

ZINC ORE

HEARINGS

BEFORE THE

COMMITTEE ON FINANCE

UNITED STATES SENATE

SIXTY-SIXTH CONGRESS.

FIRST SESSION

ON

H. R. 6238

A BILL TO PROVIDE A TARIFF AND OBTAIN REVENUE IN
CONNECTION WITH THE METAL CONTENTS
OF ZINC ORE

NOVEMBER 17, 1919

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ZINC ORE.

MONDAY, NOVEMBER 17, 1919.

UNITED STATES SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON FINANCE,
Washington, D. C.

The subcommittee met in the committee room, Senate Office Building, at 10.30 o'clock a. m., Senator Watson (chairman) presiding.

Present: Senators Watson (chairman), Curtis, and Thomas.

Present also: Senators Gore, Spencer, and Capper, and Representatives Howard, McPherson, and Campbell.

The CHAIRMAN. We will hear Mr. Ruhl at this time.

[H. R. 6238, Sixty-sixth Congress, first session.]

AN ACT To provide revenue for the Government and to establish and maintain the production of zinc ores and manufactures thereof in the United States.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That on and after the day following the passage of this act there shall be levied, collected, and paid upon articles named herein, when imported from any foreign country into the United States or any of its possessions (except the Philippine Islands, the Virgin Islands, and the Islands of Guam and Tutuila), the rates of duties herein prescribed, namely:

Sec. 1. Zinc-bearing ore of all kinds, including calavine, containing less than ten per centum of zinc, shall be admitted free of duty; containing ten per centum or more of zinc and less than twenty per centum, one-fourth of one per cent per pound on the zinc contained therein; containing twenty per centum or more of zinc and less than twenty-five per centum, one-half of one per cent per pound on the zinc contained therein; containing twenty-five per centum of zinc, or more, one cent per pound on the zinc contained therein: *Provided*, That on all importations of zinc-bearing ores the duties shall be estimated at the port of entry, and a bond given in double the amount of such estimated duties for the transportation of the ores by common carriers bonded for the transportation of appraised or unappraised merchandise to properly equipped sampling or smelting establishments, whether designated as bonded warehouses or otherwise. On the arrival of the ores at such establishments they shall be sampled according to commercial methods under the supervision of Government officers, who shall be stationed at such establishments, and who shall submit the samples thus obtained to a Government assayer, designated by the Secretary of the Treasury, who shall make a proper assay of the sample, and report the result to the proper customs officers, and the import entries shall be liquidated thereon, except in case of ores that shall be removed to a bonded warehouse to be refined for exportation as provided by law. And the Secretary of the Treasury is authorized to make all necessary regulations to enforce the provisions of this paragraph.

Sec. 2. Zinc in blocks or pigs and zinc dust, one and three-eighths cents per pound; in sheets, one and five-eighths cents per pound; in sheets coated or plated with nickel or other metal, or solutions, one and three-fourths cents per pound; old and worn-out, fit only to be remanufactured, one cent per pound.

Sec. 3. That there shall be levied, collected, and paid on zinc, oxide of, and white pigment containing zinc, but not containing lead, dry, one cent per pound; ground in oil, one and three-fourths cents per pound; sulphide of zinc, white or white sulphide of zinc, one and one-fourth cents per pound; chloride of zinc and sulphate of zinc, one cent per pound.

Sec. 4. That all provisions of any act or acts inconsistent with the provisions of this act are hereby repealed.

Passed the House of Representatives September 2, 1919.

Attest:

WM. TYLER PAGE, Clerk.

STATEMENT OF MR. OTTO RUHL, MINING ENGINEER, JOPLIN, MO.

Mr. RUHL. Mr. Chairman, I am one of a delegation of mining men from Missouri, Kansas, and Oklahoma, in one way or another connected up with the zinc mining industry of our district. Our district represents the largest single unit of zinc mining in the United States.

Senator GORE. It is one of the largest in the world, is it not?

Mr. RUHL. It is really the largest single unit in the world; yes, sir. Directly interested as laborers in our industry we have 12,000 to 15,000 miners, all Americans—not a foreigner among them—a district that has always been blessed with American living conditions; no strikes, and very good relations between both our employers and our employees.

Senator GORE. And the public also?

Mr. RUHL. Yes; and the public. We are here on account of an emergency confronting both our laborers and our employers. We are to-day suffering the greatest crisis that we have ever faced in our industry. Our ore to-day, that is, the market price, is the lowest we have had in over five years' time.

Senator WATSON. What is the price?

Mr. RUHL. The average for the past nine months is \$40.50; one of the lowest prices we have ever had.

Senator WATSON. Compare that with some previous years in prices, will you, please?

Mr. RUHL. I will be glad to do that. During 1912, we had \$51.95; 1913, \$42.62; 1914, was the next nearest year to compare, \$39.43; 1915 we began to have the war period and war prices, \$78.47; in 1916, \$83.26; 1917, \$70.52; 1918, \$51.68. So that we are really facing more serious conditions than we have ever faced before.

Senator THOMAS. Is that not a universal condition; that is not peculiar to the United States?

Mr. RUHL. I am not speaking so much in regard to the low price of our product as the running price of our product in comparison to the products that we utilize in our industry.

Senator THOMAS. Is it not as well also to consider the prevailing prices for zinc in other consuming countries?

Mr. RUHL. Well, I am not so sure that that is true, Senator, because of this fact, that we are exporting a large amount of zinc metal, but no zinc ore, and we are being deluged with zinc ore from all other countries for this reason: The smelters of Europe are largely within the war centers, Belgium, Poland, and Germany, and they were controlled for a large part of the time by the Germans and were considerably damaged or destroyed. For that reason there was no other place to which foreign ores, outside of the United States, could go during the entire war period, and since. For that reason we have been faced with all the production of the world outside of Germany.

Senator THOMAS. Is there not a large zinc refining business in England?

Mr. RUHL. They have been trying to build up since the war started a large smelting business, but so far it has not been proving successful. At one time it was supposed that English smelters could so organize that they could take over the Australian output and relieve the situation there after the embargo was placed upon the

shipments of zinc ores to America on account of lack of ship bottoms, but that has been a very slow process, and I am informed that at the instigation of the American Zinc Institute a gentleman was sent over to investigate zinc conditions in Europe, as well as our own conditions, and he reports that on account of the fuel situation in England, and on account of labor conditions in England, it would be very difficult indeed for the English people to take care of the Australian concentrates. That will probably result in all of the zinc concentrates of Australia being dumped upon the American market, and that is actually one of the great things we have to face. For instance, there is piled up on the docks in Australia to-day practically 400,000 tons of zinc ore concentrates. The entire zinc ore production of the Australian mines is a by-product, and consequently of greater danger to our country than would be a product which was not produced as a by-product.

Senator THOMAS. It is a by-product of what metal?

Mr. RUHL. They produce zinc from a lead-silver ore, the zinc being a by-product.

Senator THOMAS. That will not last very long if silver stays at its present price.

Senator GORE. It will make it longer.

Senator THOMAS. It will not make that peculiar to Australia.

Mr. RUHL. Your own State, Senator, will produce a large amount of zinc from silver and lead ores.

Senator THOMAS. I think so, but I do not think it is very good.

Senator CAPPER. What was the main product in Australia?

Mr. RUHL. Silver and lead. Lead was the first ore to command attention.

Senator WATSON. Have you a statement of the countries?

Mr. RUHL. Yes, sir.

Senator WATSON. Do you know what is being imported, and the countries from which it is being imported?

Mr. RUHL. Yes, sir.

Senator WATSON. Can you give the figures showing how those imports compare relatively to the previous imports of zinc?

Mr. RUHL. I have reduced the previous imports to three periods, imports previous to 1909, when the first tariff bill was reported on zinc, those during the Payne-Aldrich tariff bill, and those under the Underwood bill. I will simply go down the list. In 1904 it was 264 tons; it jumped to 22,137 in 1905; in 1906 it was 55,414; in 1907 it was 103,117; in 1908, which was our bad year in American commerce, 53,757.

Senator GORE. Are you giving calendar or fiscal years?

Mr. RUHL. Calendar years. At that time we succeeded in getting the Payne-Aldrich bill revision, and from then on we have these under the Payne-Aldrich bill, which shows the inability still to prevent importations. In 1909 we had 114,850 tons come in; 1910, 72,626; in 1911 we had 39,116; in 1912, 43,940; 1913 we had 31,416; at which time the Payne-Aldrich bill was superseded by the Underwood bill. The Payne-Aldrich bill, you will recall, gave us a sliding scale of duties upon which the major portion of ores were subjected to a 1 cent per pound duty on the metallic content of the ore. So during that period, even on that scale of duties, our imports came in continually without any check.

Senator GORE. Did the domestic output increase? You would have to take that into account to reach a conclusion about it?

Mr. RUHL. I can give the domestic output during the same time. For instance, during the same years, we will begin say with 1909, previous to the tariff, and the years under the tariff act. In 1909 we had a production of 301,000 in our own district. I am giving the figures now for comparison's sake.

Senator GORE. You could not go back three years before that?

Mr. RUHL. Yes; I can go back to 1906. Then it was 278,929 production in the Joplin district; imports in that year 55,414; for 1907, 286,587; imports of 103,117; a decrease in our own production and an increase in the imports. In 1908 our production was 259,598 as compared with 53,757 imports, both dropping some; in 1909, we started in under the Payne-Aldrich schedule. Our production was 301,206 and the imports were 114,850 tons. In 1910 our production dropped to 296,671; imports 72,626 tons. In 1911 our production was 268,517; imports 39,116 tons, both dropping a little. In 1912, our production went up to 299,408; imports crept up to 43,940 tons. In 1913 our production was 287,164 tons as against 31,416 tons imports; 1914, our production was 264,549 tons as against 31,962 tons imports, at which time the war period starts in. In 1915, when the demand became large again our production crept up to 314,942 and the imports jumped to 158,852. In 1916 our production was 379,469 and the imports were 385,964.

Senator GORE. That was in 1916?

Mr. RUHL. In 1916. Our production crept up to 452,983 the succeeding year, and the imports dropped to 211,000. That was when the ships began to be shut off and they began to cut down the shipments into the United States from foreign countries. In 1918 our production fell to 389,988 and our imports fell to 70,902 tons. So you see there has been a more or less parallel connection between the production of our own country and the imports.

Senator WATSON. Prior to the war what was the domestic consumption of zinc?

Senator GORE. Right there I would like to ask a question. Your figures a while ago about prices show a very sharp decline in 1918 as compared to 1916 and 1917. That was just subsequent to our entry into the war, and is not that due to the fact that the Government was taking over more and more of the output of the steel mills and using less and less of the output required to galvanize, so that the very thing that brought prosperity to the steel industry and other industries brought adversity to the zinc business?

Mr. RUHL. A very large part of our production in the Joplin district is considered the high grade spelter. A very large proportion of our production naturally went into munition products. For instance, two of the largest consumers of our ore made sheet zinc, and all of their products practically went into war purposes. A large part of it went into cartridges, and for that reason our own product during the particular years of not only our own participation in the war, but previous to that, went into war purposes, and for that reason the demand upon our district was extremely large at that time for a limited period. We had very good prices for them, but the moment the war purposes stopped, naturally we hit bottom immediately.

Senator GORE. In the matter of the ordinary use in time of peace the galvanizing of steel products was suspended during the war, and you had to rebuild that business after the war closed?

Mr. RUHL. There were very many substitutes produced for galvanizing during the war period, owing to the need of zinc for war purposes; that is, they painted sheets black, and asphalt paint was used, and a great many other things like that. The thing which we wish to call your attention to most is the fact that this is an emergency proposition with us.

Senator WATSON. What about imports from Mexico; have they increased or decreased?

Mr. RUHL. I can say this, that since the low prices have prevailed for ore in this country they have decreased down to what you might call a minimum amount. They are at the present time about a minimum for all the years that we have had any imports from Mexico, amounting to about from 5,000 to 7,000 tons a month.

Senator WATSON. That is not altogether due to the price, but partially due to the inability to operate mines in Mexico?

Mr. RUHL. Naturally, I have not any first hand information as to the conditions surrounding all the zinc mining operations in Mexico, but it is our understanding that had it not been for the disorganized state of Mexico we would have very much larger imports.

Senator CURTIS. There was a very great decrease in imports from Mexico, in 1918?

Mr. RUHL. Yes, and in 1918 our own country decreased its output very rapidly.

Senator SPENCER. Was not that decrease largely due also to the fact that the Government put an embargo on certain American articles to Mexico and the use of cars for the transportation of zinc into this country?

Representative MCPHERSON. Is it not due to the fact that when disorders in Mexico would flame up certain companies would put embargoes on their own goods?

Mr. RUHL. It was true also at various times before the Government took control.

Representative MCPHERSON. I will ask you to please give the committee the domestic consumption.

Mr. RUHL. We will file under our brief a tabular statement which will show the American spelter production spelter from foreign ores; consumption of spelter, foreign ore imports in tons, reexports of metal in ore pounds; spelter imports for consumption in pounds; foreign spelter reexports in pounds; foreign spelter exported in manufactures with benefit of drawback in pounds; American spelter exports in tons.

Senator GORE. Was there a good deal in that category?

Mr. RUHL. There is quite a little, yes. That varies too, according to the uses of the industry during particular years. We give the American spelter exports in tons, American ore exports in tons, American zinc dross exports in tons and the value of American zinc manufactures exported up to the year 1916, after which we have not been able to secure the figures from the Bureau of Statistics on those particular items.

