the Institution of Electrical Engineers for British prisoners of war in Germany to sit for the associate membership examinations held in May and November, 1942. There were nineteen such candidates who took the examination, or parts thereof, on one or other of the two dates, seven of whom were successful in passing Parts I and II, three in passing Part I only and one Part II only. Five others passed in single subjects, a special concession having been granted to prisoners of war to take one subject at a time if they so desired. A commendably high standard of marks was reached by the candidates. Seventeen candidates in Germany entered for the May, 1943, examination.

A REUTER dispatch from Chungking states that in his will, made in 1939, the late President of China, Lin Sen, bequeathed $500,000 (Chinese) for the promotion of scientific education for the specific purpose of sending Chinese students abroad to pursue advanced studies.

Nature reports that though the building of the Wellcome Research Institution suffered considerable damage by enemy action, its structure was unharmed and the two Wellcome museums can quickly be put into shape as soon as labor and materials become available after the war. While some of the objects in the Wellcome Historical Medical Museum were damaged, it has been possible to replace or repair most of them. The specimens and other valuable material in the Wellcome Museum of Medical Science remained comparatively intact. Both museums are now under the directorship of Dr. S. H. Daukes. A comprehensive scheme for the Wellcome Historical Medical Museum has been prepared and will be brought to completion as speedily as possible after the cessation of hostilities. The Wellcome Medical Library, comprising more than 150,000 volumes, will also be in the same building, and suitable accommodation will be provided for research workers so that both the library and collections may be readily available. The Wellcome Museum of Medical Science—which in the past has been much used by teachers, students and those engaged in post-graduate studies—will be reestablished in its entirety. The large lecture hall will be fully re-equipped, including film projection apparatus, and will then be available for scientific lectures and meetings.

DISCUSSION

THE SCIENCE MOBILIZATION BILL

SCIENCE is to be commended most highly for devoting some of its columns to the free discussion of the Science Mobilization Bill, S. 702. This legislation is of great importance to all scientific and technical people, and, finally, to all people of the nation. Full discussion will ultimately bring out the real issues related to this bill.

More than a thousand letters have come to me about S. 702. From these letters I find that the men of science favor the bill. The vested interests, and those who are influenced or controlled by the vested interests, are against it, and they are most unscientific in their attacks upon it.

In reading the series of letters that has appeared in SCIENCE, I am impressed with the fact that most of these letters are concerned with peripheral, irrelevant or misleading material. To illustrate, let me cite a part of the communication from Dr. Gustav Egloff, of the Universal Oil Products Company, in the issue for June 18. To support his contention against Professor L. C. Dunn that "95 per cent. of our scientific and technical manpower and facilities are now highly organized and coordinated to the single end of advancing the war effort," Dr. Egloff quotes percentages from William L. Laurence's article in *The New York Times* of January 3, 1943, but he carefully refrains from quoting the preceding sentence giving actual figures. This is the unquoted sentence: "A survey now being carried out by our research personnel reveals that between 80,000 and 100,000 scientists are working, with about 80,000 in industrial and 20,000 in university laboratories."

In the same letter, Dr. Egloff lists 231,571 scientific and technical personnel, exclusive of medical and dental personnel, registered with the National Roster of Scientific and Specialized Personnel. Dr. Leonard Carmichael, director of the roster, testifying before the Science Mobilization Committee last October, said that the number of scientists and technical men might be tripled with complete coverage, indicating that only about one third of the available people were then listed on the roster. Multiplying Dr. Egloff's figure by three, the total would be in the neighborhood of 695,000. If, then, Dr. Egloff's 95 per cent. of 100,000 people, or 95,000, are at war work, the total so engaged is only about 13½ per cent. This calculation is, of course, as ludicrous on the one side as Dr. Egloff's on the other. I give it only to show how figures can be used to mislead. Scientific and technical people who actually do the work know from their own experience and that of their associates the extent to which their talents are being used to prosecute the war.

