where for two months he made a study of the standardization movement and the manner in which European developments in this direction are likely to affect American industry.

He reports that the elaborateness of the organization for the work, its activity and the scale on which it is being carried out constitute a new development in industrial organization. Practically every important manufacturing concern in Germany is officially participating in the industrial standardization program of that country. More than a thousand German companies have formal standardization organizations within their own works.

The extent to which industrial life has been coordinated is shown by the fact that more than seven hundred national standards have been adopted. This includes only those in which several different industries are concerned, and which are approved by the central national body. In addition to this work of the central body, and closely correlated with it are no less than sixty-five special industry committees actively working on the subject.

A striking example is cited of the efficiency of national standardization as it has been developed in Germany, in the case of a rush order placed with German manufacturers for 200 locomotives for delivery to Russia. "Production of different parts was allotted to seventeen different manufacturers to be produced strictly upon the plan of interchangeable parts, no one manufacturer making a complete locomotive. No serious practical difficulty was encountered in filling the order. The inspectors made a test of the feasibility and accuracy of the plan by ordering a complete locomotive to be assembled from parts chosen at random from those furnished by the seventeen manufacturers. It proved to be ready for service immediately after assembly without the necessity of any disassembling for readjustment."

Standardization engineering is now a recognized profession. An interesting development of the last few years is the appearance of consulting engineering firms specializing in this work. There are now five such firms in Germany. The work is closely connected with industrial or efficiency engineering, in which there is a great and growing interest.

## BAYER 205

As has been reported in SCIENCE, Professor F. K. Kleine, of the Robert Koch Institute of Infectious Diseases, Berlin, who has just returned to Europe, has been investigating the therapeutic properties of a drug known as "Bayer 205" in Rhodesia and the Congo in cases of human sleeping sickness and trypanosomiasis of domestic animals. *Nature* writes as follows: "It is well known that salts of arsenic and antimony are able in many cases to control these diseases, but these remedies are far from satisfactory, and the remarkable results which were reported in Germany in 1922 in the treatment of experimental trypanosomiasis in animals and in dourine of horses with the new drug 'Bayer 205,' the composition of which has not yet been made public, aroused much enthusiasm. The completely satisfactory treatment of a human case in Hamburg, after arsenic and antimony had failed at the Liverpool School of Tropical Medicine, excited considerable interest. Other patients were treated at the London School of Tropical Medicine, and it became evident that in many cases the drug had a rapid action on the trypanosomes, and, so far as can be said at present, has effected a permanent cure. The one disadvantage is a certain irritative action on the kidneys, which, however, is not of a permanent nature. Professor Kleine was granted permission by the British Government to conduct experiments in Rhodesia, and the published accounts of his work show that the hopes which were entertained were fully justified, and that cures can be effected in a large percentage of natives suffering from sleeping sickness even in its advanced stage. As regards the trypanosomiasis of domestic animals, he has noted that it is only efficacious in ridding them of trypanosomes which are most closely related to those which produce disease in man. Experiments on the prophylactic action have shown that if cattle which are to be exposed to the bites of tsetse flies are given an injection of the drug before exposure, the chances of infection are reduced, and even if infection does occur its course is considerably modified. It is understood that Professor Kleine will, in the near future, give an account in London of his experiences."

## THE METRIC STANDARDS BILL

AMONG the first bills introduced in the new session of the Congress are the Metric Standards Bills, providing for gradual adoption of the metric units of weights and measures in merchandising.

The metric bill was introduced in the House of Representatives by the Honorable Fred A. Britten, of Illinois, and in the Senate by Honorable Edwin F. Ladd, of North Dakota. The legislatures of these states, in company with many others, have petitioned the Congress to enact metric standards laws. More than 100,000 petitions, directly representing several millions of voters, are pending before the Congress, urging favorable action on adoption of the world units for weighing and measuring.

The simple decimal nature of the metric system is ingeniously stressed in the numbers of the metric bills themselves, Congressman Britten's being number 10 in the House and Senator Ladd's bill number 100 in the Senate.