In specific reply to your question as to American consumption of spelter I will say, beginning with the year 1916, to correspond

with our other figures in these groups; in 1906 it reached 220,781 tons; 226,969; 214,167; 270,730; 245,884; 280,059; 340,341; 295,370; 299,125; 364,494; 458,428; 413,643; 424,530, and for the first six months of 1919, 159,501.

Senator GORE. What are those?

Mr. RUHL. Those are the figures for the consumption of spelter in the United States during the successive years from 1906 to the present time.

Representative McPHERSON. So that for these years you have given, the domestic consumption and production were about equal?

Mr. RUHL. They approximately equal each other. For those same years the amount of spelter left over will give you a criterion of how much variation there was. For 1906, our surplus stock was 3,824 tons at the end of that year; for 1907, it was 26,364 tons; in 1908 it was 19,613; in 1909 it was 11,167; in 1910 it was 23,201; in 1911 it was 9,081; in 1912 it was 4,522; in 1913 it was 40,659; in 1914 it was 20,095; in 1915 it was 14,253; in 1916 it was 17,594; in 1917 it was 53,721; in 1918 it was 41,241, and at the end of the six months period in 1919 it was 59,651.

Senator GORE. That is the surplus?

Mr. RUHL. That is the surplus stock of spelter in America.

Senator GORE. Does the price seem to sympathize with the surplus and the drop to the lowest point, as a rule?

Mr. RUHL. To a certain extent, it has.

Senator GORE. What is the present surplus?

Mr. RUHL. The present surplus of spelter is 65,000 tons.

Senator GORE. That is the largest in the history of the business?

Mr. RUHL. Yes, sir. We also have the largest surplus stock of ores lying in our own bins in Joplin, amounting to about 60,000 tons.

Senator GORE. You mean, representing 60,000 tons?

Mr. RUHL. That is, of ore. That would be equivalent to 30,000 tons of spelter, roughly speaking. It is a singular fact that these surplus stocks of spelter correspond in many instances very closely to the actual importations of ore. It is a singular fact, but it is true.

For instance, I will quote just a few here. Beginning with 1910, we had 23,000 tons of surplus stock, imports 72,000. These are ore. I will reduce that to metal content, to get the relationship. Surplus stock, 23,000 tons, metal content of imported ores, 25,000 tons; surplus stock of 1911, 9,000 tons; the metal content of the imported ores, 15,000; the surplus stock 1912—that is one of the largest years the zinc industry ever had—that was 4,000 tons, and the imports were 17,000, and then when you get down into our war period where the imports grew and the demands for spelter increased, the inequality between the two becomes less and less because of the fact that they utilized practically all the foreign spelter and our own, all during that period. The results, however, of these enormous importations of ore have been that to-day our mines are unable to continue operations with the present cost of fuel, the present cost of labor and other living conditions, and at the same time we have the lowest price paid for our product in over five years. As a result we have entire camps in the Missouri side absolutely doing nothing.

Senator SPENCER. What percentage of the mines are closed down?

Mr. RUHL. Something over 50 per cent of our mines throughout the three States. In the Missouri side whole camps will be idle, not a man working, the mills sold or moved away for second-hand works.

In Kansas around the Galena district the same is true. In Arkansas there is no work.

Senator THOMAS. Is it not a fact that the unusual demands caused by the war resulted in giving an artificial and widespread stimulus to zinc production, and are you not suffering from the aftermath in some degree at present, and have been for some time?

Mr. RUHL. It is true that during the very high priced period there were a large number of mines throughout the United States which were induced to operate. However, in our own mines our output received a stimulus in that respect, perhaps only covering about 16 or 18 months.

Senator THOMAS. That, of course, brought a good many other mines into competition with you.

Mr. RUHL. It brought other mines, but we have had a peculiar condition brought about, for this reason: We had opened up on the Missouri side of the line a very large number of properties of the character which we call "sheet-ground ores." Those became established properties, long-life properties, requiring a capital investment which went over a considerable period of time.

Senator GORE. What sort of ground?

Mr. RUHL. "Sheet ground," a low-percentage ore, covering a large area.

Senator THOMAS. Corresponding to what we call blanket veins?

Mr. RUHL. Yes, there is some similarity. That group of mines was able to respond directly to the needs of our country when it demanded ore, and they did respond. This also induced prospecting on a large scale, and that prospecting opened up some mines of a very rich character, which helped out especially during the war season in the Oklahoma part of the field. Naturally, as the prices of labor and materials went up and the importations of zinc ores swelled to enormous proportions, it became less feasible for the lower-grade mines to operate, and they have been forced to close down one by one. Even our high-grade mines, which at first took the place of our lower-grade properties, are closing down one by one. In our Oklahoma field, which we consider our high-grade ore mines, approximately 50 per cent are down.

Senator THOMAS. How does the cost of production with you compare with the cost of production at Butte?

Mr. RUHL. It is a different class of mining.

Senator THOMAS. I know it is, but the product is the same.

Mr. RUHL. Our product is of a higher grade than the Butte product, and we have perhaps an advantage on that score which you do not have at Butte. On the other hand, the amount of concentration required at Butte is less than we have. For instance, they concentrate their ores 3 or 4 tons into 1.

Senator THOMAS. Do you use the flotation process?

Mr. RUHL. In some of our larger units we do.

Senator WATSON. That is only with the refractory ores?

Mr. RUHL. That is only the refractory ores. Our ores are extremely free and easily yield to water separation. The number of our mines closed down now is reaching such a large percentage as to also force our population out.

Senator WATSON. What is the difference between the wages paid now and during the prewar period, for four or five years back?

Mr. RUHL. About 30 to 35 per cent higher.

Senator GORE. And the price of the ore is about the same as before the war?

Mr. RUHL. The price is less than for a five-year period previous to the war.

Senator GORE. Other items of expense on your cost sheet have gone up correspondingly?

Mr. RUHL. They have gone up correspondingly. Our powder has been very high; during the war we were forced to pay inordinate prices. Before that it used to cost \$9, and then it went up to \$18 and \$20 and \$22, so that the price of powder was more than doubled.

Representative MCPHERSON. How about machinery?

Mr. RUHL. That has also gone up very high. Articles of iron and steel manufacture which entered into our drilling machines, hard iron and steel used in the mills have all gone up.

Senator WATSON. These mines have not shut down on account of any shortage in the raw materials?

Mr. RUHL. Oh, no; there is abundance of them there if we can afford to mine them.

Senator SPENCER. Is the percentage of mines shut down in the Missouri district larger than the general closing down you mentioned?

Mr. RUHL. Yes, sir.

Senator GORE. Can you give us a statement of the number of mines that were closed down?

Mr. RUHL. I will file here a statement of the number of mines closed down, in connection with our brief. Out of 87 mills in operation in the Webb City district, which includes Duenweg, Oronogo, Alba, Neck City, and Purcell camps, only two are in operation to-day, and I understand that one of them closed down the very week we left home.

Senator CURTIS. Out of 87?

Mr. RUHL. Yes, sir; out of that whole list of mines I have given you, which used to constitute the very bulk of the product, not over two mills are operating to-day, and, as I understood, one of those is closed down. That leaves in our camps vacant houses; men have been forced to go to other places for work, and we have an idle population besides. In Webb City alone there are over 400 empty houses to-day.

Senator GORE. What class of people are those miners?

Mr. RUHL. They are all Americans. We have not a foreign laborer in our camps. So far as I know, it is the only strictly American mining camp in the United States.

Senator WATSON. Can you roughly state what their average wage is?

Mr. RUHL. Their average wage will run from about \$4 up to as high as \$7 and \$8 and even \$10, where they work on piecework.

Senator THOMAS. That is a very interesting fact, Mr. Ruhl. How do you account for it—a purely American force?

Mr. RUHL. It is partially due to this fact, Senator: Our district began in a small way. It began in the heart of a farming community; in southwestern Missouri, southeastern Kansas, and northeastern Oklahoma are some of the best farming lands we have in the States of Missouri, and Kansas, and Oklahoma. It was on those prairies and on the farms that the first strikes were made. The farmers became the labor element that first entered the mines. Gradually

those miners became prospectors and struck good ore deposits and became operators themselves, and to-day we have mine operators who were former miners, and for that reason they have continued to employ strictly American labor. It would be difficult to introduce foreign labor there at all.

Senator THOMAS. Has any effort been made in that direction?

Mr. RUHL. Only at one time, and that was during the war, when labor was so high and the draft took out a large number of young men. One company tried to introduce Mexican labor, but this was discouraged by both operators and miners, and the attempt failed.

Senator GORE. They were not only Americans, but white Americans?

Mr. RUHL. Yes; white Americans.

Senator THOMAS. Are these miners householders?

Mr. RUHL. Householders, a very large number of them.

Senator THOMAS. About what proportion of them are householders?

Mr. RUHL. I will ask Mr. Wood, who is a Webb City business man, who knows more about that than I do. I would say about 30 to 60 per cent. Mr. Wood can answer that question, as he is a citizen of Webb City and will know.

Mr. WOOD. Gentlemen, my business is a mercantile business. I am not a mining man. I live in Webb City, which five years ago was a city of 15,000 inhabitants. To-day I would say it is a city of 10,000. We have in Webb City alone 400 empty houses, and I would say 35 per cent of those houses are owned by miners. They were householders themselves. That is the condition to-day in the one town in which I live, and there is no other reason for it, because you gentlemen realize that it is certainly an unusual thing to-day to have a large number of empty houses in any town. When for these men their only source of revenue disappeared, and when this condition came about there was nothing left for these miners to do but to look for employment in other places, and I think 75 per cent of those men were householders.

Senator WATSON. In Kansas, Missouri, and Oklahoma do they have an eight-hour day?

Mr. RUHL. They have an eight-hour day there.

Senator GORE. Do you have different shifts?

Mr. RUHL. During the period of prosperity we have worked as high as three shifts of eight hours each. Naturally, at the present time, no mine is operating more than one shift.

Senator WATSON. What amount of capital would be required in each enterprise, on an average, in these three States, or in this district?

Mr. RUHL. I would say the milling property of to-day would require an investment, say, of \$10,000 to \$15,000 for prospecting of the land, \$25,000 to \$30,000 for sinking shafts and opening up the ground for mining; \$60,000 to \$100,000 to build your milling plant, making an aggregate of \$125,000 to \$200,000, depending on the unit of operation for each plant.

To give you some idea of the relative price of the product that has been brought in this country, and the price at which we have been able to produce our ore, which is really the crux of the whole situation—

Senator WATSON. Certainly the theory of the tariff is the difference between the cost of production at home and abroad, and if you can

give us some idea as to what you can produce it for and what it is produced for elsewhere, it will be a very great help to us.

Representative McPHERSON. Before you undertake to answer that question, I would like for you to describe what conditions exist in these mines that are closed down in this district, with reference to what will be required to start them in operation again, what takes place when they close down for a considerable period of time.

Mr. RUHL. I am very glad you asked that question, because it is vital to us. When a mine closes down in our field it means that the water floods the mine. It means also the deterioration of machinery and means the necessity of again installing a pumping system to drain the mines when conditions warrant their reopening. In a large district where there has been a great deal of mining the openings naturally become large and the amount of water to be pumped out of course becomes very great, and the expense of reopening one of our properties will be very heavy in addition to the losses we have sustained. For that reason it is going to be very difficult for us to revive some of our properties that we have had, and which have contributed very largely to our prosperity in days past.

Senator GORE. In Oklahoma a great many of these mines are on Indian allotments, are they not?

Mr. RUHL. Practically 90 per cent of them are.

Senator GORE. They are on limited leases?

Mr. RUHL. Yes, sir. I would venture to say that no mines that are running at the present time have an operating period of life exceeding six years. The future lease life of the mines which are contributing to our output, which have made the bulk of our production from Oklahoma, would not exceed six years or seven years at the utmost, and would average about four years in the Picher and Century districts.

Representative HOWARD. Along the line of those Indian lands in Oklahoma, is it not a fact that this low price of ore at this time is forcing some of our miners only to mine the rich part of the vein and consequently leave a large part of the ore that belongs to the Indians in the ground?

Mr. RUHL. That is true, not only from an economic standpoint, but is true because we have had to operate mines at a loss in order to keep from losing the leases.

Senator THOMAS. What sort of fuel do you use, oil or coal, or both?

Mr. RUHL. We use three kinds, practically four kinds of power there. We are adjacent to the gas lines that come from Oklahoma and Kansas, and we use gas engines, also fuel-oil engines; also fuel oil and coal under the boilers, and we have electric power. We are blessed with a variety of power. That power is used which is best available and which proves to be the most economical for the camp or the location of the property.

Now, to return to the question of comparison of prices. I have taken the years from 1914 to 1918, inclusive, ascertained the number of tons and the price in short tons, and have compared them to our own average prices received for zinc ore in Joplin, with the freight rate to the smelters added. In 1914, 1915, 1916, 1917, and 1918 the average importation for those five years was 150,872 tons, the value of which per short ton was \$25.43. The value of our ore in Joplin for the same period was \$66.22. The difference in cost is largely due

to the difference in wages paid in Mexico and the United States, and because of the fact that the Mexican ores do not need concentration, while practically all of ours must pass through a milling plant to yield a marketable product. Due to the disorganized and revolutionary state of Mexico for a number of years recent data of a detailed and authoritative character is not available.

Senator WATSON. Does that mean that they get this ore only in a pure state in Mexico?

Mr. RUHL. Yes, sir. Practically 50 per cent of the ore shipped out of Mexico to this country comes out in the lump ore, simply hand picked out of the mines. It requires no concentration. It will run from 20 per cent up to 40 per cent zinc.

