the additive question were received by members of Congress, and early last year the Senate Select Committee on Small Business became interested in AD-X2 and the complaints concerning NBS that were made by the president of Pioneers, Inc., Jess M. Ritchie. One consequence of the Committee's interest was that a new series of NBS tests was carried out last June. According to the Bureau, each of the batteries used was personally inspected and approved by Mr. Ritchie and a testing procedure was employed which he guaranteed would show the merits of AD-X2. Coded groups of treated and untreated battery cells were arranged in a manner not known to those carrying out the tests. A representative of the manufacturer was present, as were battery experts from other government laboratories. These observers, and Mr. Ritchie himself, took part in the visual and manual comparisons of the

treated and untreated batteries. Statistical analysis of the tests, according to the Bureau, gave no evidence that AD-X2 would improve or extend the life of a storage battery under conditions of normal use. Mr. Ritchie is reported to have claimed that the tests deviated in several respects from the procedures he had recommended and that a fair test of AD-X2 has therefore not been made by the Bureau. Dr. Astin, in commenting on this point, has maintained that only a few minor deviations were made in the interest of simplifying the test procedure and of ensuring the objective nature of the tests.

At the request of the Senate Select Committee on Small Business, laboratory services and facilities at the Massachusetts Institute of Technology were made available in 1952 for a series of independent tests of AD-X2. The results of these tests were reported last December in a 94-page document prepared by Harold C. Weber, Professor of Chemical Engineering at MIT. In summarizing the test results, Professor Weber listed eight differences he had found between cells treated with AD-X2 as compared with untreated cells. At the same time, he emphasized the desirability of employing field tests to determine whether these differences might be great enough to be of commercial value. A supporting authority, James A. Beattie, Professor of Physical Chemistry at MIT, agreed with Professor Weber's conclusion that the addition of AD-X2 does have an effect on the behavior of a lead acid battery. "From my brief contact with the work," he remarked, "I cannot say that this effect is correlated with a beneficial action from the standpoint of the normal use of such a battery. I feel that the latter can be determined only after the examination and statistical evaluation of extensive field tests."

In commenting on the results obtained at MIT, the Bureau has indicated that at least five of Professor Weber's eight conclusions do not correspond with results obtained by NBS and that the remaining differences between treated and untreated cells observed both at the Bureau and MIT do not provide evidence that AD-X2 has a beneficial effect on normal battery operation. Most of the MIT tests, according to the Bureau, were made at discharge rates of 5 to 10 amperes, a rate considerably below the 200 to 300 amperes required to start an automobile engine, whereas the NBS tests are reported to have been designed to measure battery life expectancy and capability with respect to actual engine-starting requirements.

On April 1st, two days after submitting his letter of resignation, Dr. Astin stated that he had urged early in March that a technical evaluation of the Bureau's work on battery additives be made by qualified scientists. He suggested that such an evaluation might appropriately be carried out by the Visiting Committee for the Bureau, established by law to report on the efficiency of the Bureau's scientific operations, or by a group of scientists from the National Academy of Sciences.

On April 3rd, Mr. Weeks sent out telegrams asking that members of a committee to evaluate the present

functions and operations of the Bureau of Standards be appointed by the American Institute of Physics, the American Institute of Electrical Engineers, the American Institute of Mechanical Engineers, the American Society of Civil Engineers, the American Chemical Society, the American Institute of Mining and Metallurgical Engineers, and the Institute of Radio Engineers. Mr. Weeks said that he had requested the President of the National Academy of Sciences, Detlev W. Bronk, to name a chairman of the committee, and that Dr. Bronk had appointed M. J. Kelly, President of the Bell Telephone Laboratories. Dr. Kelly, a physicist, also happens to be a member of the present Visiting Committee for the National Bureau of Standards.

On April 7th, following a scheduled meeting of the Executive Committee of the American Institute of Physics, George R. Harrison, Dean of Science at the Massachusetts Institute of Technology and Chairman of the AIP Governing Board, sent the following message to Mr. Weeks:

"Replying to your wire of April 3, the American Institute of Physics appoints Dr. Lee A. DuBridge, President of the California Institute of Technology, to represent our field of science on the Kelly committee to evaluate the present functions and operations of the Bureau of Standards in relation to the national needs. This appointment is made with the understanding that the report of this committee will be made public promptly after submission."

