Mining in the Philippines

(Speech delivered to the American Mining Congress in Los Angeles on October 25th. Reprinted from the Manila Daily Bulletin.)

By John W. Haussermann

It is a pleasure for me to appear before this body of outstanding mining executives whose operations, generally speaking, are so much larger than our more limited mining operations in the Philippines, and I welcome the opportunity to tell you something of our mining industry and the problems connected with it. I want you to understand from the start that I speak only from my experience as a mining executive. I am not a mining engineer, nor am I familiar with the ordinary operating problems that beset all mines such as, difficult ground, heavy water flows, geological problems and so forth. I am assuming that you are interested more in the Philippine mining industry insofar as it differs from your own.

One of the great differences, I should say, is that the mining industry of the Philippines was started by men who were not miners. The first prospecting was done by venturesome soldiers who, during their service in the Philippines at the time of the Spanish-American War, heard tales of gold mines back in the hills and decided to take their discharge from the army in the Philippines in order that they might be free to go back into those hills in an attempt to make a fortune for themselves.

Darned clever, these Igorotes

Their prospecting was done, not as it has been done here in the United States by actually searching for outcrops of goldbearing veins, but by living with the natives and gaining their confidence to the point where these natives were willing to show the prospector their mines, both active and abandoned. This was entirely in accordance with the philosophy of the hill people whom we know as Igorots. They believe that a mineral deposit is a sort of a community proposition, as far as the individual tribe is concerned, and that anyone may work it who will, provided he belongs to the community. They tolerate no intruders from other tribes. The accepted formula for prospecting, therefore, was to first find a grubstaker and then take up residence in an Igorot community, preferably one where the natives were wearing gold ornaments, find out the location of the native mine workings and then cover the same by a location under the newly established mining law. It is a fact that with only one or two excpetions, all of the gold deposits now known in the Philippine Islands were already known at the time of the American occu-

pation and, in the country where the Sna. nish had control, were already covered by Spanish "denuncias". One of these districts was what is now known as the Baguio district. At that time it was called Antamok, the district in which our mines happen to be located and with which I am consequently most familiar. There, the early American prospectors found the Igorots actively engaged in shallow mining operations. They had attained a degree of expertness in their mining which was remarkable and had a nose for gold which resulted in their discovery of practically everything of any value. In our subsequent mining operations we have connected with some of their old stopes and have found modified square sets there probably several generations old which would do credit to any of our American miners. The only difference between these square sets and the usual square set timbering is that they were much lighter and used the mortise and tenon principle. They conducted their mining according to weird beliefs. One of these was that all of the gold should never be removed from the earth as this would incur the displeasure of the good spirits who would then refuse to place more gold there. Another was that women should never be allowed to enter the mine, although they could be utilized in the heavy work of grinding and

panning the ore on the outside. Another was that mines were revealed by the spirits. In one case, a golden deer was followed which disappeared into the hillside. At the point of his disappearance, a big mine was found.

Darned clever, these Prospectors

Strangely enough, the Igorots seem to have accepted this virtual usurpation of their mines by American prospectors, although they did not understand how such mines could be taken away from them by any law and the mere act of placing posts in the ground. The explanation probably is that the mines, having been worked for generations, were already practically exhausted. Furthermore, the Igorots, being enemies of the low land Filipinos, regarded the Americanos who were fighting the Filipinos, as their friends. This attitude exists even today. They take the position that they have never fought with the Americans and have never been conquered by them as were the Filipinos, but that they have always been friendly with the Americans and have allowed them to come into their country and stay there because of friendship.

The first claims in the Baguio district were staked in 1901 under a temporary

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mining law which permitted the staking of claims 1000 feet square. It is interesting to note that there was a denial of extralateral rights in the Philippines from the start, probably because no such rights had ever existed under the Spanish rule. Later. when the civil government took over from the military government, the standard size mining claim was changed to 300 meters square. In other respects the mining law adopted by the Americans for the Philippines has been very similar to the Federal mining law, with the notable exception that an individual was not allowed to hold more than one claim on the same vein. The impracticability of the last named provision