Senator THOMAS. Does that apply to any other country?

Mr. RUHL. In many cases the zinc is a by-product of the lead and silver mines. At any rate, it is evident that the relationship between the costs will likely parallel those when data of a reliable and detailed character is available. We therefore submit the following table, which gives the cost of labor in Mexico as compiled from consular reports in the zinc producing regions of Mexico. In a parallel column are placed the cost of labor for the Joplin district under normal conditions during prewar period. [Reading:]

Wage scale comparisons.

Kind of labor.	Gold value of Mexican wages.	Usual wages Missouri-Kansas district.
Ground boss.....	\$1.42-2.50	\$4.00-85.00
Shift boss.....	.85- 1.10	3.00- 4.00
Pump man.....	.25- 1.50	3.00
Drill man.....		2.75
Drill helpers.....		2.50
Shovelers.....	.50	2.50- 5.00

Senator GORE. Please read that as to the shovelers again.

Mr. RUHL. The shovelers in Mexico get 50 cents a day and in this country get \$5 a day. [Continuing reading:]

Kind of labor.	Gold value of Mexican wages.	Usual wages Missouri-Oklahoma-Kansas district.
Holst men.....	\$1.50	\$2.50-3.00
Engineer.....	1.00	2.50- 3.50
Jig men.....	\$0.75- 1.50	3.00- 5.00
Crusher feeder.....	.75- 1.50	2.50
Laborers.....	.15- .50	2.00
Blacksmiths.....	1.50	2.50- 3.50

Our present Joplin wage scale is approximately 30 per cent to 35 per cent higher than the prewar scale. From such a contrast of wage scales it is easy to see that the cost of production must be much lower in Mexico than it is in the United States.

Senator WATSON. From what other countries do we import zinc in appreciable quantities besides Mexico?

Mr. RUHL. Canada and Australia are the principal other producers.

Representative Howard. We have a large production from Canada? Mr. RUHL. Not so large as previously.

Representative HOWARD. Do we get any from Germany?

Mr. RUHL. No, sir. They are importers of ore instead of exporters.

Representative McPherson. Where was that table obtained giving those figures as to labor costs?

Mr. RUHL. The labor costs I gave you were obtained from the consular reports of the United States.

Representative McPHERSON. Have you there the figures showing the wages paid by the mining companies in Mexico and the wages paid by the American companies operating in Missouri prior to the war, which was contained in a table given before the House Committee?

Mr. RUHL. Yes; I can give that to you. I will file that with our brief. I will file the consular report from which those are taken.

Representative McPHERSON. The figures as to imports in tons, were they long tons or short tons?

Mr. RUHL. I have reduced them all to short tons so as to compare with our own production.

Representative McPHERSON. The Treasury reports are in long tons or in short tons?

Mr. RUHL. They are all in long tons.

Representative McPHERSON. And you have reduced them to short tons?

Mr. RUHL. I have reduced them to short tons in order to compare with the American production, which is always given in short tons, and imports in long tons.

Senator GORE. Can you file a statement showing the number of mines opened up during the last six or eight years, to show whether or not they were responding to war demands, and if they were able to respond to the extraordinary demands of the war, and if they were encouraged largely by the Government? I think that would constitute one of the strongest arguments you could present.

Mr. RUHL. I can file that, but I would have to make a tabulation of them before I could do so, but I can answer that question positively. It is a fact that due to the war demand, a very large proportion of the Oklahoma development has been a result of that war demand.

Senator GORE. Did the Government take any direct steps to encourage increased production of zinc? You know it did with reference to certain metals.

Senator THOMAS. No; not with reference to zinc.

Senator GORE. I have no recollection of any special efforts to stimulate zinc.

Senator WATSON. It was included in the war minerals that the Government undertook to stimulate.

Senator THOMAS. What Senator Gore has reference to is the need for unusual metals, like tungsten and chrome and manganese, etc. With reference to those a special and unusual effort was made by the Government.

Senator GORE. That is what I thought, but I did not know whether there was any special effort made to encourage the production of zinc. If there was, it would be very important.

Mr. RUHL. There was no special demand made in that respect. But the War Minerals Committee of the Government met in special session with the American Institute of Mining Engineers in our district, in October, 1917, with the special idea of encouraging large production of high grade ores at that time.

Senator GORE. Including zinc ores?

Mr. RUHL. Including zinc ores. To quote from the report presented to that committee at that time as to the cost of our production at that time, this will probably illustrate exactly the point which we have at issue:

At the annual meeting of the American Institute of Mining Engineers for October, 1917, held with the War Minerals Committee of the Government at St. Louis and Joplin, Mo., there was presented a complete report upon zinc mining costs under the title "War Minerals of the Joplin-Miami District." The following excerpt is taken therefrom:

"The costs as shown on the tabulated sheets made a part of this report have been best reported by the Joplin, Webb City and Oklahoma producers. Of 12 Joplin properties reporting complete costs, the range is \$1.12 to \$2.24 per rock ton. The numerical average is \$1.46 per rock ton. Of 15 Webb City properties reporting, we have a range of 98 cents to \$1.50 per rock ton. The numerical average is \$1.27. Of 11 Oklahoma properties reporting, the average is \$1.40 to \$2.55 per rock ton and the numerical average is \$1.89. In every case these costs do not include royalty, depletion, or depreciation."

Senator GORE. What is that increase; what does that \$1.89 represent?

Mr. RUHL. That would be this, Senator: We mine our ore and we take an aggregate of the cost of labor, power, overhead, etc., all expenses in one lump sum. We find out how many tons of rock is hoisted during a day and divide that number of tons into the total cost and get the average cost per rock ton. That is what I am stating now. [Continuing reading:]

"Accepting the data of costs as outlined above, and accepting the average recoveries as manifested in the reports given and which approximate very closely those given by the United States Geological Survey for 1916 for the above camps at 2.5 per cent, 3 per cent and 5 per cent, we find that the Joplin district produces concentrates at \$48.91; the Webb City district, \$50.80; and the Oklahoma district, \$37.80 per ton, to all of which costs must be added the royalty, depletion, and depreciation factors. It should be noted at this point also that there is one discrepancy in the cost figures, when considering them as a basis for future operations. Many of the mines, especially during the earlier months of 1917, were still operating under powder contracts which gave a much lower price than the open market for dynamite."

Senator WATSON. From what are you reading now?

Mr. RUHL. This is the data which was used at this meeting between the War Minerals Committee and the American Institute of Mining Engineers in Joplin, in 1917. [Continuing reading:]

"These contracts have now practically all expired, and the increase in this item alone is very material in the sheet ground and disseminated districts of Webb City and Joplin.

"Estimating royalties at \$7.50, or 10 per cent upon a \$75 ore market, depletion at \$4 per ton in Joplin and \$3 in Webb City and \$6 for Oklahoma, and depreciation of plant and equipment in all the camps at \$4 per ton, makes a total cost of concentrates as follows: Joplin camp, \$64.40; Webb City camp, \$65.30; Oklahoma camps, \$64.80."

From above evidence it is clear, therefore, that the average price postulated for Joplin ores of \$65.72 laid down in the smelter bins is a conservative one.

We then will file a list of our freight rates to the various smelting points, which will show the method of getting at the cost laid down at bins. The metal content of the ores imported from 1914 to 1918, inclusive, has run from 30 per cent to 38 per cent zinc, with an

average over the entire period of 36 per cent. This would give a metallic content of 720 pounds of zinc metal to the ton. Joplin zinc ores carry 60 per cent zinc, or 1,200 pounds of zinc metal to the ton. It takes, therefore, 1½ tons of Mexican zinc ores to yield the same metal that 1 ton of Joplin zinc ore does. The Mexican ore, to equal the Joplin ore, then, in metal, would cost one and two-thirds times \$25.43, or \$42.21, as against \$66.22 for the Joplin ore, both prices being taken as the average of a five-year period from 1914 to 1918, inclusive. The same metallic content of 1,200 pounds from Mexican ore cost \$24.01 less than the Joplin ore, or it would take a tariff of approximately 2 cents per pound on the metallic contents to equalize the cost of production. That is the crux of the whole matter, in my opinion. We are producing for \$66.22 what the Mexican mines can produce for \$42.21, a difference of \$24.01, and that is what we have come here to ask for, the difference in the cost of these products.

Senator THOMAS. Have you any figures showing the relative labor costs as between the Mexican laborer and the American laborer?

Mr. Ruhl. The difference is \$24, and that is what we have to remember, to watch for—the difference in the cost of these two products.

Senator GORE. Have you any figures showing the relative labor costs in Mexico and the United States?

Mr. Ruhl. I can file this statement, which I have taken from the consular reports.

Senator WATSON. It is not necessary for the witness to read the figures. We want the cost of production. I know something about the labor conditions in Mexico. There, wherever it is possible to hire a white man the owners hire him, so that the product of the white man at higher wages must be superior to the product of the Mexican peon at low wages. So then the labor cost is diminished by the employment of white labor. So when I ask if you had any figures showing the actual labor cost I mean independently of the amount of the wages paid to the laborers in the mines?

Mr. Ruhl. I think I can file this consular report, in which there will be not only the relative wages paid to the miners, but the actual cost of production, which will involve both the white laborer and the Mexican peon employed in the mines.

Senator WATSON. And does that cost include the handling of the product?

Mr. Ruhl. That will be the actual cost laid down at the border, whether the work was done by white men or Mexicans—the cost is identical.

Senator WATSON. Have you not the reports of the Treasury Department containing the values of all ores imported, wherein the prices given are all the declared values?

Mr. Ruhl. Yes, sir; but as I told you a while ago, we are filing here a report showing the exact amount that was imported for consumption and the exact amount for various purposes. We have all that data here for file, but we also, as I called your attention a while ago, have the amount of ore which it really would take to care for home consumption, or consumption in this country. The consumption in this country balances very closely our surplus product. We are, therefore, asking that this bill be considered as emergency measure.

Senator WATSON. What are the other great centers of zinc products in this country?

Mr. Ruhl. Joplin is first in the production of zinc products; Montana ranks second, and Wisconsin third. When I speak of the Joplin district I use the word in the genetic sense, including the four States meeting near that point, calling it the Joplin district. Then there are scattering amounts in Alaska, Colorado, Utah, a little bit in California. Tennessee is becoming a very important producer. New Mexico and New York—the latter has been opening up centers of production. We practically do supply the American demand. Not only that, but we exported the world's demand during the war period. We are asking therefore that this committee give us the actual difference in cost of production between Mexican and our own, because Mexico is our chief competitor. We have one other thing which hangs over us, and is perhaps more vital at this time. There are available on the docks in Australia 400,000 tons of ore which will approximate 40 per cent zinc, which will be dumped on this market as soon as ship bottoms are available. The only thing that has kept it out has been the embargo on most unnecessary materials in this country during the war, and the inability to obtain shipping, and since that 400,000 tons of ore hangs over us, it is a very vital thing which we must consider at this time, for if that should come in here we would have to shut down our mines until it was consumed.

Senator THOMAS. Do you think that this 400,000 tons of ore will come here rather than to Europe?

Mr. Ruhl. Yes; for the reason that the American Zinc Institute, after having made an inspection of Europe, says that it will be impossible for the Belgium smelters to obtain fuel to operate their plants to anything like taking care of their own zinc production from the mines available there, and in the ore districts of Germany the same condition prevails, while in England preparations have been made to try to take care of it, but reports are to the effect that England can not take care of the situation owing to the fuel conditions, there being a lack of coal.

Senator THOMAS. This is spelter that Australia reports?

Mr. Ruhl. No, sir.

Senator WATSON. Have you figures as to what they export?

Mr. Ruhl. The Broken Hills mines have been the greatest lead-silver mines that were worked in the English dependencies and yet have had the largest, perhaps, zinc body in the world. The zinc in those mines for years was thrown into the tailings which were piled up year after year.

Senator THOMAS. The same thing is true in regard to Leadville, for years?

Mr. Ruhl. Practically a similar case, except that in the Broken Hills the percentage of zinc is much higher. That is why we are confronted with this tremendous emergency. Those tailings lie there and there is nothing to do but run them through the concentrator which piles them up besides the others from the mines.

Senator GORE. Have any efforts been made there to establish smelters, as far as you know?

Mr. Ruhl. There is a small smelter at Fort Parry that has a capacity of from 100 to 125 tons a day, but that will not even take care of their own production from the mines in the regular operations.

Senator GORE. What is the reason for not producing it?

Mr. RUHL. The Australians had no fuel to operate his smelter. Japan has recently purchased a very small amount of this Australian ore and they have tried every means to get it out.

Representative McPHERSON. Mr. Ruhl, what benefit would you people derive from the pending bill if it passed the House of Representatives which affords the protection of 1 cent per pound? Would it benefit industry, and if so, to what extent?

Mr. RUHL. I would say that it would be of very little benefit because of these two facts. In the first place, this Australian ore, which I know amounts to over 400,000 tons, is by-product pure and simple, and whatever can be exported from Australia is so much gain. Therefore, no matter what we put on, until we make it equal the cost of production here, in it comes. In consequence, we must have a bill that will prevent our mine product being marketed for less than the cost of production.

Senator GORE. Is there in existence any bill in regard to dumping, or affording any protection such as you desire?

Mr. RUHL. I am not familiar enough with that dumping law to answer your question intelligently, Senator. If I had had that bill for study perhaps I could tell you something.

Senator CURTIS. I talked with the Tariff Commission, and they said that with a few amendments it could be made very effective.

Senator WATSON. Have you read the report of the Tariff Commission on zinc ore?