[Dr. DuBridge, a former President of the American Physical Society (1947), served during World War II as Director of the Radiation Laboratory at MIT. A member of the AEC's General Advisory Committee until late last year, he is now a member of the National Science Board of the National Science Foundation. He headed the department of physics at the University of Rochester from 1938 until his appointment in 1946 as President of the California Institute of Technology in Pasadena, California.]

On April 8th, Dr. Harrison, acting on the instructions of the AIP Executive Committee, sent a second telegram to Mr. Weeks, which contained the following statement:

"Published reports regarding the resignation of A. V. Astin as Director of the National Bureau of Standards have caused profound disquiet among American physicists. Rightly or wrongly, the impression has got abroad that the resignation was forced for political or arbitrary reasons. Such an impression, unless corrected, will greatly impair the morale of scientists now working for the government, and will make it increasingly difficult to draw other scientists into careers in government service. In the hope of dispelling this impression we respectfully urge that the matter be publicly clarified."

On April 10th, Mr. Weeks replied that he did not feel that further statements from him would be appropriate in view of the fact that the Senate Select Committee on Small Business intended to call Dr. Astin in the course of hearings it was planning to hold on the matter. Mr. Weeks pointed out that he had al-

ready made a statement before the Committee on March 31st.

On April 17th, after a number of scientific organizations had called for immediate public airing of the controversy, Mr. Weeks released another statement. Dr. Astin, he indicated, would continue to serve as Director of the National Bureau of Standards until the Kelly Committee had completed its evaluation of the Bureau's functions and operations. The Senate Select Committee investigation, according to press reports, was thereupon called off.

Statement by Secretary of Commerce Sinclair Weeks to Senate Select Committee on Small Business, March 31, 1953

"Even before I came to Washington, my mail in Boston was heavy with people telling me that an outfit in Oakland, California, making a product called AD-X2 to prolong battery life through reducing sulphation was having tough sledding in Washington. Your Committee, in fact, issued a report on the subject last December. One of the first things I did was to ask Mr. Sheaffer, Assistant Secretary for Domestic Affairs, to make a full and impartial investigation. He and his men have gone through file after file extending over the past five years. Exhaustive examination of the files shows:

"1. When this manufacturer put his product on the market in 1948, he was confronted with a pamphlet prepared by the National Bureau of Standards (No. 302) condemning *all* battery additives. This pamphlet was for sale by the Government Printing Office and, therefore, easily obtainable for distribution by anyone interested in combatting the sale of the new product.

"2. When he asked for tests to prove the merit of his product, the National Bureau of Standards resisted making further tests, stating that, basically, the product was the same as others previously tested. The manufacturer, under these circumstances, could only tell his customers that his product had not been tested by NBS and, therefore, pamphlet 302 did not apply to it.

"3. The files show that scientists in the National Bureau of Standards were in touch with and worked closely with individuals and organizations who might have had an interest in the final outcome, submitting their work to them previous to publication and seeking their advice and guidance. In response to the National Better Business Bureau's request that Circular 302 be strengthened to "combat the flood of battery dopes" came a statement from Dr. Condon, then head of NBS, which was widely circulated. There also came, in 1951, a new Circular, No. 504, from NBS to supersede No. 302. This was advertised through press releases by the Department of Commerce as being available at 15 cents from the Government Printing Office. It sold!

"4. While the manufacturer was having no luck getting the National Bureau of Standards to run tests which would show that his product was different from previous additives tested and had merit, I find NBS suggesting to the National Better Business Bureau that

tests would be made if requested by the Federal Trade Commission. The FTC very promptly docketed the case—and the Post Office followed through later—although in all this period I can find no evidence of one single complaint by a user of the product. On the contrary, there are a great many testimonials from users stating that the product was saving them money by prolonging the life of their batteries. Many of these statements were made by reputable firms operating trucks, busses and tractors, as well as industrial equipment depending on batteries. I further find that the Oakland Better Business Bureau circulated their findings of no complaints as to 'product, personnel or methods of doing business.'

