evaporation to dryness Tube 4 gave 2 mg. of hydrocarbon which melted at the proper place for chrysene, and Tube 10 gave 2.8 mg. of hydrocarbon which melted at the proper place for anthracene.

These preliminary data would thus appear to show that a solid phase can be substituted directly for one of the liquid phases of "Countercurrent Distribution," provided an adsorbent is chosen which has an adsorption isotherm within the proper range and of the proper type. Certain advantages at once become evident in the procedure. Most of these have previously been mentioned (*7*) and scarcely need to be repeated here except as they relate to the customary chromatographic procedure.

It would appear that the determination of the coefficient, A, may offer a rapid and convenient method for selection of the most promising system from among the large number of possibilities.

Secondly, the physical state of the adsorbent, such as size and shape of the particles, should be relatively unimportant in the procedure as outlined. With the chromatograph a certain size and uniformity is usually required in order that the packing may be homogeneous and at the same time yield the desired rate and uniformity of flow.

Just as in the case of the liquid-liquid type, the shape of the curve may give a suggestion at once as to the homogeneity of the preparation when a single substance predominates. If a mixture is present, it may suggest the number of components or give at least a hint in regard to whether or not further work with the particular system is advisable in order to obtain resolution of the mixture.

It would appear probable that the use of a solid with adsorptive properties in place of one of the liquid phases may greatly extend and widen the range of application of "Countercurrent Distribution." It is therefore our intention to make this approach part of our future study and to devise equipment suitable for achieving large numbers of transfers.

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Science Legislation

The Senate and S. 1850

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AS ANNOUNCED IN THE 3 MAY ISSUE OF *Science*, the Council of the American Association for the Advancement of Science voted overwhelmingly to support the Kilgore-Magnuson bill creating a National Science Foundation. The final vote is 230 to 10, which means that over 90 per cent of the Council members voted. The problem now is to convince the members of Congress that S. 1850 not only meets the basic needs of science and scientists, but also will, if enacted, perform a public service of the first importance.

At the St. Louis meetings of the Executive Committee and the Council of the Association, James B. Conant, as president of AAAS, was asked to serve as the chairman of a special committee, empowered to take such steps as may be deemed desirable to assure passage of the bill. The following men have been asked to serve as members of this committee: Detlev W. Bronk, of the University of Pennsylvania; A. J. Carlson, of the University of Chicago; Magnus I. Gregersen, of the College of Physicians and Surgeons, Columbia University; Ernest O. Lawrence, of the University of California; Howard A. Meyerhoff, executive secretary of AAAS; E. C. Stakman, of the University of Minnesota; and Charles Allen Thomas, of the Monsanto Chemical Company, St. Louis.

The bill was placed upon the Senate calendar very quickly after it was reported out by the Committee on Military Affairs (*Science*, 1946, **103**, 382). However, it was passed over on 12 April, when it should logically have been discussed on the Senate floor. It is the hope of the bill's senatorial sponsors that it will come up for discussion during the week of 13 May. It is expected that action will have been taken on the extension of Selective Service by 10 May, and that the Senate will not be ready for the debate on the extension of OPA. In the week between the debates upon these controversial pieces of legislation, it is proposed

to turn to science, giving consideration to the Kilgore-Magnuson bill, the McMahon bill on Atomic Energy, and the Fulbright bill. Already the week of 13 May has been dubbed "Science Week" by the Senators.

To inform the members of the Senate how American scientists feel about S. 1850, Dr. Conant has composed a letter which has been sent to every Senator except those who have sponsored the bill. The letter tersely outlines the reasons why the National Science Foundation should be created, and the reasons are pertinent not only to Congressmen but also to scientists. For this reason the full text of the document is printed herewith:

Dear Senator

It is my understanding that Senate Bill 1850 creating a National Science Foundation is on the Senate Calendar, and I am writing on behalf of the American Association for the Advancement of Science to ask your support of this legislation.

Designed to promote the training of young scientists, to sponsor new fundamental research, to disseminate the results of research widely for the benefit of the public, and to restore national strength in scientific and technological fields, this bill is extremely important legislation, which scientists have endorsed by an overwhelming vote in the American Association for the Advancement of Science Council. The Association, in addition to its own 28,000 members, has 196 affiliated scientific societies with gross memberships in excess of 600,000. These affiliates have representation on the American Association Council which has just voted 228 to 10 in favor of S. 1850.

The Bill is non-partisan. It embodies carefully evolved compromises on such controversial questions as the administrative organization of the Foundation, the treatment of patents, the inclusion of the social sciences, and safeguards for scientific freedom. Not only the scientists, but the members of the Senate committees who have formulated the bill, have found a meeting ground in the sound and solid provisions comprising S. 1850; and these Senators, following consultation with government agencies that will be concerned in its operation, are satisfied that it is practical and will work. More than six months of research, analysis, and conference are embodied in the bill, and I am confident that you can accept it as a well considered piece of legislation which will greatly benefit the Nation.

In view of the importance of S. 1850, I venture to ask your support both in bringing the Bill to a vote and in voting for it, and I will appreciate your assurance that this support will be given.

Very sincerely yours,

JAMES B. CONANT, *President*
Harvard University and
American Association for the
Advancement of Science

Although the sponsors of the bill feel that the proposed legislation is sound and will command considerable respect and support in the upper chamber, they anticipate some opposition from a few of their colleagues. There are some who are opposed to the patent provisions of the bill, but it may be pointed out that S. 1850 contains no new patent legislation, although it does systematize patent policy within governmental bureaus and departments. It is difficult to see what legitimate or logical objection could be raised to systematization. There are others who are opposed to the inclusion of the social sciences but, as Senator Fulbright has aptly said, there is no field in which fundamental research is more urgently needed, and there is none in which greater return to the public welfare can be achieved. Even more serious is a widespread feeling that the creation of one more government agency, calling for an initial appropriation of approximately $40–45,000,000, and an ultimate annual appropriation in excess of $100,000,000, would be a mistake. Such a feeling, if prevalent, ignores the significant tangible and intangible returns which the National Science Foundation will bring to our Nation.

Within the ranks of science most of the opposition for S. 1850 is professionally localized. From the outside the only known organized opposition comes from the National Association of Manufacturers. In the four-page release which the National Association of Manufacturers recently directed against S. 1850, it was not demonstrated that industrialists have an important stake in the creation of a National Science Foundation, and their gratuitous opposition to a carefully considered experiment designed to advance science must be branded as presumptuous. The relationships between science and industry are close and vital, but this fact does not give either group the prerogative to intervene in the affairs of the other. The National Association of Manufacturers has not been noted for its public relations policy, and it seems unfortunate that this organization should now attempt to obstruct legislation that has been painstakingly worked out with the collaboration of eminent scientists who have close ties with industry.

It is unnecessary to stress the fact that the week of 13 May may be an extremely critical period in the history of this proposed legislation. Favorable action in the Senate may make it possible to secure action in the House before the current session of Congress comes to an end. Unfavorable action will mean, at best, a delay of a year in the creation of a National Science Foundation. More ominously, it may mean the death of constructive science legislation.