Mr. RUHL. No, I have not.

Senator WATSON. You do not know whether it is reliable then or not?

Mr. RUHL. No. Replying still further to this question that I started to answer, I will say that in Mexico, unless we get the actual difference in the cost of production we will always have her at our doors. She is the steady, cheap, constant supply of ores. Unless we get the difference in the cost of production we must face her all the time. Well, we have got to employ American labor and compete with this American labor against the conditions of cheap labor in Mexico, and I assure you gentlemen that this condition must be taken care of very soon. Fifty per cent of our mills are down, the population is scattered, our labor is in distress, and our employers are in distress, and all have been since the middle of 1918. We are asking this as an emergency measure now, and submit this for your consideration.

Representative McPHERSON. And with the provision that the ores brought in are smelted and the product exported that industry would not be injurious in any way?

Mr. RUHL. No, sir. If the product is immediately exported there would be no harm done our industry and the smelter men alone would profit by the additional work. I am submitting schedule covering zinc ores and all its products, and show what we believe to be a balance and a correct differential between the various products under existing conditions as an emergency clause.

Senator CURTIS. Have you compared that with the act of 1909, which is higher than that?

Mr. RUHL. It is higher than that in three respects. We have increased the duties on zinc-bearing ores to 2 cents.

Senator CURTIS. As against what?

Mr. RUHL. Two cents instead of 1 cent. We have increased the duties on spelter from $1\frac{1}{2}$ to 2 cents so as to have the same metallic contents in ores, and then there has been an increase in sheets of one-eighth of a cent a pound. The ores remained the same. I can read the whole thing.

Senator CURTIS. No; you need not read from that.

Mr. RUHL. I think that we will submit our case with this brief, together with this other data that you requested.

Senator CURTIS. Well, you file that with this statement and turn them over to the clerk, who will then give them to the reporters.

Senator WATSON. Then if you care, you can extend your remarks in the record, unless you may have overlooked anything that you have done.

Mr. RUHL. I shall be very glad to do so.

Senator GORE. I wish to state that if this matter were met by a measure to cope with the situation in point of time that it would not have to be made permanent as would general tariff legislation.

Mr. RUHL. Well, I rather think, Senator, that if we have to wait for general tariff legislation we will all be out of business.

Senator WATSON. If you are going out as rapidly as now it will not be long before all will go out.

Mr. RUHL. The revision of the tariff on a general basis can not be approached.

Senator THOMAS. I want to say that this emergency is said to exist with regard to a great many industries, and if you gentlemen are laboring under an impression that the Senate is going to take up this bill without being obliged to take up others, you are mistaken.

Senator CURTIS. I think that we ought to give consideration to these three, four, or five bills along this line and take action on all of them.

Senator THOMAS. Then the others will clamor for amendments and thereby resolve itself into a general tariff discussion, and in view of the coming presidential election everything that we do now except adjourning is done with an eye on the next presidential election.

Senator CURTIS. You could not pass a general bill now. I just made that suggestion.

Senator THOMAS. It will have to be done from the floor if it is done at all.

BRIEF TO THE FINANCE COMMITTEE OF THE UNITED STATES SENATE BY THE ZINC-ORE PRODUCERS OF THE JOPLIN DISTRICT, COMPRISING PORTIONS OF THE STATES OF MISSOURI, KANSAS, AND OKLAHOMA—SUBJECT: ZINC ORES—THE NECESSITY OF A PROTECTIVE TARIFF ON ZINC ORES AND THE HISTORY OF TARIFF LEGISLATION.

The zinc industry of the Joplin district has been in existence a half a century. The uses for zinc have gradually multiplied during that time, and with the demand for zinc caused by these additional uses came an increased output.

In 1904 the zinc output of the Joplin district, which at that time embraced only the States of Missouri, Kansas, and a limited tonnage from northwestern Arkansas, amounted to 267,210 short tons. The industry had grown to considerable proportions. It was not until this demand became substantial that foreign zinc ores found their way into the United States. Prior to 1904 little, if any, zinc ore was imported. In that year there was imported 2,264 short tons. In 1905 the imports were 22,137 short tons; in 1906 the imports were 55,414 short tons. In that year the Joplin district produced 278,929 tons. In the following year, 1907, there was imported a total of 103,117 tons, with a total production in the Joplin district that year of 286,587 tons—more than one-third in tonnage of the product of the entire Joplin district.

This vast importation brought about the discussion of a protective tariff which might equal the difference between the cost of producing zinc ore at home and abroad. In the year 1909 the total importations were 114,850 short tons, with a total production in the Joplin district of 301,206 tons.

During that year the necessity of a protective tariff was presented to the Congress of the United States, with the result that there was incorporated in the Payne-Aldrich tariff bill, which became a law August 6, 1909, a tariff providing for a duty of 1 cent per pound upon the metallic content of all zinc ores imported into the United States, containing in excess of 25 per cent metallic zinc. The law also contained a sliding scale of tariffs upon ores containing a lesser percentage of metallic zinc.

Evidence was presented to Congress at that time in the form of figures showing the cost of producing a ton of zinc ore, particularly in Mexico, which up to that time was practically the sole exporter of zinc ore to the United States. It was conclusively demonstrated, however, that the tariff was not adequate to keep out these low-priced Mexican ores, for in the year 1910 there was imported into the United States a total of 72,026 tons. In 1912 there was imported 43,940 tons, against a total production in the entire Joplin district of 299,408 tons.

Notwithstanding that fact, Congress saw fit to repeal that law by the provisions of the Underwood bill (effective Oct. 4, 1913), which provided a tariff of 10 per cent ad valorem. It was speedily demonstrated from the tariff received that this amounted to from \$1 to \$1.50 per ton, whereas the tariff under the provisions of the Payne-Aldrich bill amounted to \$12 per ton, based upon zinc ore of the metallic content of 60 per cent such as is commonly mined in the Joplin district.

In the years 1913 and 1914 there was a decreased demand for zinc ore, owing to the general industrial paralysis in the United States, the steel companies having little, if any, demand for their manufactures, and, being the largest users of zinc, the demand for spelter, which is the term used for the refined product of zinc ores, was lessened. The Joplin district in that year produced only 264,540 tons, the price being very low. Notwithstanding this fact, there was still imported in that year into the United States from foreign countries 31,062 tons. (See table on succeeding pages.)

Then came the European war in 1915. Up to that time approximately one-half of the zinc ore produced in the world was mined in the United States, and one-half of the smelter capacity in the world was located in the United States. Nearly all of the smelter capacity in the Old World was located in Silesia, Germany, and in Belgium. The ores mined in the Old World for the most part were shipped to these smelters. Early in the war Germany captured all of these smelters that were located in Belgium and thus obtained possession of all of the spelter product of the world, except that which was made in the United States. At the same time the mines of Europe and Australia had no market for their ores. There was nothing left to do except to find a market in the United States. The tariff had been removed, with the result that in the year 1915 there was imported into the United States from foreign countries 158,852 tons. In 1916 importations jumped to 385,064 tons, and fell to 211,595 tons in 1917.

A table of these importations is found in the body of this brief, the figures being obtained from the Bureau of Foreign and Domestic Commerce of the United States. From this table it will appear that these importations came from 13 different countries in Europe, Australia, North America, and South America. The largest importations came from Mexico, Australia, Italy, Spain, and even the Chinese Empire.

The effect of these vast importations was to depress and destroy the zinc-mining industry of the Joplin district, and particularly the industry in southwestern Missouri. The mine operators and mine owners and miners of the Webb City-Carterville mining district, which was the largest producer of zinc ore in southwestern Missouri, in April, 1918, directed the attention of Congress to this condition, and then furnished statistics, which are attached to this brief, showing that at that time out of the 87 mills that were in operation in 1915 in the Webb City-Carterville district, including the Oronogo, Prosperity, and Duonweg camps, only 18 continued in operation (only two of those mills are in operation to-day in that entire district).

Relief was obtained in that year, but after it was too late, in the form of a war measure, prohibiting the importation of zinc ore into the United States in ship bottoms. That had the effect of shutting off the Australian ore and ores from other foreign countries shipped by boat into the United States. It left open, however, the importations into the United States from Mexico and Canada, which at that time were considerable, and which are still coming in at the present time to the extent of 5,240 tons imported in the month of July, 1919, being the last available figures. The war measure also passed away with the close of the war.

Since these vast importations have come into the United States the mining industry of the entire district has been in bad financial straits. The price of ore in 1918 went down and has remained there, to a point where the mine operators of the district can

no longer operate their mines at a profit. Some of the mines have been kept open by reason of the fact that the mine operators desired to keep experienced employees, and in addition to that, if the mines were closed, they would become flooded and vast property interests entirely destroyed.

That is the situation that we are facing to-day. There are a few of the mines of exceptional richness that have operated at a small profit, but the majority of the mines in the whole Joplin district are not operating at the present time, many of the ones now operating are operating at a loss.

Notwithstanding this fact, that these mines have been operated at a loss, as stated, these importations continue to come in from Mexico, Canada, and Chile, as shown by the reports for the month of July, 1919.

NECESSITY FOR SPEEDY REMEDIAL LEGISLATION IS GREAT—MUST HAVE A TARIFF OF 2 CENTS PER POUND UPON THE METALLIC CONTENT OF ZINC ORES IMPORTED.

From the tables appearing in the body of this brief and in the appendix it appears that during the high prices that prevailed during the war these zinc ores were imported into the United States during the years 1915, 1916, 1917, and 1918 to a total of 827,000 tons at a declared value of from \$12.23 to the maximum of \$28.70 per ton. During those same times the cost to the mine operators of the district, by reason of the increased wages and enhanced prices for mining supplies, for producing a ton of that same zinc ore, was from \$39.79 to \$73.57 per ton. As shown by the attached table, zinc ores are now coming in from Mexico at a declared value of less than \$10 per ton.

At the present time this district is threatened with another deluge of importations from European countries, and particularly from Australia. The embargo prohibiting the importation of zinc ores into the United States in ship bottoms left Australia entirely without a market for its ores. At the close of the war, according to statistics furnished by the United States, there were on the docks in Australia 300,000 tons of zinc ore awaiting shipment. That tonnage has now increased to more than 400,000 tons. The European smelters which were captured by Germany are not yet rebuilt. This Australian ore is bound to be dumped into the United States as soon as ocean tonnage can be procured. It threatens financial ruin to the mine operators of the Joplin district. In order to keep our mines open we must have a tariff of 2 cents per pound upon the metallic content of zinc ores imported. It will require that to keep out these foreign ores.

The House bill provides for a tariff of only 1 cent per pound upon the metallic content of zinc ores imported, and is entirely inadequate.

The bill should be amended by the Senate Finance Committee to provide for a tariff of 2 cents per pound upon the metallic content of zinc ores imported.

H. R. 6238, as originally introduced, provided for a tariff of 2 cents per pound upon the metallic content of all zinc ores imported into the United States, where that zinc ore contained a percentum of metallic zinc in excess of 25 per cent, and a sliding scale below that figure. That bill was introduced on the 19th day of June, 1919; testimony was offered before the Ways and Means Committee. In the latter part of July and the first part of August a public announcement was made that the House would adjourn for the session. The zinc-mining industry of the United States was in extremis. It was believed that the House would adjourn without passing any kind of a bill, with the result that the bill was hurriedly reported out of the Ways and Means Committee without further consideration, and amended so as to carry a tariff of only 1 cent per pound upon the metallic content of zinc ores, the old Payne-Aldrich schedule.

The zinc-ore industry of the United States now appears before this committee, and asks that this bill be amended before being reported out, so that it shall provide for a tariff of 2 cents per pound upon the metallic content of zinc ores imported, and respectfully submits the following facts as full justification for the plea of 2 cents per pound upon the metallic content of all zinc ores imported into the United States and a proper differential upon all related finished products. We respectfully submit herewith for the consideration of your committee a schedule covering what we believe to be a well-balanced scale of duties which can be defended upon the grounds of absolute necessity in order to revive the zinc-mining industry of the United States and save it from further depression and threatened destruction by the importation of zinc ores mined by peons of Mexico, the coolies of China, and the underpaid and underfed and underhoused laborers of foreign countries.

It is fitting to state here that the miners of the Joplin district and of the zinc-mining industry generally in the United States are real Americans and all white, differing in this respect from the men employed in other mining districts, particularly the coal-mining districts of the United States.

Table showing vast imports of zinc ore shows why American zinc-mining industry is threatened.

[Compiled from reports of the United States Geological Survey.]

Periods.	Calendar years.	Imports of zinc ore and calamine.
		<i>Short tons.</i>
Imports previous to 1900.....	1904	2,264
	1905	22,137
	1906	55,414
	1907	103,117
	1908	53,757
Imports under Payne-Aldrich tariff ¹	1909	114,850
	1910	72,626
	1911	39,116
	1912	43,940
	1913	31,416
Imports under Underwood tariff ²	1914	31,962
	1915	153,852
	1916	385,964
	1917	211,595
	1918	70,902

¹ Payne-Aldrich bill became a law Aug. 6, 1909.

² Underwood bill became a law Oct. 4, 1913.

The above figures are for calendar years. The Bureau of Foreign and Domestic Commerce publishes its reports for fiscal years ending June 30. This should be remembered when making comparisons.

WHY A TARIFF OF 2 CENTS PER POUND ON METALLIC CONTENT IS NEEDED.