"5. The manufacturer claims that, to this date, he has not been able to get the National Bureau of Standards to run a test that would show the merit of his product. A test was agreed upon, but 10 modifications in the procedure were made by NBS.

"6. The manufacturer had independent tests made by the U. S. Testing Company, of Hoboken, New Jersey—controlled field tests extending over a period of 362 days. These tests rendered credible the experience reported by consumers.

"7. Your Committee enlisted the aid of the Massachusetts Institute of Technology whose findings differed in some respects from NBS' findings, even if, as some claim (including MIT), they cannot be interpreted as being so broadly favorable to AD-X2 as was done in the report of your Committee dated December 18, 1952. However, Dr. Weber of MIT states that extensive field tests might show the value of the product. Presumably, this statement puts believability into the U. S. Testing Company's report.

"8. The present status of the matter is that there is a suspended fraud order against Pioneers, Inc., Mr. Ritchie, his wife, and Mr. Hager, vice-president of the firm, in the Post Office Department. After issuance on February 24, 1953, it was suspended by Postmaster General Summerfield at my request in order that I might investigate further. There is also an open docket in the Federal Trade Commission.

"Throughout this whole matter runs the fact that the National Bureau of Standards is the keystone on which other agencies of the Government depend. The Post Office calls it their 'Supreme Court' on questions of fraud in a case like this. The FTC relies on its tests in a similar manner. The Bureau, which is supposed neither to approve nor condemn a product, has, by its very setup, the power to make the introduction of a new product on the market very difficult, to prevent a product's being advertised by FTC action, and to have people labeled 'fraud' and denied the use of the mails. If this power is objectively and correctly used, it has great value to all the people of this Nation. However, if the Bureau's foot slips, a business starting in against all the normal competitive hazards, finds itself up against something with which it cannot cope, the vast power of the U. S. Government. Unless the small businessman knows a very great deal about Government, or

has the finances to employ experts, he is obliged to quit.

"I cannot bring myself to believe that the people making AD-X2 have the intent to defraud—and without intent, I do not see how there can be fraud.

"I know that this business has suffered severely at the hands of certain bureaucrats. In fact, it is a wonder they are in existence at all after five years of struggle. Your Committee might want to re-examine the legislation giving the Federal Trade Commission very broad powers in matters like this.

"I am not a man of science, and I do not wish to enter into a technical discussion or be accused of overruling the findings of any laboratory. But as a practical man, I think:

"That the National Bureau of Standards has not been sufficiently objective, because they discount entirely the play of the market place and have placed themselves in a vulnerable position by discussing the nature and scope of their prospective reports with the very people who might not want to see the additive remain on the market, and when their reports and results of tests were questioned, discussed the matter with other scientists, engaged by your Committee to make separate, objective findings.

"I cannot help but wonder how many similar cases have never been heard about—how many entrepreneurs who were convinced they have a good thing for the people, who, whether they knew it or not, were licked before they started—and by their very own Government to whom they paid high taxes!

"It can generally be said that there are no complaints, but, on the contrary, many testimonials to the fact that the product is good and has saved the users money. As a practical man, I do not see why a product should be denied an opportunity in the market place. I believe that the purpose of the Congress in establishing the Bureau of Standards and in giving powers to such agencies as the Federal Trade Commission and the Post Office Department to act to prevent unfair practices and the perpetration of frauds, was that they should be operated or their powers should be exercised in the interest of the general public and that such interest should be substantial and specifically and positively shown to be adversely affected before the power is used.

"At this point, *Pioneers, Inc.*, has a long way to go. It has to make its peace with the Post Office Department. It has to get off the hook with the Federal Trade Commission. It has to fight its way back in to customers it has lost, including the Government. It probably has to get financing to replace the funds lost through fighting the Government so far.

