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REPORT No. 487.

## TUNGSTEN ORES.

MARCH 23, 1920.—Ordered to be printed.

Mr. Curris, from the Committee on Finance, submitted the following

## REPORT.

[To accompany H. R. 4437.]

The Committee on Finance, to whom was referred the bill (H. R. 4437) to provide revenue for the Government and to promote the production of tungsten ores and manufactures thereof in the United States, having considered the same, report favorably thereon, with

the recommendation that the bill do pass with amendments.

Tungsten is a vitally important war metal. It is equally important in our industrial peace program. Tungsten is the only known element which forms an alloy with steel, giving to this steel the property of retaining its temper at extremely high temperatures. This property, together with its great hardness, makes possible the manufacture of tools for drilling, cutting, and finishing steel products. Those tools are operated at such high speed that one machinist and one lathe can do as much as five machinists and five lathes equipped with carbon steel tools. Quantity production is dependent on high-speed tungsten steel.

Prior to the war Germany controlled the tungsten refining industry and very little tungsten was refined in the United States. During the war the tungsten industry was fully established and the United States became the leading nation in the manufacture of tungsten

products.

The mining of tungsten in the United States was greatly stimulated during the war and the production, in 1917, reached 6,144 tons of 60 per cent concentrate. The evidence showed that the normal requirements of this country were between 5,000 to 7,500 tons of 60 per cent concentrate per year. The annual production from the equipped mines that can be operated under the proposed duty was demonstrated to be from 4,000 to 4,500 tons per year. It is claimed, through the stabilization of price and stimulus of the duty, that this production can gradually be increased until our entire domestic requirements will be supplied. During that period of development a substantial revenue would be received from importations of ore.

The report of the United States Tariff Commission states that "the United States has a sufficient supply for many years to come."

The destructive competition which American producers are help-less to meet comes from the ores of Asia. The costs of domestic production were proved from certified statements to average \$13 per unit. The foreign costs were showed to be from \$2 to \$4 per unit; and foreign ores are being sold in New York at from \$6 to \$7.50 per unit. Large quantities, aggregating about 50,000 units per month, are being imported, duty free, and none is being produced now in the United States.

The difference in costs are not due alone to the discrepancy in high wages paid our American miners (from \$4.65 to \$6.50 per day) and the pittance paid Asiatic coolies (from 20 cents to 50 cents per day), but the physical character of the deposits is different. Most foreign ores are recovered from rich surface deposits, that require little or no equipment, while American ores are recovered from veins or lodes of hard rock. Expensive mine equipment is required and large costly mills are necessary, as the ore has to be crushed and concentrated to put it into a marketable product.

It has been shown that the tungsten mining industry is in a critical condition. Unless prompt action is taken it will be destroyed. Every mine in the United States is closed down, and without the duty asked for can not reopen. The industry which proved of such vital importance during the war will fall in decay, so it can not be rehabilitated and the country will be left to the mercy of Asiatic production to supply a material as necessary in our industrial peace program as it is essential in war.

At the present time tungsten-bearing ores of all kinds are on the free list. With the placing of a duty on such ores it is necessary to place a compensatory duty on imports of refined tungsten products and alloy steels, and the rate named in the bill provides that compensation.

From the showing made it is perfectly evident that this industry should be protected. Without a healthy tungsten industry the United States will be completely at the mercy of hostile nations, which could instantly cut off supplies. The production of war material would be paralyzed.

Your committee believes a duty should be placed upon tungstenbearing ores for two reasons: First, the protection it would afford to this country and, second, the revenue that would be derived from a duty upon such ores as may be imported.

We therefore recommend the passage of the bill, H. R. 4437, as amended by your committee.