Prior to October 4, 1913, it was difficult to establish an official price for zinc ores at the border, as the law did not require a sworn statement as to their value. Under the Underwood law such a declaration of value had to be made by the importer so as to fix the amount of the duty, as it provided an ad valorem duty instead of a specific duty. Hence we are able to show in the subjoined table compiled from the reports of the Bureau of Foreign and Domestic Commerce the actual declared valuation of these imported zinc ores and secure a direct comparison of these prices with the average price paid for Joplin zinc ores for the same years. A study of this table indicates that this declared value has never been as great as one-half the price of Joplin zinc ores. How, then, can the American miner compete with the Mexican miner without a tariff protection to equalize the difference in the cost of production?

Declared value imported ore per ton compared with average base price Joplin zinc ore in the bins at smelters for same periods.

Fiscal year ending June 30—	Long tons (2,240 pounds).	Value, long tons.	¹ Value, short tons.	Value Joplin zinc ore.	Freight and buying charge to smelters.	Value Joplin ore at smelters.
1914.....	18,280	\$13.70	\$12.23	\$39.79	\$2.50	\$42.29
1915.....	79,814	22.77	20.33	54.18	2.50	56.68
1916.....	291,264	32.32	28.77	92.78	2.50	95.28
1917.....	262,767	28.57	25.50	73.57	2.50	76.07
1918.....	102,231	24.44	21.82	53.30	2.50	55.80
Average.....	150,872	28.48	25.43	63.72	2.50	66.22

¹ Values of short tons of 2,000 pounds are computed in order to compare with Joplin ores, the prices for which are given in short tons.

The difference in cost of production is largely due to difference in wages paid in Mexico and the United States and partially to the fact that much of the Mexican ores do not need concentration, while practically all American zinc ores must be put through a milling plant to yield a marketable product. Due to the disorganized and revolutionary state of Mexico for a number of years recent data of a detailed and authoritative character is not available, but the general facts of a much lower labor cost in Mexico than in the United States can be asserted without any successful

contradiction. At any rate it is evident that the relationship between the costs will likely parallel those when data of a reliable and detailed character was available. We therefore submit the following table, which gives the costs of labor in Mexico as compiled from consular reports in the zinc-producing regions of Mexico. In a parallel column are placed the costs of labor for the Joplin district under normal conditions during prewar period.

Wage-scale comparisons.

Kind of labor.	Gold value of Mexican wages.	Usual wages, Missouri-Oklahoma-Kansas district.
Ground boss.....	\$1.42-\$2.50	\$4.00-\$5.00
Shift boss.....	.85- 1.10	3.00- 4.00
Pump man.....	.25- 1.60	3.00
Drill man.....		2.75
Drill helpers.....		2.50
Shovelers.....	.60	2.50- 5.00
Hoist men.....	1.60	2.50- 3.00
Engineer.....	1.00	2.50- 3.50
Jig men.....	.75- 1.50	3.00- 5.00
Crusher feeder.....	.75- 1.50	2.50
Laborers.....	.15- .50	2.00
Blacksmiths.....	1.50	2.50- 3.50

Present Joplin wage scale approximately 20 to 30 per cent higher than prewar scale. From such a contrast of wage scales it is easy to see that the cost of production must be much lower in Mexico than it is in the United States.

Cost of ore production in Joplin district, prewar period.

Mine.	Mining cost.	Transportation to railroad.	Freight to Kansas and Oklahoma smelters.	Total cost.
Federated mine:				
Soft ground, Alba.....	\$42.81	\$0.50	\$0.66	\$43.97
Disseminated, Neck City.....	33.38	.50	.66	34.54
Sheet ground, Webb City.....	39.47	.50	.66	40.63
Do.....	40.65	.50	.66	41.72
Diplomat mine, sheet ground, Galena.....	38.70	.60	.66	37.88
Mo-Ark Nemo, sheet ground, Webb City.....	33.44	.60	.66	34.60
Oronogo Circle, disseminated, Oronogo.....	41.65	.50	.66	42.72
Kramer mine, disseminated and soft ground, Joplin.....	41.71	.50	.66	42.87
Mattes Bros., sheet ground, Joplin.....	38.50	.50	.66	37.60
Average.....	38.45	.50	.66	39.61

Cost of ore production in Mexican mines, prewar period, as shown by consular report Dec. 7, 1908.

Mine.	Mining cost.	Transportation to railroad.	Freight to smelters.	Total cost.
E. S. Tuttle, Nuevo Leon.....	\$2.00	\$2.50	\$5.33	\$9.83
Picachos, in Chihuahua.....	3.75	1.50	7.07	12.32
Calera, in Chihuahua.....	5.50	2.50	5.57	13.57
Santa Eulaha, in Chihuahua.....	2.00	2.18	5.57	9.75
El Potosi.....	4.00		5.57	9.57
Charcos, in San Luis Potosi.....	1.65	2.15	5.85	9.65
Mine in Tamaulipas.....	5.00	10.00	7.57	22.57
La Malinchi, near Monterey.....	2.00	2.50	5.45	9.95
El Moro.....	5.55	2.54	5.15	14.05
Baltillo, in Coahuilla.....	8.00	2.50	6.45	16.95
Refugio mine, in Nuevo Leon.....	5.00	2.25	5.33	12.58
Average.....	4.03	3.06	5.97	12.89
Freight rate raised Dec. 23, 1909.....			1.08	1.08
Average.....	4.03	3.06	7.05	13.97

While we can not supply the data for present Mexican labor wages and costs, we can supply recent and authoritative data on the wages of labor and the costs of production in the Joplin district. For this purpose we submit the following facts:

"At the annual meeting of the American Institute of Mining Engineers for October, 1917, held with the War Minerals Committee of the Government at St. Louis and Joplin, Mo., there was presented a complete report upon zinc mining costs under the title of 'War Minerals of the Joplin-Miami District.' The following excerpt is taken therefrom:

"The costs as shown on the tabulated sheets made a part of this report have been best reported by the Joplin, Webb City, and Oklahoma producers. Of 12 Joplin properties reporting complete costs, the range is \$1.12 to \$2.24 per rock ton. The numerical average is \$1.46 per rock ton. Of 15 Webb City properties reporting, we have a range of 98 cents to \$1.50 per rock ton. The numerical average is \$1.27. Of 11 Oklahoma properties reporting, the average is \$1.40 to \$2.55 per rock ton and the numerical average is \$1.89. In every case these costs do not include royalty, depletion, or depreciation.

"Accepting the data of costs as outlined above, and accepting the average recoveries as manifested in the reports given and which approximate very closely those given by the United States Geological Survey for 1916 for the above camps at 2.5 per cent, 3 per cent, and 5 per cent, we find that the Joplin district produces concentrates at \$48.91; the Webb City district, \$50.80; and the Oklahoma district, \$37.80 per ton, to all of which costs must be added the royalty, depletion, and depreciation factors. It should be noted at this point also that there is one discrepancy in these cost figures, when considering them as a basis for future operations. Many of the mines, especially during the earlier months of 1917, were still operating under powder contracts, which gave a much lower price than the open market for dynamite. These contracts have now practically all expired, and the increase in this item alone is very material in the sheet ground and disseminated districts of Webb City and Joplin.

"Estimating royalties at \$7.50, or 10 per cent upon a \$75 ore market, depletion at \$4 per ton in Joplin and \$3 in Webb City and \$6 for Oklahoma, and depreciation of plant and equipment in all the camps at \$4 per ton, makes a total cost of concentrates as follows: Joplin camp, \$64.40; Webb City camp, \$65.30; Oklahoma camp, \$54.80."

From above evidence it is clear, therefore, that the average price postulated for Joplin ores of \$65.72 laid down in the smelter's bins is a conservative one.

FREIGHT RATES.

The freight rates and all other charges have been taken into consideration by the revenue department when valuing imported zinc ores. (See T. D. 36652.)

Therefore, the freight rates and buying costs must be added to the average Joplin ore prices to give a fair basis of comparison and levying of the proper tariff.

The average charge for buying ores in the Joplin field is placed at \$0.50 per ton.

The loading charge is \$0.50 per ton.

The freight charge varies from \$1 to \$7.20 per ton.

The following rates now prevail from Joplin to various smelting centers:

Kansas points.....	\$1.00
Oklahoma points.....	\$1.30- 2.20
St. Louis and Collinsville.....	3.10
LaSalle and Peru, Ill.....	3.80
Other eastern points.....	6.90- 7.20

APPRAISEMENT OF ZINC ORE—T. D. 36652—METHOD OF ASCERTAINING THE VALUE OF ZINC IN IMPORTED ORE UNDER THE PROVISIONS OF PARAGRAPH L OF SECTION 3, TARIFF ACT OF 1913, BASED UPON THE SELLING PRICE OF ZINC IN THE UNITED STATES

TREASURY DEPARTMENT, June 3, 1916.

To appraisers of merchandise and others concerned:

The following method will be followed by appraising officers in determining the value of zinc in imported ore arriving in the United States after July 1, 1916:

(1) From the ascertained assay deduct 8 units for sulphide and 6 units for nonsulphide ores. The remainder will represent percentage of recoverable zinc in the ore, which multiplied by 2,000 will give the number of pounds of zinc recoverable from a ton of ore.

(2) Multiply the result as above ascertained by the average price of prime western spelter at East St. Louis for the week in which the ore was exported; that is, the week including the date of sailing of the ship or day the car leaves the foreign country. This will give the gross value of the zinc in the ore at the time of its exportation.

(3) Deduct from the gross value of the zinc in the ore as above ascertained the following:

(a) The freight actually paid from the foreign mine to the domestic smelter receiving the same in the United States.

(b) The insurance actually paid.

(c) The actual shipping charges.

(d) Foreign export duties and charges, if any.

(e) Treatment charge (as explained in par. 4).

(f) Penalties for iron, as stipulated in paragraph 5.

(g) Duty on lead contents, if any.

(h) Duty on zinc.

(4) *Treatment charge.*—(a) For sulphide ores the treatment charge will be ascertained as follows: From the value of the recoverable spelter in a ton of 2,000 pounds medium-grade Joplin sulphide ore, 60 per cent base, deduct the average of the quoted prices for such ore and \$1.50 per ton of 2,000 pounds as representing the average freight on Joplin ores from Joplin, Mo., to common Kansas smelting points.

(b) For nonsulphide ores the treatment charge will be ascertained as follows: From the value of the recoverable spelter in a ton of 2,000 pounds of 40 per cent calamine ore deduct the average of the quoted prices for such ore and \$1.50 per ton of 2,000 pounds as representing the average freight paid from Joplin, Mo., to common Kansas smelting points.

(5) *Penalties.*—On iron ore deduct penalties as follows: \$1 on each unit of iron in excess of 1 per cent up to and including 6 per cent; \$0.50 per unit on each unit of iron in excess of 6 per cent up to and including 12 per cent; \$0.25 for each unit of iron in excess of 12 per cent.

(6) The average market price of Joplin zinc ore and prime western spelter to be taken in accordance with quotations contained in the Engineering and Mining Journal for the calendar week, including the date of the sailing of the ship or day the car leaves the foreign country.

(7) Recoverable spelter, wherever that term is used in this memorandum, means for sulphide ores the assay minus eight units, and for nonsulphide ores the assay minus six units.

Example—Sulphide ore.

Assume: Assay 48 per cent zinc, 6 per cent lead, 14 per cent iron; freight, mine to smelter, \$13 per ton of 2,000 pounds; insurance, \$0.50 per ton; loading and expenses, \$1 per ton; prime western spelter, 15 cents per pound; medium grade Joplin ore, 60 per cent base, \$100 per ton.

48% - 8% = 40% × 2,000 lbs. = 800 lbs. at 15c..... \$120.00

Deductions:

Freight, mine to smelter.....	\$13.00	
Insurance.....	.50	
Loading and expense.....	1.00	
		\$14.50

Penalties—14% - 1% = 13%:

5% at \$1.00.....	5.00	
6% at .50.....	3.00	
2% at .25.....	.50	
		8.50

Treatment:

60% - 8% = 52% × 2,000 = 1,040 at 15c.....	156.00	
Ore quotation.....	\$100.00	
Freight to smelter.....	1.50	
		101.50

Lead, 2,000 lbs. × 6% = 120 lbs., at ¾c.....	.90	
		78.40

		41.60
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\$41.60 + \$1.10 = \$37.82 dutiable value.

Example—Nonsulphide ore.

Assume: Assay 36 per cent zinc, 3 per cent lead, 2 per cent iron; freight, mine to smelter, \$10 per ton of 2,000 pounds; export duty, \$1; prime western spelter, 15 cents per pound; Joplin calamine, 40 per cent base, \$50 per ton.

36% - 6% = 30% × 2,000 lbs. = 600 lbs., at 15c.....		\$90.00
Deductions:		
Freight, mine to smelter.....	\$10.00	
Export duty.....	1.00	
		\$11.00
Iron penalty, 2% - 1% = 1% at \$1.00.....		1.00
Treatment:		
40% - 6% = 34% × 2,000 lbs. = 680 lbs., at 15c.....		102.00
Ore quotation.....	\$50.00	
Freight to smelter.....	1.50	
		51.50
		50.50
Lead duty (not over 2%, no duty).....		62.50
		27.50
$\$27.50 + \$1.10 = \$28.60$ dutiable value.		

Owing to the fact that the several factors necessary to determine the market value or purchase price of zinc ores are usually not known at the time of shipment, and importers can not ascertain the value of the zinc in the ore, collectors are authorized to permit entry by appraisement of zinc-bearing ores.

ANDREW J. PETERS, *Assistant Secretary.*

The following modification (T. D. 36,652) of these instructions was also sent out by the department:

TREASURY DEPARTMENT, *August 31, 1916.*

To appraisers of merchandise and others concerned:

The plan for the appraisement of zinc in ore, published in T. D. 36,446, is hereby modified, to provide that the method therein set forth shall not apply to sulphide ores assaying 40 per cent or less of zinc. The zinc in such ores should be appraised at not less than the contract or purchase price.