was discovered almost immediately and it has never been enforced. For instance, at the time of location, no one can say whether discoveries which may be much as 600 meters apart, are on the same vein or not and if it be assumed that they are not on the same vein so that both claims can be legally located, proof that they are actually on the same vein may not come about until underground development actually follows the vein from one claim into the other, by which time a great part of the ore in both claims may have been extracted and the profits derived therefrom irrevocably distributed as dividends. Rather than discourage all prospecting by a strict enforcement of this provision, which could only have been done by prohibiting the location of adjoining claims, prospectors were allowed to locate such adjoining claims in the names of others under a power of attorney and then the registered owner of the second claim was allowed to lease his claim to the prospector or his successor in interest. Such documents were filed with the mining recorder in the knowledge that if the issue were ever raised, the government itself was the only one who could raise it.

Going back to the history of the Baguio district which I started to relate to you, the claims located by the early prospectors during the period immediately following the Spanish-American War did not prosper a great deal. At that time, it was a week's journey from Manila to Baguio; there were no roads over which to transport machinery and there was very little

capital available locally. The only serious effort made was that of the Benguet Consolidated Mining Company, organized in 1903. It so happened that at that time I was a practicing attorney in the City of Manila and Mr. M. A. Clark, the organizer of the Benguet Consolidated Mining Comnany, was one of my clients. It fell to my lot to draw up incorporation papers and I might also add that I had to accept as a fee for that services, shares in the company being organized. A 60-ton mill was erected in 1906. Transportation facilities were sadly lacking: this mill had to be lowered down the hillside into the bottom of the canyon by ropes. There were no roads to the mine in those days. In 1910 this mill was partly carried away by record typhoons. The typhoons of 1911 finished the job and carried away not only the mill but the mill site. To give you an idea of the intensity of these typhoons, I might mention that during the typhoon of 1911. an all-time world record for rainfall was. I believe, established in Baguio. We had 88 inches of rain in four days, 47 inches of which fell in 24 hours. Imagine a country of very rugged topography with steep gradient canyons 1000 feet deep and then imagine that volume of water falling on such a country with an almost immediate run-off. During a typhoon of this intensity in such steep country, one literally has the feeling that the entire surface is so thoroughly saturated that it might start to flow at any time. This is one of the problems of mining in the Philippines with which you are not confronted in this coun-

At the same time, unfortunately, Mr. Clark's other business did not prosper, with the net result that these shares were hypothecated and eventually taken over by the bank. After a dormant period during which the mine was idle, the bank holding which the mine was idle, the bank holding which the mine was idle, the bank holding which the organization of the company, came to me and asked me whether I could not effect some sort of a reorganization or do something which would revive interest in the mine and consequently give the shares held by them a real value.

Tribute to C. M. Eve

After this disaster, it was more difficult than ever to obtain money to continue the operations. However, fortunately for us, the mill had operated long enought to prove to the general public that there was gold to be obtained in the Benguet mine, which to them was still an isolated spot up in the Igerot country that might as well have been in Timbuctoo.

Mr. C. M. Eye, whom many of you know, pointed this out to us and proved to us that the venture could be made a success. I must admit that Mr. Eye's faith and confidence in the property at this time, together with his ability, displayed in open-

ing further ore bodies and later designing and building a ten-stamp mill, was to a large degree responsible for carrying us through those early struggles.

Rough going at Balatoc

The mill built by Mr. Eye proved to be a turning point in the career of Benguet. By 1916 we were on our feet and paid our first dividend. Since then, Benguet dividend record has been unbroken. Up to and including the dividend paid in the nidd of the year, a total of P47,150,000.00 has been paid in dividend against an original capitalization of P1,000,000.00, which has since been raised to P6,000,000.00 by means of stock dividends. You can easily calculate what P1.00 invested in Benguet at the time of its organization or even as late, as 1915 would be worth today.

