THE CHEMICAL INDUSTRIES OF AMERICA

The topic which you have done me the honor to invite me to address you upon appears on first consideration quite specific, but investigation shows that this is not quite the case. Thus we find the popular idea of a chemical industry to be one producing acids, alkalies, salts, explosives, fertilizers, dyestuffs and extracts, pigments, distillation products and elementary substances like bromine, phosphorus, sodium and others, and the officials of the U. S. Census Bureau in 1880, in fixing a classification, styled in the various censuses "chemical production" or "chemicals and allied products," adopted this popular view.

In discussing this, I have said: 2

A reason for the variation in the industries included at the different censuses is found in the very general and indefinite title used, for in the strictest technical sense every material thing is chemical, and accordingly every industry in which the materials used undergo a chemical change in the process of manufacture, as in the smelting of iron from its ores or the production of leather from a hide, may be considered as a chemical industry. It is evident that if this view of the significance of the title were taken, "Chemicals and Allied Products" would properly cover every manufacture except those like furniture making, machine construction, or textiles, in which the material remains unchanged in composition during the manufacture but is turned, or cast, or woven into other shapes. The popular idea of the term limits its application but admits as chemical industries the manufacture of gunpowder, fertilizers and similar mixtures, whose ingredients

1 Address delivered before the American Institute of Chemical Engineers at Philadelphia, December 9, 1909.
2 Bull. 92, Census of 1905, p. 9, by Charles E. Munroe.