"Because I feel that the Commerce Department's skirts are not entirely clean, and because I think we may have been the cause of prejudicial action against *Pioneers* by the Federal Trade Commission and the Post Office, and because our job at Commerce is to operate for the general public interest and to help business in every possible manner, I propose to:

"1. Get the best brains I can find to examine into the functions and objectives of the National Bureau of

Standards and re-evaluate them in relation to the American Business Community and other agencies of Government. This is a job that we should do, and I guarantee it will be done, and your Committee will always be thoroughly posted as to the actions we are taking;

"2. As quickly as I can find the money in the budget, I am going to put a group of scientists in the Bureau who have never had any connection with this matter and tell them to test this thing in every conceivable way—even to the extent of field tests in actual operation; and

"3. I am going to direct the withdrawal of Circular 504 and all other circulars and technical reports dealing with battery additives until such time as those tests are completed."

Statement by Dr. A. V. Astin, Director, National Bureau of Standards: April 1, 1953

"I was asked for my resignation on March 24 by Mr. Craig R. Sheaffer, Assistant Secretary of Commerce for Domestic Affairs, and he stated that the Secretary desired my resignation in order to study and make changes in the operations of the NBS. Although I had expected to try to work with the Secretary in carrying out any changes he wished to make in the operations of the Bureau, this apparently was not desired by him. Also, although I have not had the privilege of a conference with the Secretary of Commerce, I was told informally by Mr. Sheaffer on February 13 and in writing on February 24 that the NBS was to be under his jurisdiction. I have had no difficulty in seeing Mr. Sheaffer at any time.

"When Mr. Sheaffer informed me that the Secretary desired my resignation, I felt I had no alternative to submitting it. Unless the Director of NBS has the full support and cooperation of the Secretary of Commerce, the effectiveness of the important services which NBS renders to science, industry and government would be seriously impaired.

"Mr. Sheaffer expressed dissatisfaction by the Department of the Bureau's handling of the battery additive question. Appreciable attention has been given to this subject by the press. In particular, questions have been raised about the objectivity and fairness of the Bureau's work on this subject. The Bureau has for many years enjoyed a reputation of fairness, thoroughness, and accuracy in its scientific work, and I have striven to maintain and strengthen in every way these traditions. As a great scientific laboratory the NBS is basically concerned with the soundness of its technical operations, and it must adhere to the results of scientific findings regardless of what pressures are brought on the organization to change or modify conclusions based directly on those findings.

"It was in the interest of scientific objectivity and fairness that I consented to running an additional test (several tests had been made earlier) in June, 1952, on battery additives, using test conditions prescribed by the manufacturer of an additive. These test conditions

were followed in all essential details although a few minor deviations were made in the interest of simplifying the test procedure and of ensuring the objective nature of the tests. It was again in the interest of objectivity and fairness that I initiated in December, 1952, a new series of tests following the release of a report by the Senate Small Business Committee on the subject of battery additives. The results of most of these tests were summarized in a report (dated February 10, 1953) prepared for and at the request of the Hon. Charles A. Wolverton, Chairman of the House Interstate and Foreign Commerce Committee. This report was cleared through previously established administrative channels of the Department of Commerce but not with members of the new administration. If any of these tests had developed results warranting modifications of prior conclusions, I would have made such modifications immediately. If there are any questions on this matter, or others, on the part of the members of Congress, I should be pleased to testify before an appropriate committee.

"About a month ago it was apparent to me that the Department of Commerce did not have confidence in the adequacy of the Bureau's work on battery additives. Since this work is technical in nature and since proper evaluation of it can be done only by properly qualified scientists, I urged in writing on March 4 that the Department secure the best possible advice in the nation for such an evaluation. Two suggestions were made. First, there is established by law a Visiting Committee for the Bureau, to report to the Secretary at least annually on the efficiency of the Bureau's scientific operations. This Committee consists of five of the nation's leading scientists and is eminently qualified to conduct an evaluation of this sort. Second, the National Academy of Science, established by Abraham Lincoln, to advise the government on scientific problems, affords a body from which an appropriately qualified evaluating group could also be obtained. Since the thoroughness and fairness of the work of NBS has been questioned, I still urge that it is very important to secure advice from such competent groups as those mentioned. I have no doubt that under qualified scientific scrutiny the operations I have been directing will be shown to have been fair and adequate."