I should point out, however, that during recent years, since 1929, a part of these dividends has come from profits derived from Benguet's participation in the Balatoe Mining Company. My story would not be complete without a brief recital of the history of Balatoc. These claims were also located in the years immediately following the American occupation by oldtime prospectors, which claims covered known Igorot workings. The work was very desultory, however, and the mine had many setbacks in its early days. There was reorganization after reorganization as stockholders became disgusted and refused to put up any more money. I should mention here that under the Philippine law assessments may not be levied against capital stock. Consequently when the entire authorized capital stock of a company has been



sold and the proceeds of such sales have been spent, the company which has not been successful by that time must borrow money to continue or alternatively abandon active work if no funds can be obtained in this way. The property was, during various stages of its development, submitted to groups of local capitalists and even to some of your very prominent mining companies in this country. One of the latter went so far as to make examination of the property but turned it down. I must admit that I was one of those who at one time held an

(Please turn to page 35)

"In June of this year the Santa Rosa Mining Company petitioned the Securities and Exchange Commissioner to authorize the release of its shares held in "escrow" after our mining engineers have submitted a report to the effect that we had ore reserves worth P4.800.000. Acting upon this petition, two engineers of the Bureau of Mines were sent to our mines, to make the necessary examination of the property: they inspected all the tunnels for about fifteen days, and have taken samples personally of our ore in accordance with the regulations of said Bureau, which samples were assayed afterwards in the Government Laboratory giving an average value of P32.80 per ton, after which the engineers of the Rureau of Mines in their report submitted to the Securities and Exchange Commissioner regarding this particular, confirmed that on June 30, 1938 we had ore reserves worth P3.631.208. In view of this, the Securities and Exchange Commissioner authorized us last Saturday to release the shares of this Company held in "escrow". On the 29th of this month, the books of the corporation will be closed for transfer on the so-called "Old Santa Rosa Stock". It is requested, therefore, that all holders of the same present to the Secretary of our corporation their corresponding certificates of stock which have not yet been transferred properly in their names in the books of the corporation, so that we may execute the necessary transfer not later than October 29, 1938, and before the "escrow" shares are delivered to their owners." (50,000,000 shares)

The Balatoc . . . (Continued from page 22)

The arrangement with Benguet was made in 1927—just a year after Hausserman had arrived to close Benguet down. Benguet Consolidated agreed to spend P600,000 in putting a 10-ton mil on the Balatoc property, and got 600,000 shares of Balatoc in return—all of the shares which were still available. By 1929, the P600,000 had been repaid, and enough more so that a small dividend was distributed.

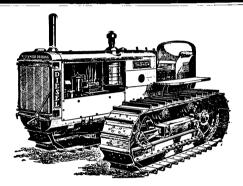
Benzuet Consolidated, the courts have decided, is not a corporation, but a sociated anonima, which existed under the old Spanish Code of Commerce, and is not bound by the provision of the law preventing a mining company from owning stock in another mining company.

Paul Gulick, who participated in the long struggle with the Balatoe property from start to finish, and who more than any other one man is responsible for its success, says that his experience has convinced him that mining is not a matter of luck. "IC's the same as nay other business", he says, "you've got to use good horse sense in mining the same as you do in merchandising, shipping, lumbering, or anything else. Luck? Sure there's luck, but there's luck in any other game." He's probably right. Certainly Benguet and Balatoc are managed today in the very best conservative business tradition. But we are curious about one thing: suppose they hadn't gone 500 yards farther up that creek?

Mining in the . . . (Continued from page 24)

option on the property and relinquished that option due to the adverse result of development. To make a long story short, in 1927 the Balatoc Mining Company, who at that time was in possession of this area of mining claims, again found itself financial-

ly unable to carry through the development of the mine. They appealed to the Benguet Company and an arrangement was finally made under which Benguet would build a 100-ton mill and carry on development of the mine at an estimated expenditure of P600,000.00. In return for the P600,000.00 so spent, Benguet was to receive 600,000 shares of Balatoc stock, the full amount of stock still available and for any expenditures beyond P600,000.00. Benguet was to be returned such amounts with 6% out of the first profits. We went at this job very energetically and by the end of the following year had completed construc-



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BAGUIO LEGASPI tion of the mill. The mill started operation in January, 1929, and by the end of 1929, Benguet had been repaid its expenditures over P600,000.00, amounting to about P900,000.00 together with interest and a small dividend was distributed.

Chromite with gold profits.