ANDREW J. PETERS, *Assistant Secretary.*

SPECIFIC PROOF OF NEED FOR TWO CENTS PER POUND ON METALLIC CONTENTS OF IMPORTS.

The metal content of the ores imported from 1914 to 1918, inclusive, has run from 30 to 38 per cent zinc, with an average over the entire period of 36 per cent. This would give a metallic content of 720 pounds of zinc metal to the ton. Joplin zinc ores carry 60 per cent zinc, of 1,200 pounds of zinc metal to the ton. It takes, therefore, 1½ tons of Mexican zinc ore to yield the same metal that 1 ton of Joplin zinc ore does. The Mexican ore, to equal the Joplin ore, then, in metal, would cost one and two-thirds times \$25.43, or \$42.21, as against \$66.22 for the Joplin ore, both prices being taken as the average of a four-year period from 1914 to 1918, inclusive. The same metallic content of 1,200 pounds cost in Mexican ore \$21.01 less than the Joplin ore, or it would take a tariff of approximately 2 cents per pound on the metallic contents to equalize the cost of production.

In view of the conditions above outlined and which are fully substantiated by the data in the body of this brief, and the addenda and exhibits likewise submitted, we submit the following draft of schedule for zinc ores for the consideration of this committee, which we believe will meet the needs of the industry and provide justice to all its departments and give the Government a reasonable revenue:

"A BILL To provide a tariff and to obtain revenue by imposing a duty on the metal contents of zinc ores and articles in whole or in part manufactured of zinc.

"Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That on and after the day following the passage of this act there shall be levied, collected and paid upon the metallic contents of all zinc ores imported from any foreign country into the United States or any of its possessions, the following sums, to-wit: Upon all zinc-bearing ores containing more than 10 per centum and less than 25 per centum of metallic zinc there shall be levied, collected and paid 1½ cents per pound on the metallic zinc contained therein; upon all zinc-bearing ores containing more than 25 per centum of metallic zinc, there shall be levied, collected and paid on the metallic zinc contained therein 2 cents per pound.

"No duty shall be levied, collected or paid on the metallic contents of zinc ores containing less than 10 per centum of metallic zinc.

"Provided, That on all importations of zinc-bearing ores the duty thereon shall be estimated at the port of entry, and a bond shall be given in a sum double the amount of such estimated duties for the transportation of the ores by common carriers bonded for the transportation of appraised or unappraised merchandise to properly equipped sampling or smelting establishments, whether designated as bonded warehouses or otherwise. On the arrival of the ores at such establishments they shall be sampled according to commercial methods under the supervision of Government officers, who shall be stationed at such establishments, and who shall submit the samples thus obtained to a Government assayer, designated by the Secretary of the Treasury, who shall make a proper assay of the sample and report the result to the proper customs officers, and the import duties as provided by this act, shall be liquidated thereon. The Secretary of the Treasury is authorized to make all necessary regulations to enforce the provisions of this act.

"There shall be levied, collected and paid on zinc in blocks or pigs and zinc dust 2 cents per pound; in sheets, 2½ cents per pound; in sheets coated or plated with nickel or other metal or solutions, 2 cents per pound; old and worn-out, fit only to be remanufactured, 1 cent per pound. There shall be levied, collected and paid on zinc oxide of and white pigment containing zinc, but not containing lead, dry, 1 cent per pound; ground in oil, 1½ cents per pound; sulphide of zinc, white or white sulphide of zinc, 1½ cents per pound; chloride of zinc and sulphate of zinc, 1 cent per pound."

AN EMERGENCY EXISTS WHICH WARRANTS PLACING ZINC ORE TARIFF WITH THE EMERGENCY TARIFF LEGISLATION RECOMMENDED BY THE PRESIDENT.

The situation in the Joplin district is desperate, especially in Missouri. The situation is reflected in the calling off of production from 287,925 tons of zinc ore concentrates in 1916 to 88,627 tons in 1918.

In April, 1918, the mine operators and citizens made a special appeal to Congress setting up the following facts. We give it in full:

To the business men, miners, and property owners of the Webb City-Carterville mining district:

Why conceal the facts? A great misfortune, amounting to disaster, has overtaken the Webb City-Carterville mining district. It is time the entire citizenship was aroused to the situation. The business man, the merchant, the miner, and the property owner are equally concerned.

The Southwest Missouri Mine Safety and Sanitation Association has recently gathered information and facts that every man should know. It is time that we were awakened to the situation. Out of the 87 mills that were in operation in the Webb City-Carterville district, including Oronoho, Prosperity, and Duenweg, only 18 are now in operation, or partial operation, with the probability that 5 more of them will be closed within the next week. Of these 69 mills, 30 of them have been dismantled and moved away, and others are now being offered for sale.

The production of zinc ore has declined from 75,000,000 pounds for the first 11 weeks in 1916 to 25,000,000 pounds for a like period in 1918; from 58,000,000 pounds in November and December, 1916, to 24,000,000 pounds in November and December, 1917. The bank deposits in Webb City alone have fallen off more than \$500,000.

Some of the business houses have been closed, and the business men of the district are making no money. The situation will become worse, because many of the miners working in the Oklahoma field are now still living in Webb City, because of cheaper rents.

That every citizen may have the information, a list has been prepared, showing the names of the mills that were in operation 12 months ago, which have now either been closed down or dismantled and moved away. The list is as follows:

Name of plant.	Operating or closed down.	Mills moved or dismantled.
Oronogo Circle.....	Closed down.....	Dismantled.
Oronogo Mutual.....	Operating.....	
Unity.....	do.....	
O. & M.....	Closed down.....	
D. C. & E. No. 4.....	do.....	
D. C. & E. No. 2.....	do.....	
D. C. & E. No. 1.....	do.....	
Star.....	do.....	
Providence.....	do.....	
John L.....	do.....	
Little Princess.....	do.....	
Genesee.....	do.....		Moved.

Name of plant.	Operating or closed down.	Mills moved or dismantled.
Wingfield.....	Closed down.	Moved.
Bertha A.....	Operating.	
Osceola.....	Closed down.	
Mercantile No. 1.....	do.	
Mercantile No. 4.....	do.	
Imperial.....	do.	
Hurry Up.....	Operating.	
Ice Plant No. 2.....	do.	
Ice Plant No. 1.....	Closed down.	Do.
Electrical.....	do.	
Media.....	do.	
Van Hoose.....	do.	Dismantled.
Meadville.....	do.	Moved.
Mont B.....	do.	
Chapman Bros.....	do.	Do.
Schoolhouse.....	do.	Dismantled.
Yale.....	Operating.	
Ben Franklin.....	do.	
Nearby.....	Closed down.	Moved.
Cisco.....	do.	Do.
Ramage No. 4.....	do.	Do.
Orange.....	Operating.	
Concord.....	Closed down.	
Old Virginia.....	do.	
Zinc Fields M. & M. Co.....	do.	Do.
American Z., L. & S. Co., No. 3.....	Operating.	
American Z., L. & S. Co., No. 4.....	do.	
Continental.....	Closed down.	
Kirkwood.....	Operating.	
Twin Cities.....	Closed down.	
Red Bird.....	do.	Do.
Franklin (Prosperity).....	do.	Do.
National No. 1.....	do.	
National No. 2.....	do.	Do.
National No. 3.....	do.	
Queen Esther.....	do.	Do.
Shinley.....	do.	Do.
Tom C. No. 4.....	Closed down.	
McDonald Bros.....	do.	Moved.
Cobler.....	do.	
Cumberland No. 2.....	do.	Do.
Cumberland No. 1.....	do.	Do.
Dixie.....	Operating.	
Lucky Budge.....	Closed down.	Dismantled.
Arkansas.....	do.	Moved.
McDonald Mining Co.....	do.	Do.
Cygni.....	do.	Do.
Corona.....	do.	
Milan.....	do.	
Jasper County L. & M. Co.....	do.	Do.
Eleven O'clock.....	Operating.	
Gibson Mining Co.....	Closed down.	
What Cheer.....	do.	
Coahulla No. 1.....	do.	
Coahulla No. 3.....	Operating.	
Vocle.....	do.	
Barnett No. 2.....	Closed down.	
Porto Rico Mining Co.....	do.	
Fidelity.....	do.	
Mahatma.....	do.	Do.
Old Fort.....	do.	
Owasa.....	do.	
Athletic.....	Operating.	
O. F. & L.....	Closed down.	
Gopher.....	do.	Do.
Evans-Hall-Boy.....	Operating.	
Scott Mining Co.....	Closed down.	
Onamena No. 4.....	do.	Do.
Onamena No. 3.....	do.	
Onamena No. 2.....	do.	
Crown Point.....	do.	Do.
Birch Mining Co.....	do.	
St. Regis.....	Operating.	

Statement showing the falling off in the production of zinc ore in the Webb City-Carterville district, including Duenweg, Oronogo, and the Alba, Neck City, Purcell camps, for the first 11 weeks in the years 1916, 1917, and 1918.

Production:	Pounds.
1916.....	75,036,933
1917.....	61,916,767
1918.....	25,028,020

Comparative statement showing the production of zinc ore in the Webb City-Carterville district, including Duenweg, Oronogo, and the Alba, Neck City, Purcell camps, for the months of November and December, 1916 and 1917.

Production, November and December:

	Pounds.
1916.....	57, 626, 952
1917.....	24, 563, 920

Vast importations responsible for the above conditions.—There is a reason for the above condition. The disaster which has overtaken the district is directly traceable to the vast importations of zinc ore in the years 1915, 1916 and 1917. In 1915 the importations were 158,852 tons; in 1916 they were 385,964 tons; in 1917, 211,596 tons, or a total of 756,312 tons. Is it any wonder that our own ore remains unsold in the bin? Is it any wonder that with this vast amount of cheap ore coming in from China, Australia, Mexico, Italy, Spain and a dozen other countries, that the price of zinc ore is now reduced to a point where it can no longer be profitably produced in this district? The Oklahoma field is also beginning to show the effect of this condition. It is coming upon them.

Congress must remedy the situation.—This vast importation of 756,312 tons has flooded the market with surplus spelter and ore. Importations from all countries save Mexico and Canada are now practically shut off by reason of the fact that ships are used for other purposes, but after the war closes or these ship bottoms are released we will once more be overwhelmed.

Importations must be stopped. America can produce all the zinc ore it needs. An urgent appeal must be made to our Representatives from Missouri in the Senate and in Congress. Most of the zinc used in war munitions is made from the high-grade zinc ore of the Webb City-Carterville district. That production has already been lessened 75 per cent. With the cutting off of the production of this zinc and the closing of the mills also comes the cutting off in the production of lead. Surely, as a war measure, Congress should give this district immediate relief by the imposition of a tariff of 2 cents per pound upon the metallic content of ore. Such a bill if passed would raise the price of zinc ore \$10 a ton in a week's time. If the smelters knew they couldn't get the ore without paying the tariff, the price would go up immediately.

ZINC ORE COMMITTEE OF THE
SOUTHWEST MISSOURI MINE SAFETY AND
SANITATION ASSOCIATION.

ALL MINES IN THESE CAMPS NOW IDLE EXCEPT TWO.

When the foregoing appeal was made to Congress in April, 1918, 18 mines in these Missouri camps were in operation; now, all but two have closed down.

Fifty per cent of all the mines of the entire Joplin district are now closed down. This includes all zinc mines in Missouri, Kansas, Oklahoma and Arkansas.

The zinc industry of the Joplin district employs from 12,000 to 15,000 men, with an invested capital of \$50,000,000.

If the dye industry is worth building up, the zinc industry is worth saving.

Recognizing the urgency of the necessity of securing immediate relief, the workmen of the district have passed the following resolutions:

Resolution favoring the passage of the zinc ore tariff bill.

Whereas it has come to the knowledge of the members of the Workingmen's Protective Tariff League that Congressman I. V. McPherson of the fifteenth congressional district of Missouri, has introduced the following bill into Congress at Washington, D. C., to wit:

"Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That on and after the day following the passage of this act there shall be levied, collected and paid upon the metallic contents of all zinc ore imported from any foreign country into the United States or any of its possessions a tariff of 2 cents per pound."

Resolved by the Workingmen's Protective Tariff League, with headquarters at Joplin, Mo., in meeting assembled, That we express our emphatic approval and indorsement of the said zinc ore tariff bill, and instruct the officers of this league to convey to Mr. McPherson our hearty congratulations on his having introduced said measure and assure him that the working people of this district do approve of his wise action in having introduced said bill and pledge to him our support and assistance in having the bill enacted into law.

Unanimously adopted May 30, 1919.

Respectfully submitted,

WORKINGMEN'S PROTECTIVE TARIFF LEAGUE.

ZINC MINING INDUSTRY OF JOPLIN DISTRICT.

STATEMENT OF E. B. HOWARD (DEMOCRAT), A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OKLAHOMA.

Mr. HOWARD. Mr. Chairman and gentlemen of the committee, I am here to urge upon your committee a favorable report upon this resolution, because I am convinced that it is one of our American industries which can be properly called a "war baby" and entitled to the protection and preservation to which such industries as the dye industry and potash industry are entitled.