Statement by Secretary of Commerce Sinclair Weeks, April 17, 1953

"I have at this time some announcements to make respecting the National Bureau of Standards, its Director, Dr. Astin, and certain decisions taken with respect thereto.

"First, I would emphatically point out that at no time has there been any intent, implied or otherwise, to cast reflection on the integrity of the Bureau or on the professional competence or integrity of Dr. Astin. The latter is a scientist of distinction who has served his country well. Such differences as I have had with Dr. Astin result from a conflict with respect to administra-

tive viewpoint and procedure and have literally nothing to do with scientific evaluations or conclusions.

"I have recently requested Dr. Detlev W. Bronk, President of the National Academy of Sciences, to appoint a chairman of a committee to evaluate the present functions and operations of the Bureau of Standards in relation to the present national needs. Dr. Bronk appointed Dr. M. J. Kelly, a member of the Academy of Sciences and President of the Bell Telephone Laboratories. In discussing with Dr. Kelly the prospective work of the committee, he has indicated to me the desirability of asking Dr. Astin to continue as Director of the Bureau until the work of the committee is completed in the late summer or early fall. No question is involved of Dr. Astin's permanent retention, but it is felt by all concerned that he can be most helpful in this evaluation study, and he has accordingly consented to carry on until the study is completed.

"Looking forward to this time, I was yesterday in conference with the National Bureau of Standards' Visiting Committee, established by Act of Congress, and have asked for it, during the next several months, to make a canvass and bring forward a panel of names from which I shall expect to select a new Director of the Bureau.

"With respect to the recent discussions involving battery additive AD-X2, and in accordance with the statement of intent in my remarks to the Senate Small Business Committee on March 31, I have asked Dr. Bronk, President of the National Academy of Sciences, to appoint a committee to objectively appraise the quality of the Bureau's work in this particular area, this study to include tests, both laboratory and field.

"Further, with respect to Dr. Astin, I am authorized to say that, when Dr. Kelly's committee has made its report and Dr. Astin's duties with the National Bureau of Standards are concluded, there will be a position of comparable grade available in the Government, should he desire it, where his professional skill and abilities—never questioned by me or any associates—may be utilized in the national interest.

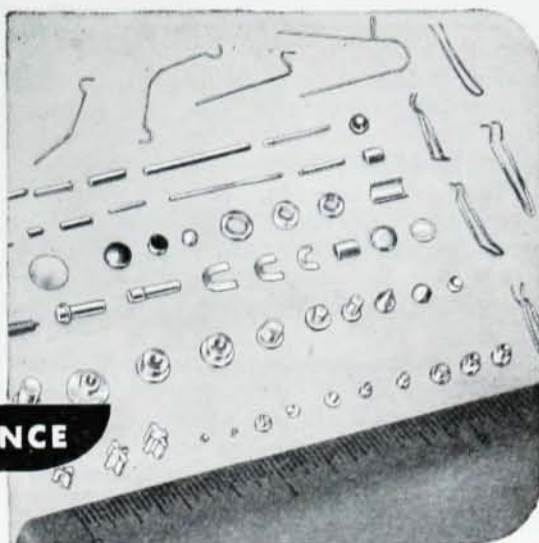
"This whole program, I may add, was discussed with the Visiting Committee on April 16, and they authorize me to quote them in the following language—'Under the present difficult circumstances, the Visiting Committee of the National Bureau of Standards believes this program the best practicable solution to the problem'."

Statement by Dr. A. V. Astin, April 17, 1953

"Secretary of Commerce Weeks has asked that I remain as Director of the National Bureau of Standards until the Ad Hoc Committee of the National Academy of Sciences has completed its studies of the present functions and operations of the National Bureau of Standards in relation to the present national needs. The Secretary has also agreed to ask the National Academy to appoint a special committee to evaluate the technical adequacy of the Bureau's work on battery additives.

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"Both of these studies are in accord with prior recommendations made by me to the Secretary, and my remaining as Director until such studies are completed is in accord with requests made by a number of members of the Congress, by a number of scientific organizations, and by many individual scientists.

"The Visiting Committee of the National Bureau of Standards has also agreed that this represents the only practicable solution to the present problem. I, therefore, believe that regardless of my personal opinions or wishes I should continue as Director during this interim period.

