

work. No reversal of the survey's present decline curve need be expected until adequate provision is made for such opportunities.

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THE AWARD OF THE NOBEL PRIZE TO
PROFESSOR HABER

TO THE EDITOR OF SCIENCE: The statement of the First Secretary of the Swedish legation (published in the February 27 number of SCIENCE, p. 207), relative to the award of the Nobel Prize to Professor Haber, contains some erroneous conclusions and some half-truths which should not be allowed to pass unchallenged. While Professor Haber's perfection of the commercial synthesis of ammonia amply warrants the award of the prize to him, I would comment upon the other numbered statements as follows:

2. The production of ammonia is only a step, this product being oxidized to nitric acid and nitrates by the Oswald process. While the Haber process will ultimately be of great value to the world at large, the patents, secrets, experience and profits were all Germany's (until after the war). The first secretary omitted to state that the Haber process made Germany independent of Chile saltpeter (sodium nitrate), not only for agricultural purposes, but also for the manufacture of chemicals, dyes, and especially explosives.

3. The address of Professor Bernthsen in 1912 before the eighth International Congress of Applied Chemistry in New York, was notice to the world at large that Germany could carry on war even if the British fleet cut off the Chile nitrate supply. While giving much general information, Bernthsen did not disclose all of the essential details necessary to the successful manufacture of ammonia, and of nitrates from ammonia. Therefore during the war when this country wished to use the Haber process, it became necessary for one of our large American corporations to work out the details in connection with the War Nitrates Board.

4. The statement that "the Haber plants in Germany were erected with a view to produc-

ing agricultural fertilizers" is a half-truth. This naturally was an important object, for in war as well as in peace the army and the nation must be fed, and business go on; but even more vital to Germany's purposes was the fact that ammonia meant nitrates, and nitrates meant explosives necessary for the carefully planned war, which so soon followed the perfection of the Haber process.

5. Although the first secretary disclaims knowledge of the manufacture of gas masks in Sweden, it is probable that Germany got wood or charcoal from Sweden for gas mask purposes, just as she got iron ore. No criticism attaches to Sweden for this, and her fear of Russia and proximity to Germany across the Baltic (a "German lake") readily explain her attitude toward her powerful neighbor.

However the pro-German activities of certain Swedes and Swedish-Americans, and especially the abuse of Swedish diplomatic privileges by such Germans as Count Luxberg, of "spurlos versenkt" fame, have naturally created among the Allied people an atmosphere of suspicion against Sweden; so that, especially since Professor Haber is understood to be one of those who advised and helped develop gas warfare, it is easy to understand how many believe that the award of the Nobel Prize to him was, *at this time*, ill-advised and undiplomatic.

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SCIENTIFIC BOOKS

A Handbook of Physics Measurements. By ERVIN S. FERRY in collaboration with O. W. SILVEY, G. W. SHERMAN, JR., and D. C. DUNCAN. Vol. I. Fundamental Measurements, Properties of Matter and Optics. Pp. ix + 251. \$2.00. Vol. II. Vibratory Motion, Sound, Heat, Electricity and Magnetism. Pp. x + 233. \$2.00. New York, John Wiley & Sons, Inc. 1918.

Manuals for use in the physical laboratory have been designed from two quite distinct points of view. On the one hand, an attempt has been made to develop a series of experiments that would serve to illustrate the gen-