Mr. Ewert and others have explained to you fully the conditions through which these industries have passed since the beginning of the war and have brought out to you fully the facts that previous to the war the greater per cent of these products which were placed upon the market throughout the world were produced and smelted in Germany and Belgium and that, in fact, up to that time there was only a local market for American-produced ores of this nature. They have also pointed out to you that by reason of the war and the taking over by Germany of that part of Belgium which produced this spelter there suddenly arose a great demand for these minerals, with the result that the price of same was greatly increased, and that by reason of this and the patriotism of the citizens of the United States in various parts of the country production was increased until at the time of the signing of the armistice the lead and zinc industry had become a very important one in this country. By reason of this condition many people throughout the entire nation have invested their money in lead and zinc property, and I have no doubt your committee will agree with me that this industry is indeed one of our war industries which is entitled to protection and preservation.

To be more concrete, however, I desire to call your attention to the condition of this industry in Ottawa County, Okla. Previous to the war period there was a small production of lead and zinc in this community. Immediately upon the beginning of the war and the subsequent raise in price of these products, hundreds of companies and individuals set about in this district to exploit and develop lead and zinc property. The result is that there are now in existence in this county more than 200 mills and mines. Much money was expended in the development of these, with the result that during the war period, with prices that would justify the mining of these minerals, business was placed upon a staple basis. Immediately after the signing of the armistice, however, through manipulation and the importing into this country of zinc ores mined in Mexico with cheap peon labor, the industry of producing lead and zinc ores in this community was entirely paralyzed, with the result that to-day not more than 28 per cent of the mines in this district are in operation, and can not be placed again in operation until such steps are taken to preserve them and protect them from the cheap labor of Mexico, and the possible cheap importation of these minerals from Germany and Belgium in the near future.

This industry having been practically built up in this country by reason of war conditions, and as people having, from a pecuniary and especially from a patriotic standpoint, developed these mines to their limits in order to furnish these minerals to our Government at a time when it was much needed, I have no hesitancy in supporting a measure at this time placing a duty upon the importation of these minerals into this country sufficient to put our American mines upon an equal footing with those of other countries.

Another point in connection with these mines in Oklahoma to which I desire to call your attention is the fact that practically nine out of ten of the lead and zinc mines located in Ottawa County, Okla., are located upon what are known as restricted Indian lands. With the present price of ore none but the richest veins in this field can be utilized, and I fear that the result of the present conditions is that these companies operating upon restricted Indian lands, over which the Government assumes the position of guardianship, are only able to mine and place upon the market the very richest part of the veins contained in these lands, and are, no doubt, by reason of the low price of these metals, being forced to leave in the ground under these restricted lands much valuable metals that could and would be mined if the price of the metal was such as to justify so doing. Consequently, it is the duty of the Government, as we have assumed guardianship over these properties (many of which guardianships, I am frank to admit, should be immediately abandoned), to take any and all steps necessary to properly protect this property and secure for the owners and operators the largest possible returns, especially in view of the fact that, peculiar to the business of mining for lead and zinc, after these properties have been mined and when the lead and zinc deposits are exhausted, it will be found that the mining of same has practically ruined and condemned these lands for agricultural purposes.

In view of these conditions and many more arguments in favor of this bill which I might present more in detail, I urge upon this committee immediate and favorable action so that this industry may again be placed upon a staple basis, and that in my district we may be able to open the mines and mills that are now standing idle and

thereby open avenues of employment for our returning soldiers, who will need every aid we can lend them when they return to civil life.

Average monthly price of zinc blend ore at Joplin, Mo.

(Price of 2,000 pounds of ore in producers' bins.)

Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	12 months.
1896..	\$24.00	\$23.50	\$23.00	\$23.00	\$21.50	\$21.00	\$21.50	\$21.00	\$20.00	\$20.50	\$23.50	\$25.50	\$22.33
1897..	22.12	21.50	21.00	21.12	21.60	21.87	22.50	22.50	22.02	22.75	23.50	24.25	22.23
1898..	23.00	23.50	23.00	24.62	25.50	28.50	28.00	28.37	31.00	33.70	34.25	37.00	28.44
1899..	32.25	43.37	43.40	51.50	50.50	45.50	44.20	45.00	43.75	43.50	35.00	39.00	38.54
1900..	30.25	29.36	28.45	28.42	26.92	25.00	24.23	25.67	24.25	24.25	24.45	25.40	26.50
1901..	23.73	23.96	23.70	24.58	24.38	24.22	24.68	23.88	22.82	21.63	20.15	28.24	24.21
1902..	26.75	27.00	28.00	28.85	20.23	34.10	34.37	32.50	33.58	33.58	32.10	29.25	30.73
1903..	34.50	32.50	35.75	37.75	36.00	35.50	33.00	36.00	34.40	34.40	30.75	30.00	34.44
1904..	32.12	34.00	36.00	36.40	34.63	32.62	35.00	37.00	40.40	40.00	44.25	46.13	37.40
1905..	51.94	53.65	47.40	43.93	43.74	40.75	43.00	50.24	43.80	49.37	50.37	44.67	47.40
1906..	49.33	49.25	45.60	44.00	41.50	44.20	43.88	44.38	40.20	42.50	44.43	44.55	44.82
1907..	40.90	48.30	49.75	40.25	46.90	47.00	40.86	44.58	41.00	41.75	38.60	31.50	44.38
1908..	35.00	35.17	34.32	34.19	33.57	32.05	30.77	34.07	34.41	33.37	35.84	38.66	34.40
1909..	38.87	34.89	35.77	30.05	38.20	42.21	42.66	40.19	46.37	47.80	49.40	47.81	42.20
1910..	40.56	40.12	42.81	41.17	39.89	30.98	38.25	38.96	41.01	42.16	44.30	31.89	41.47
1911..	40.72	39.59	39.85	37.62	37.46	38.27	39.08	41.14	39.70	41.83	43.03	42.50	40.20
1912..	43.47	46.58	49.72	46.77	53.98	55.20	58.05	55.30	58.04	57.31	55.21	54.10	53.58
1913..	52.22	44.34	44.62	40.92	41.76	40.30	40.88	44.54	44.30	40.07	39.99	37.50	42.62
1914..	39.71	41.15	38.54	30.75	30.68	39.41	35.58	41.02	41.33	38.46	41.13	44.95	39.43
1915..	51.01	65.93	62.73	56.03	69.42	101.84	104.14	79.87	78.49	81.72	97.85	92.64	78.47
1916..	99.82	108.90	99.10	106.45	90.14	74.26	67.72	59.11	50.50	64.34	85.41	87.20	83.26
1917..	74.87	82.78	82.83	71.35	75.44	74.18	69.77	70.00	68.94	64.80	60.74	61.12	70.52
1918..	57.02	55.00	50.14	42.10	47.79	52.08	54.81	53.30	53.18	54.70	56.20	44.60	51.68

Imports of zinc ore and calamine (dutiabie), years ending June 30, 1914-1918.

[From Commerce and Navigation, 1918, compiled by Bureau of Foreign and Domestic Commerce, pp. 289-290.]

Imported from--	1914	1915	1916	1917	1918
Europe:					
France--					
Tons.....			3,468		
Pounds.....			2,843,103		
Value.....			\$56,542		
Italy--					
Tons.....			11,462	4,487	5,285
Pounds.....			10,815,656	5,000,000	4,822,400
Value.....			\$360,663	\$181,507	\$117,271
Norway--					
Tons.....		5			
Pounds.....		4,200			
Value.....		\$84			
Spain--					
Tons.....			34,142	29,022	
Pounds.....			32,011,720	20,310,942	
Value.....			\$1,051,315	\$759,951	
United Kingdom--England--					
Tons.....					5
Pounds.....					3,500
Value.....					\$42
North America:					
Canada--					
Tons.....	9,773	9,447	17,953	15,243	15,379
Pounds.....	8,689,926	8,178,643	16,185,251	11,080,050	12,601,278
Value.....	\$143,788	\$143,191	\$419,040	\$382,117	\$413,516
Central American States--					
Costa Rica--					
Tons.....	5		1		
Pounds.....	2,525		311		
Value.....	\$63		\$17		
Guatemala--					
Tons.....			540	83	
Pounds.....			480,000	74,080	
Value.....			\$17,090	\$2,617	
Salvador--					
Tons.....				34	
Pounds.....				7,677	
Value.....				\$232	
Mexico--					
Tons.....	8,493	39,651	98,239	155,023	77,825
Pounds.....	5,789,485	30,729,461	69,610,518	108,317,379	57,343,642
Value.....	\$107,553	\$935,929	\$4,661,803	\$4,239,958	\$1,661,487

Imports of zinc ore and calamine (dutiable), years ending June 30, 1914-1918—Cont'd.

[From Commerce and Navigation, 1918, compiled by Bureau of Foreign and Domestic Commerce, pp. 289-290].

Imported from—	1914	1915	1916	1917	1918
South America:					
Argentina—					
Tons.....					110
Pounds.....					123,200
Value.....					\$2,559
Chile—					
Tons.....					2,182
Pounds.....					2,297,316
Value.....					\$49,560
Colombia—					
Tons.....	9		2	13	
Pounds.....	2,860		1,481	10,940	
Value.....	\$75		\$120	\$268	
Peru—					
Tons.....			113	52	
Pounds.....			74,751	32,946	
Value.....			\$4,657	\$2,720	
Asia:					
China—					
Tons.....		2,625	3,778	67	
Pounds.....		2,789,640	4,597,610	58,228	
Value.....		\$70,807	\$189,626	\$660	
East Indies—French—					
Tons.....			1,476		
Pounds.....			1,491,114		
Value.....			\$55,407		
Hongkong—					
Tons.....		2,625		4,773	
Pounds.....		2,686,780		4,480,840	
Value.....		\$49,106		\$154,000	
Japan—					
Tons.....			1,222		
Pounds.....			997,780		
Value.....			\$77,899		
British Oceania:					
Australia—					
Tons.....		25,461	110,668	48,155	1,448
Pounds.....		22,200,696	113,451,986	46,474,494	1,578,675
Value.....		\$619,023	\$3,450,568	\$1,595,079	\$50,033
New Zealand—					
Tons.....				2,913	
Pounds.....				1,888,051	
Value.....				\$105,880	
French Africa:					
Tons.....			2,200	2,912	
Pounds.....			2,304,717	2,655,767	
Value.....			\$73,664	\$121,935	
Total.					
Tons.....	18,280	79,814	291,264	262,707	102,234
Pounds.....	14,494,802	66,649,420	254,865,998	206,397,423	73,770,011
Value.....	\$251,479	\$1,818,140	\$10,425,111	\$7,596,930	\$2,499,468
RECAPITULATION.					
Europe:					
Tons.....		5	49,072	33,509	5,290
Pounds.....		4,200	45,070,479	31,316,942	4,825,900
Value.....		\$84	\$1,474,520	\$941,458	\$117,313
North America:					
Tons.....	18,271	49,098	116,733	170,383	93,204
Pounds.....	14,491,636	38,908,104	80,276,080	119,479,186	69,944,920
Value.....	\$251,404	\$1,079,120	\$5,098,850	\$4,074,924	\$2,280,003
South America:					
Tons.....	9		115	65	2,292
Pounds.....	2,860		76,232	43,895	2,420,516
Value.....	\$75		\$4,777	\$2,968	\$52,119
Asia:					
Tons.....		5,250	6,476	4,830	
Pounds.....		5,476,420	7,086,504	4,539,088	
Value.....		\$119,913	\$322,632	\$154,666	
Oceania:					
Tons.....		25,461	116,668	51,008	1,448
Pounds.....		22,260,696	113,451,986	48,262,545	1,578,675
Value.....		\$619,023	\$3,450,568	\$1,700,959	\$50,033
Africa:					
Tons.....			2,200	2,912	
Pounds.....			2,304,717	2,655,767	
Value.....			\$73,664	\$121,935	

Tons represent gross weight; pounds represent zinc contents.

Production, consumption, imports and exports of zinc ores and spelter from 1902 to June 30, 1919.¹

	American spelter production.	Spelter made from foreign ores.	Consumption of spelter.	Surplus stock spelter.	Foreign ore imports in tons.	Contents in tons metal.	Reexports of metal in ore in pounds.
	Tons.	Tons.	Tons.	Tons.			
1902.....	156,027		152,682	3,361			
1903.....	157,219		154,381	6,880			
1904.....	² 186,702		180,911	2,803	2,264		
1905.....	² 203,849		200,438	1,268	22,137		
1906.....	199,694	25,070	220,781	3,824	55,414		
1907.....	233,745	26,115	220,609	20,264	103,117		
1908.....	190,749	19,075	214,167	19,613	53,757		
1909.....	230,225	25,535	270,730	11,167	114,850		³ 655,102
1910.....	252,479	16,705	245,884	23,201	72,626	25,439	³ 9,420,184
1911.....	271,621	14,905	280,059	9,081	39,116	15,933	22,552,000
1912.....	323,707	14,899	340,341	4,522	43,940	17,567	12,572,000
1913.....	337,252	9,424	295,370	40,659	31,416	13,497	12,054,000
1914.....	343,418	9,631	299,125	20,095	31,962	12,132	11,160,000
1915.....	458,135	31,384	364,494	14,233	158,852	57,669	25,550,000
1916.....	607,204	104,005	458,428	17,578	385,064	148,147	86,460,000
1917.....	584,597	84,070	413,643	53,721	211,575	73,474	129,360,000
1918.....	492,405	25,522	424,530	41,241	70,702	24,809	37,802,000
1919 ⁴	247,584	7,918	159,601	59,651	18,570	6,318	19,240,000

	Spelter imports for consumption in pounds.	Foreign spelter re-exported in pounds.	Foreign spelter re-exported in manufactures with benefit of drawback in pounds.	American spelter exports in tons.	American ore exports in tons.	American zinc dross exports in tons.	Value American zinc manufactures exported.
1902.....	673			3,237	55,733		\$114,107
1903.....	494			1,521	39,411		71,354
1904.....	394			10,147	35,011		117,957
1905.....	528	38,753		5,516	30,940		159,985
1906.....	1,122	2,779	4,469	4,070	27,720	15,887	204,269
1907.....	1,883	17,458	3,110,239	563	20,352	0,573	180,203
1908.....	850	16,748	2,408,305	2,640	26,108	8,405	8,485
1909.....	9,774	12,569	610	2,566	12,455	7,009	69,751
1910.....	1,317	94,672	8,972,427	3,970	19,711	4,724	101,336
1911.....	723	915,823	5,788,429	6,872	18,281	4,240	134,518
1912.....	11,534		2,438,000	6,634	23,340	203	140,027
1913.....	5,663		14,918,000	7,783	17,713	28	145,184
1914.....	830		9,162,000	64,807	11,110	2,535	210,974
1915.....	904		510,000	118,603	782	4,167	2,173,089
1916.....	684			163,137	78	48	
1917.....	250		3,176,000	153,796	1,320	13,302	
1918.....	35		13,536,000	80,243	62	15,816	
1919 ⁴	45		7,454,000	64,283		5,010	

¹ From reports of the United States Geological Survey on mineral resources of the United States.

