CHEMISTRY

American Chemical Industry No Longer Relies on Europe

Chemical Foundation Was Organized To Meet Problem Brought About by World War; No Fear of Famine Now

THE OUTBREAK of war in Europe would find American industry, which was hard hit at the start of the last World War by a famine in chemicals and other technical materials made then only in Germany, so nearly self-sufficient regarding major chemical products that no serious crisis would result, a survey by Science Service disclosed.

American scientists, however, still dependent upon German technicians for the highest grade optical goods and scientific equipment, particularly of specialized types, might find their sources of vital apparatus dried up overnight.

Leading import into the United States from Germany last year was potash, to an amount worth $6,668,000, an increase of more than $4,000,000 over the previous year. But, should war make it necessary, the United States could get along readily on American supplies.

Today the United States has one of the most powerful heavy chemical industries in the world, producing a wide variety of synthetic organic compounds ranging from dyes to explosives. The industry could be expanded to meet our own wartime needs; it already meets American demand and has some left over for export to other countries.

That was not the case at the start of the first World War, however. At that time the world's synthetic dye industry was almost entirely in German hands. Utter confusion resulted in the United States, partly because German patents contained only part of the necessary formulas or else formulas that were deliberately misleading. In addition to that, American chemists lacked the necessary experience for immediate application of such accurate information as they could get.

The Chemical Foundation was organized to meet this problem and to make German patents available to American industry.

Cameras worth $3,372,000, optical glass worth $318,000, and photographic paper worth $444,000 and other optical goods worth $746,000 were brought into the United States during 1937 from Germany.

Much of this equipment represents goods that compete directly with American products of similar grade, but a not inconsiderable portion consisted of instruments and materials it would be virtually impossible to duplicate in this country. Included in this last category, for example, are the planetaria which have been installed in several American cities by Carl Zeiss during the last few years.

Specialized laboratory apparatus, particularly in the glassware field, are in many instances made only in the Reich. These would be difficult, if not impossible, to duplicate either in this country or elsewhere in Europe. America does not import appreciable quantities of scientific equipment from other countries.

At one time the United States was dependent upon Germany for many of its better surgical instruments, but the situation has changed in recent years. Today, if America had to go to war or were blockaded, American soldiers would be treated with a completely adequate variety of American-made instruments.

A considerable quantity of medicinal preparations still come from Germany and from what used to be Austria. One such product is Prontosil, the first sulfanilamide compound. But American chemists have been making other effective varieties of this remarkable new curative agent. A temporary shortage in a few medicinals might be felt, but it probably would not last long.

Palm-kernel oil worth $4,644,000, used in the manufacture of lacquers and for other purposes, was sent to the United States from Germany last year.

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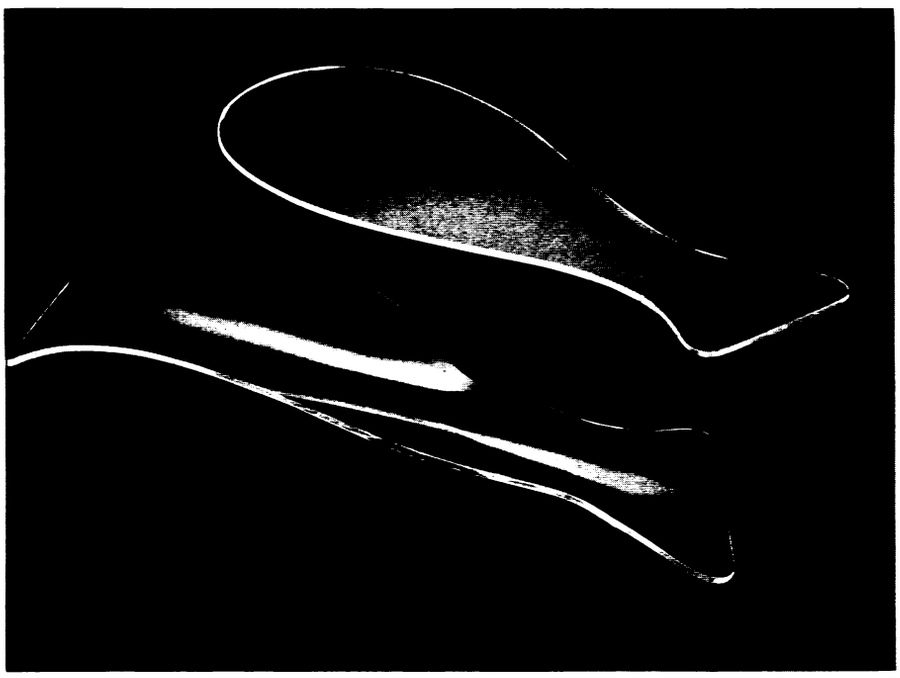

TRANSPARENT SPLINTS

CHEMISTRY

Transparent Splint Among Prize Winning Plastics

A FISH lure with an electric light inside to make it glow, a transparent molded splint through which a doctor can see a broken arm, three-pronged clothes-pins, and transparent oil cans which show when they are about to run dry are among the prize-wining designs in the Third Annual Modern Plastics Competition.

Translucent venetian blinds, the "radio nurse" loudspeaker system and a new type of sun goggles were other winners.

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