Dr. Egloff, of the Universal Oil Products Company, also uses other interesting techniques in his fight against this legislation. I quote him:

> It is not too much to say that their passage [the two mobilization bills] might well be worth 100 divisions to our enemies.—*The Chemist*, April, 1943, page 229; *The Journal of Commerce*, April 12, 1943; *The Chicago Trib-*

une, March 14, 1943; the *Washington Times-Herald,* March 14, 1943.

Their passage would be worth 100 divisions to the enemy.—*The Chemist,* April, 1943, page 252.

The bill would be worth 100 divisions of trained, motorized troops to Adolph Hitler. *Chicago Tribune,* June 17, 1943.

Adolf Hitler wrote in "Mein Kampf":

. . . in the big lie there is always a certain force of credibility.

And:

. . . only constant repetition will finally succeed in imprinting an idea on the memory of the crowd.

So here we have Dr. Egloff, of the Universal Oil Products Company, using two of Hitler's techniques in his effort to defeat this bill. Also, it is significant to note that the *Chicago Tribune* and *Washington Times-Herald* gave strong play to his words.

I am deeply concerned that American men of science participate in a full discussion of this legislation: They alone can provide the advice and counsel to make the bill adequate to the national need.

The bill is based on five primary needs:

1. The need for a central independent agency of government devoted exclusively to the progress and expansion of science and technology, first to win the war and later to contribute to the peace. Science and technology need to be considered as a national resource, serving the interests of the nation as a whole and not those of select groups. Indeed, it is the only remaining sector of our public domain. This agency should be an independent arm of Government, eventually on the same footing as the established departments.

2. The need for integration of existing government research and development facilities. There are about 20 major and 40 minor bureaus in the Government devoted to research and development; their operation cost more than $557,000,000 last year. The excellent work of these groups should be so integrated as to widen the usefulness of their work and to provide a greater service to the public.

3. The need for active governmental support of fundamental research. The Government should give widespread support to basic research, by grants to existing non-governmental as well as governmental groups. This would apply particularly to universities and colleges, where fundamental research should flourish. Insufficient budgets have caused our educational institutions to depend increasingly on industrial grants and fellowships. This, to an alarming degree, has reduced much of university research to the status of handmaiden for corporate or industrial research, and has resulted in corporate control of many of our schools.

4. The need for a uniform and effective policy to achieve the fullest utilization of scientific and technical manpower in wartime.

5. The need to promote the use of government patents in the interest of the public. These patents are to be clearly distinguished from privately owned patents. They are of three types: Those derived from government research and development and assigned to a Federal Department or Bureau; those held by the Alien Property Custodian; those derived from non-governmental research financed by Federal funds.

The use of these patents needs to be promoted, and they should be administered for the public good.

I have long realized the basic importance to the welfare of the country of a free science and an expanding technology. I have long advocated a far-reaching program of governmental research. The experience of Federal agricultural research provides ample precedent for such a step. I have also observed that all advances in the public interest are fought bitterly by selfish interests. Examples have been the establishment of our public school system, public ownership of municipal water supplies, enforcement of sanitation of the milk supply, range and forest conservation, public ownership of power, and so on.

Scientific and technical men hold in their heads and hands the collective knowledge of the ages. Whose knowledge is it? This group, more than any other, can help achieve these purposes: To free technology for its maximum use in this technological war, and to free technology for the greater advancement of the American people.

HARLEY M. KILGORE

U. S. SENATE

SALMON CONSERVATION

I WISH to call attention to an article in "Discussion" in the March 12, 1943, issue of SCIENCE, entitled "The Fundamentals of Salmon Conservation."

The article in question has absolutely *nothing* to do with salmon conservation. The author, however, has taken advantage of the current food shortage to try to show some practical use for a pet experiment.

Just what difference could it possibly make to salmon conservation if ". . . the salmon with lateral line nerves bilaterally sectioned should be less apt to find their home stream than those with their lateral line nerves intact."

If the author merely wishes to discover what factor guides salmon in their return to their parent stream we have no quarrel with him. We do wish to point out, however, that his project should not masquerade either as a war-time food problem or even as a project fundamental to salmon conservation.

GEORGE A. ROUNSEFELL

U. S. FISH AND WILDLIFE SERVICE,
CAMBRIDGE, MASS.