

## Ernest Lindley Says

# German Companies Control Vital U. S. Defense Articles

A Federal grand jury in New York has indicted the Aluminum Co. of America and five other companies on charges that they entered into agreements restricting the production of magnesium in the United States.

"Magnesium is important to our national defense. It is so light that two pounds of it will do the work of three pounds of aluminum. The Germans have been using large quantities of magnesium alloys in their airplanes and aerial-bomb casings.

Last year the Germans produced between 50,000 and 75,000 tons of pig magnesium. The American output was about 6,000 tons, all from one producer, the Dow Chemical Co.

The contrast begins to take on new significance when you find that a large German concern—the I. G. Farbenindustrie—has held joint control with the Aluminum Co. of America over the American production of magnesium. In 1931 they formed a company, the Magnesium Development Co., to develop their several patents. The ownership of this company is divided 50-50 between the German concern and the Aluminum Co. of America.

Dow is the only American concern which has been licensed to produce pig magnesium under the patents controlled by the Magnesium Development Co. Dow, in turn, has licensed all the fabricators.

The various officials and companies involved deny that they were conscious of any violation of the antitrust laws, or that their intention was to restrict the production of magnesium.

It is reasonable to suppose, however, that the Aluminum Co. of America, with its monopoly over raw aluminum, was not eager to encourage production of a competing metal, which in some respects is superior. The price of magnesium has been held at levels which offered little inducement to its use in preference to aluminum.

Why would the German concern be interested in restricting the production of magnesium in this country? Commercially, perhaps, it had no reason. But was its interest purely commercial? We have a right to wonder, now that we are faced with a great rearmament problem.

Magnesium is only one of at least four articles important to defense over our production of which German concerns have been able to exercise some kind of control in recent years.

The other three are beryllium, tungsten carbide, and optical instruments for military use. These, with magnesium, are the prime examples of what Assistant Attorney General Norman Littell calls "The German Invasion of American Business."

Beryllium is combined with nickel or copper to make alloys of almost unbelievable durability. On a fatigue-testing machine, the best steel spring broke after 3,000,000 vibrations. Springs of the same size made of beryllium alloys vibrated 15,000,000,000 to 20,000,000,000 times before breaking. For years the Germans have been using beryllium alloys for bushings for airplane propellers and other parts which must undergo severe wear at extremes in temperature.

The basic beryllium patents are held by a large German concern, the Siemens & Halske Co., near Berlin. Ten years ago the American Beryllium Co. was experimenting with uses of beryllium. After difficulty it was able to obtain use of the German patents through a cross-licensing arrangement. But the business was closely controlled. At the outbreak of the war the German company ordered the Beryllium Co. of America to stop shipments to England. The order was disobeyed.

Both the British and ourselves awoke late to the value of beryllium. It is now used for parts of the Garand rifle. Incidentally, beryl ore, the source of beryllium, is plentiful in the United States.

Tungsten carbide is the hardest cutting substance

known except diamonds. It is essential to the cutting of armor plate. Experiments are being conducted with projectiles made of tungsten carbide.

Germany uses about 20 times as much tungsten carbide as we do. The Krupp Co. of Germany developed patents on tungsten carbide about 15 years ago, while the General Electric Co. was at work on the same problem. In 1928, Krupp and G. E. entered into an agreement, which included the fixing of minimum prices. Prior to that Krupp has exported tungsten carbide to this country to sell at about \$48 a ton. Since 1928 it has never sold for less than \$205 a pound, and has sold as high as \$453 a pound, although the manufacturing cost is said to be only about \$25 a ton.

In 1936 the agreement was amplified. By one clause Krupp reserved the power to prohibit the General Electric Co. from issuing additional licenses to manufacture tungsten carbide products.

Last August the Department of Justice obtained indictments of General Electric for violating the antitrust laws. The case has not yet been tried, but the prices of certain tools tipped with tungsten carbide have begun to fall.

Meanwhile, for years German industry has been getting all the tungsten carbide it needs, and getting it at low prices. Germany has the machines, the skilled workmen and the technicians with which to use tungsten carbide in large quantities, while we do not.

The story of optical instruments is the most amazing of all. The Bausch & Lomb Optical Co., an American concern, manufactured about half of all military optical instruments in the United States, and most of those for heavy use. In 1921 it entered into a world-wide agreement with the German concern, Carl Zeiss, Inc.

Under this remarkable agreement the head of the vitally important military instrument division of the American company had to be acceptable to the German company. Actually a German was placed in charge. The German concern received full information on the manufacture of all military optical instruments by Bausch & Lomb.

In 1935 the American concern rejected a French and British order for range-finders, periscopes, gun-sights and fire-control instruments.

As Assistant Attorney General Littell said, in a speech before the Indiana Bar Association this week, that agreement resembled "a military treaty between two sovereign powers . . . Critically important military devices have been denied to those two democratic countries while their adversary, Germany, was not only rearming, but using our country to prevent the democracies from arming."

This agreement was broken last June by a consent decree obtained by the Department of Justice.

When Assistant Attorney General Arnold and his antitrust division began to unearth and hack away at these international agreements he was rather crossly criticized for baiting business. He has obtained indictments in the cases of magnesium and tungsten carbide. The story of beryllium was brought out in hearings before the Temporary National Economic Committee.

The full import of these agreements is now becoming apparent, as we move into our tremendous rearmament program. Most, perhaps, all, of the American businessmen who entered into them did not realize that there was anything sinister about them. Probably they thought that they might impair the security of the United States never entered their heads. Certainly, the American patent system, which helped the German concerns to fashion bargains to their own liking, was at fault.

Mr. Littell told the Indiana Bar Association: "This all makes a pattern . . . While these agreements may be commercial in character to the American businessmen, they are treaties to the German government, accomplishing definite objectives of German foreign policy in this country. They bear all the earmarks of supervision by the German government. As recently as last week a prominent American businessman told me that while making an agreement in Berlin he asked the question point blank whether or not the agreement had to be submitted to the German government for approval. He was advised that it did!"



ERNEST LINDLEY