² Includes some foreign spelter.

³ After Aug. 6, 1919.

For first six months of 1919.

Zinc statistics, 1914-1919, by 6-month periods, in short tons.

[Prepared by C. E. Siebenthal, U. S. Geological Survey.]

	1914		1915		1916		1917		1918		1919
	First half.	Last half.	First half.	Last half.	First half.	Last half.	First half.	Last half.	First half.	Last half.	First half.
Supply:											
Stock at beginning of period.....	40,659	64,039	20,095	5,884	14,253	23,879	17,598	33,147	53,721	44,502	41,241
Production:											
From domestic ore.....	171,496	171,922	207,634	250,501	267,696	295,755	311,539	273,058	242,976	249,429	247,584
From foreign ore.....	3,562	6,069	8,898	22,487	48,756	55,249	49,599	35,377	14,287	11,235	7,918
Imports (mostly scrap).....	506	374	489	415	464	220	136	121	31	4	45
Total available.....	216,223	242,404	237,116	279,284	331,109	375,103	378,872	341,703	311,015	305,170	290,788
Withdrawn:											
Exports from warehouse.....	167	5,413	5,704	7,071	20,197	23,033	31,180	33,500	12,521	6,390	9,620
Exports under drawback.....	1,881	3,100	255	.....	.....	.....	.....	1,588	1,851	4,917	3,727
Domestic exports:											
Slabs.....	821	63,983	64,368	51,235	52,544	93,090	85,578	51,704	31,559	31,809	52,989
Sheets.....	.....	.....	.....	.....	5,463	7,040	7,685	8,829	5,712	8,163	11,300
Stock at end of period.....	64,039	20,095	5,884	14,253	23,879	17,598	33,147	53,721	44,502	41,241	59,651
Total withdrawn.....	66,911	92,591	76,211	75,559	102,083	145,701	157,690	149,342	99,145	92,510	137,287
Apparent consumption.....	149,312	149,813	160,905	203,727	229,026	229,342	221,282	192,361	211,870	212,660	159,501
Zinc smelted in:											
Arkansas.....	.....	.....	.....	.....	.....	7,503	12,476	13,184	11,773	14,080	14,029
Illinois.....	62,062	65,884	74,982	84,076	90,082	91,351	95,149	77,310	69,672	72,172	61,701
Kansas.....	23,737	20,773	35,217	60,176	74,592	60,694	42,359	33,689	12,803	16,316	22,034
Oklahoma.....	45,443	45,924	51,172	58,036	73,298	94,908	109,130	95,264	69,157	69,909	65,272
Pennsylvania.....	13,752	14,343	18,828	25,339	34,593	41,652	44,052	42,943	39,133	38,209	37,108
Other States.....	30,064	31,067	30,303	38,208	42,190	40,064	40,359	38,419	35,273	29,584	32,147
Electrolytic zinc.....	.....	.....	.....	252	1,697	8,532	17,613	7,596	19,452	19,464	23,211
Total primary zinc.....	175,058	177,091	216,532	272,987	316,452	351,001	361,138	308,435	257,263	260,664	255,502
Redistilled secondary zinc.....	10,113	10,432	13,546	16,218	9,924	19,739	42,145	4,690	3,585	6,333	7,328
Total.....	185,171	189,423	230,078	289,205	326,376	370,743	373,283	313,125	260,848	266,997	262,830
Yearly total.....	373,594	.....	519,283	.....	697,119	.....	684,408	.....	527,845	.....	.....
Grade A (high grade).....	19,385	.....	54,056	.....	73,405	.....	97,707	.....	66,210	63,134	30,154
Grade B (intermediate).....	32,076	.....	69,751	.....	94,825	.....	69,189	.....	39,122	29,865	25,802
Grade C (select and brass special).....	68,551	.....	93,131	.....	100,875	.....	148,749	.....	42,485	56,099	43,481
Grade D (prime western).....	253,582	.....	302,345	.....	428,014	.....	370,763	.....	113,031	117,899	163,393
Total.....	373,594	.....	519,283	.....	697,119	.....	686,408	.....	260,848	266,997	262,830
Zinc ore imported.....	0,052	22,910	66,683	92,169	231,845	151,119	142,180	69,115	45,086	25,816	18,570
Zinc content of imported ore.....	2,949	9,183	23,997	33,672	93,907	51,210	48,958	23,516	15,820	8,989	6,314
Zinc ore exported.....	8,042	3,068	627	155	33	45	35	1,285	62	.....	.....
Zinc dross exported.....	286	2,249	2,832	1,235	28	20	5,236	8,066	7,576	8,240	5,010
Total number of retorts at end of period.....	.....	115,114	130,512	156,568	196,610	219,418	224,778	220,060	176,098	170,526	158,988
Total number in operation at end of period.....	.....	94,500	129,000	155,000	177,500	201,500	189,500	132,750	107,500	123,500	82,000

**STATEMENT OF PHILIP P. CAMPBELL, A REPRESENTATIVE
IN CONGRESS FROM THE STATE OF KANSAS.**

Representative CAMPBELL. Mr. Chairman and gentlemen of the committee, just a word. I represent one of the districts affected by the general depression that exists in the zinc industry. All told there are 225,000 people affected by this. They are all Americans and all live on American standards. These people have raised their families, sent them to school and college. It is needless to say that the whole district is now in a very disorganized condition. That is true because of the large importations of ores. In the first place it is proper to say that no one great industry controls the production in this district. There are hundreds and hundreds of ore producers, all with ore on the dump on Saturday, ready for the ore buyers, and the ore buyer comes to these men having this stuff for sale. The men are there with their products to sell it at the very best price they can get. They desire to have enough to pay their laborers and their expenses and make a living for themselves. To-day, it costs \$56 a ton to produce ore in that district. This condition applies both in the Galena District and the Baxter District in Kansas. But the ore buyer goes to the people holding ore and makes them an offer. The ore buyer says, "If you will not take \$43 a ton, we will simply get it in from Mexico." Under this condition the miners are forced to sell their ore at less than production costs in that district.

The industry sustains these 225,000 people. They have nothing else. It is a one-industry section of the country. Not far removed from there we have the smelters. We have the smelters in my district. The ore buyer can go—not now so much, but heretofore—the ore buyer can go through the various ore districts abutting the Joplin District to buy their ore, and as I have just said, they always hold up the price of Mexican ore to depress the price of ore in our own section of the country. The matter is vital at this time for two reasons. First of all the matter as referred to by Mr. Ruhl is this, that when a mine is closed it fills up with water, and the longer that water stands the more expensive it eventually becomes to drain the mines. The water in the mine becomes acid and the pump, that is, an ordinary pump, will not take it out. This acid water will eat up an ordinary pump in a short time, and in consequence of this, it is necessary to have unusual lining provided in each pump for getting the water out of the mine. It is important on that account, and then it is also important because of the gradual decrease in the output of our own mine, and the gradual closing down of mine, and the gradual dispersing of labor that is going on there, and if we have to wait in that district for the general division of the tariff, which will occur probably after the election, as Senator Thomas of Colorado has stated, it will come too late for many in that district. There are other industries that are similarly affected. I doubt if there is another industry as is as much affected as is the zinc industry at this time, because of the importations of ores from other countries. If anything can be done, and I think it can be, it should be done now, even if we do not get a recess.

Senator GORE. Perhaps Mr. Howard, the Congressman from the Oklahoma district would like to make a brief statement.

Mr. HOWARD. I would like to make a statement for two or three minutes.

Senator WATSON. Before you say anything, Congressman, is that all that you care to have heard before the committee?

Representative CAMPBELL. Mr. Sparks, one of the producers of zinc ore, a miner, just wishes a word.

Mr. SPARKS. The reason that the mines that have been running can do so, is that they have lead to help them out. About one out of five have lead which is helping them out. If it was not for lead, now—I am just breaking even—I would not be able to keep our mine at work. Those that are running have lead or they could not run.

**STATEMENT OF HON. E. B. HOWARD, A REPRESENTATIVE
IN CONGRESS FROM THE STATE OF OKLAHOMA.**

Representative HOWARD. Mr. Chairman and gentlemen of the committee, my section of the country is more affected than any other section. I supported this measure before the Ways and Means Committee of the House and on the floor of the House, not because it is a protective tariff measure but because it is a necessary equalization measure and extends to American industries the protection to which they are entitled. I believe the figures presented by Mr. Ruhl and others will demonstrate to you that in order to equalize this American industry at least 2 cents a pound tariff is necessary.

Referring to Senator Gore's question as to one condition that has developed, I want to say that in Oklahoma there was very much the spirit of a fear that if we did not give our Government our best production we might run out of lead to deliver to the Germans through our guns, and this inspired us to open up these mines at a considerable expense.

As to the other proposition, with which Senator Curtis is familiar, in Ottawa County, Okla., there are over 200 mills that are located on Indian lands which are under the supervision of the Government. We pay a royalty and a bonus, sometimes amounting to 25 per cent, and as a result of the low price of ore at this time, and as a result of keeping these mines running, owing to water conditions, it is necessary that some of these people take out of these mines only the very richest ore. Through these importations of Mexican ore our Indian wards are losing thousands of dollars in low-priced metals that could be brought to the service.

Senator WATSON. Will those ores be lost forever?

Representative HOWARD. Yes, sir; the loss is that in operating these mines the value of them is practically destroyed.

One other thing that our miners have to contend with right now is the lack of cars. We know that condition. First they are compelled to meet the price of Mexican ores, and even when they get this market for the ores it is impossible to get cars to deliver them. I want to say that the miners are in a position where they need this 2 cents a pound tariff, and they need it in order to keep a great American industry going.

Senator WATSON. Now, gentlemen, I do not know when we can give you another hearing, unless there is some special reason for doing so.

**STATEMENT OF ISAAC V. McPHERSON, A REPRESENTATIVE
IN CONGRESS FROM THE STATE OF MISSOURI.**

Representative McPHERSON. I represent the fifteenth congressional district of Missouri, and introduced this bill in the House. The bill as I introduced it provided for a duty of 2 cents per pound. That amount of protection is necessary. The figures that have been put in the record show that the Payne-Aldrich Act, carrying the zinc rate that the House committee adopted at 1 cent, even in these times, were not sufficient as against the principal competitor. Mexico is a competitor that makes this industry require this protection. At the time the Payne-Aldrich law was enacted no data had been collected and little or nothing was known as to production costs in foreign countries.

The conditions that existed in those days are different from those which confront us now, and that 1 cent which was insufficient then will not open one single zinc mine now. A tariff will be of no benefit if we do not have 2 cents a pound, because the idea would prevail in the minds of our people that it was not a practical business to open the mines. If Congress only gives the 1 cent a pound tariff that is provided in the House bill, or gives us less than 2 cents, the people will conclude that this method of reviving the industry is not a practical or a wise one, and they will go into some other business, and the mines consequently must have protection if they are to exist. Unless we get this needed protection, this zinc industry, which is an absolute necessity for the prosperity of our people, and in times of war absolutely necessary to our Government in the manufacture of munitions, this industry will pass into foreign hands.

Senator WATSON. Congressman McPherson, nobody said anything about lead. Are they kindred?

Representative McPHERSON. They are kindred, but they are not covered in that bill. Lead is at a fair price. It perhaps needs some protection, but it is not an emergency matter like zinc. The mining of lead is going on and will go on, but this industry is out of hand and can not be revived except in some way that will make it possible to introduce new life.

There is \$250,000,000 of capital connected in mining the ore, and you have heard how many have been driven out of business. They have been driven out of business by reason of the fact of the importations, and also from the new discoveries that have been made. Zinc was at unknown prices during the war, and the consequence was that vast quantities of ore were opened up. New deposits of ore have been located and ore is coming from Japan, China, Canada, and Australia, and we must have a duty that is strong enough to induce the capital to unwater these mines that were shut down on account of the losses sustained. If you gentlemen will examine these figures, you will all realize that they are taken from reliable data, and I am certain that you will conclude that not less than 2 cents a pound will afford sufficient protection so that the capital employed in this industry will be induced to reembark in mining.

Senator WATSON. The committee will now adjourn, subject to call.

(Thereupon, at 11.55 o'clock a. m., the committee adjourned to meet at the call of the chairman of the subcommittee.)