"The professional integrity of the Bureau and my own integrity and competence have during recent weeks seemed to be in question. I am gratified that the Secretary has seen fit to reassure me and the Bureau on these particular points."

Science and Congress

New Joint Committee Proposed

Early in February, Representative Carl Hinshaw, Republican from California, introduced a joint resolution in the House of Representatives calling for the formation of a Joint Congressional Committee on Science to keep the members of Congress informed as to the results of scientific research and technical development bearing upon public affairs. The proposed committee would be concerned with "problems encountered in maintaining in the United States a scientific and technical effort of outstanding quality and accomplishment" and with the promotion of "better understanding of the actual and potential impact of science upon public affairs, including human and natural resources, interstate and foreign commerce, relations with foreign nations, the common defense and security, and the national health, prosperity, and welfare".

Contacts between science and Congress have not been altogether lacking in recent years. For example, the Joint Congressional Committee on Atomic Energy, established under the Atomic Energy Act of 1946 to make continuing studies of AEC activities and of problems relating to the development, use, and control of atomic energy, has been obliged to deal with a variety of questions concerning science and public affairs. Similarly, the Armed Services Committees have had some familiarity with research and development carried out under funds administered by the Department of Defense. The two billion dollars being spent annually by agencies of the federal government on science and technology, furthermore, is a significant item in the federal budget, and thus is of specific interest to the Appropriations Committees and to Congress as a whole.

The proposed Joint Committee on Science would, however, occupy an entirely different position than do these and other Congressional committees. Its functions would be purely educational in nature and, in the language of the resolution, "shall not supersede in any way the duties and responsibilities of any standing or select committee of the Senate or House of Representatives or any joint committee of the Senate and

House of Representatives". It would be remarkable also in its composition. According to the resolution, the committee would consist of fourteen appointed members (seven from each house of Congress) and "such other members of the Senate and the House of Representatives as shall signify their intention of becoming members of the committee by filing a declaration to that effect in writing with the chairman of the committee".

The committee would be authorized to utilize the services, facilities, and personnel of the National Science Foundation and of other federal departments or agencies with their consent, and it would hold at least one meeting annually with the National Science Board of NSF.

The reaction of scientists to the resolution has been favorable—prevalent opinion being that a somewhat broader base of informed opinion on scientific matters in Congress would be very much in the national interest. The joint resolution (H.J. Res. 166; 83rd Congress, 1st Session) is now in the hands of the Committee on Rules of the House of Representatives, where its fate is uncertain. Whether or not it will be released by the Rules Committee is thought to depend largely on the extent and nature of public response to the resolution.

Miscellany

The Joint Congressional Committee on Atomic Energy, after being deadlocked for several weeks over the question of whether a new chairman should be elected from the Senate or from the House of Representatives, finally has settled the issue by naming Representative W. Sterling Cole of New York to fill the post. A bipartisan conference of leaders of both houses of Congress is reported to have approved Mr. Cole's election and to have established a policy whereby chairmanships of all joint committees shall be rotated every two years between the Senate and the House.

The Lorentz Medal of the Royal Netherlands Academy of Sciences will be awarded to Fritz London, professor of chemistry at Duke University, at a meeting in Amsterdam on June 27th, immediately following the commemoration of the hundredth anniversary of the late H. A. Lorentz to be held in the last week of June. Professor London was chosen to receive the award in recognition of: his contribution to the theory of chemical binding, in particular of homopolar molecules; his interpretation of the Van der Waals forces on a quantum-mechanical basis; his contributions toward the development of a phenomenological theory of superconduction; and his theoretical explanation of the behavior of helium below the lambda-point. Previous awards of the Lorentz Medal have been made to Max Planck (1927), W. Pauli (1931), P. Debye (1935), and H. A. Kramers (1948).

Delegates appointed by the National Research Council to represent the United States at the Third International Commission of Optics in Madrid, Spain, on April 20-21 were Brian O'Brien (chairman of the delegation), Deane B. Judd, Irvine C. Gardner, and Stanley S. Ballard. Dr. O'Brien is president of the Optical Society of