Since that time. Balatoc has never looked back. It has distributed, up to and including the June, 1938 dividend, a total of P32.100.000.00, and, at the same time, its original capitalization of \$1,000,000.00 has been increased to P6.000.000.00 by means of stock dividends. At the present time it maintains a regular production of one million pesos (\$500,000,00) a month and its mill capacity of 1,200 tons per day is being further increased to 2,000 tons per day. While I may be prejudiced of course, I believe that we have at Balatoc, an operation which will compare favorably with any in this country or in the world, for that matter, from the standpoint of efficiency and the percentage of the gross production which is eventually paid to the stockholders as dividends. This figure averages about 55% which, I am told, is an exceptionally good performance for a mine handling medium grade ore, that is, ore running \$7.00 to \$8.00 at the old value.

A few years ago, partly because I felt that Benguet, having been successful and



occupying first position among the mining companies in the Philippines, should take the lead in building up the mining industry of the Philippines, and partly due to a desire to diversify its interests in interests in order to provide additional protection for its stockholders, a decision was made to extend the scope of Benguet's operations into other fields. Due to the limitations imposed by the corporation law of the Islands which provides that a company or an individual owner holding more than 15% of the capital stock of one mining company may not own stock in any other mining company, the development of other properties was undertaken under a so-called operating contract. The basis of this contract was that Benguet assumed the position of an independent contractor and engaged to complete development, erect a mill and do whatever other work was necessary to bring the mine into production. The compensation for this was a stipulated share of the net profits after Benguet's investment had been repaid. Under such contracts, several other properties are now heing handled.

Among these are two chromite properties which I believe will interest you. One of these known as the Florannie Mine, was the first chromite deposit found in the Philippines. Some 70,000 tons of ore which will average better than 50% chromic oxide, has been shipped from this property so far. The other is known as Masinloc and is. I am told, the largest deposit of chromite in the world. This deposit forms the top of a small hill and has a roughly circular outerop about 1,000 feet in diameter. The deposit has been thoroughly developed by diamond drilling and underground workings. The exposures thus obtained, together with those of the surface, show a chromite lens of at least 9,000,000 tons in a single body. In addition to this, there is easily another 1,000,000 tons of talus and float ore around the base of the hill referred to. Unfortunately, this ore is not of the same high grade as the Florannie ore: its average chromic oxide content is about 33%. So far its principal use has been for the manufacture of refractories for which the combination of 33% chromic oxide and 30% aluminum oxide which it carries, make it particularly desirable. Lately, however, a method has been devised for utilizing this ore in the manufacture of metallurgical products. Hence, we look forward to an expansion of our business into other fields of chromite consumption at an early date.

Educating Miners

There is an interesting story in connection with the discovery of the Florannic deposit. A mining engineer happened one day to notice a native using a black whetstone for sharpening his bolo. He also noticed that the mud resulting from the sharpening operation was a chocolate brown color.

From this he surmised that the whetstone might be a niece of chromite and had the whetstone tested. It proved to be high grade chromite ore. His next problem was to learn the source of this ore. He went back and spread the word around that he was looking for "taisan," which in that particular locality is the native word for a sharpening stone. All kinds of sharpening stones were brought to him, black, white and green. Among them there was some chromite. He then asked the man who submitted these particular pieces of chromite whetstone to show him where he obtained the same and was taken back some 15 kilometers into the hills and shown considerable quantities of chromite float. The area was staked as chromite claims and eventually the principal lens, known as Landoc. was found. Since that time, the natives themselves have learned to identify chromite as such and native prospectors now search for it as they do for gold ore.

This story is an excellent illustration of one of our chief problems, that of education of native personnel in mining. Aside from a handful of Igorots in the hill promines, the Filipinos know nothing of mining. We had no skilled mining labor such as you have in this country and in Mexico. It has, therefore, been necessary for us, each time that a new mine is started, to take raw laborers who have never done anything but fish and grow rice and train them into miners, mill men, electricians, mechanics and all of the many other occupations that are necessary in a mining operation.

Boom Raide

Generally speaking, this education is an expensive process. It takes at least a year or two before a man is reasonably familiar with underground work and much longer than that to develop skilled mechanics. Eventually, however, we get some very good men. It is a great source of pleasure to me to walk through our extensive machine shops and see Filipinos turning out work on lathes, gear-cutting machines, electric welding and so forth, that is just as good as anything we receive from the factory.

This situation, I might say, introduced another problem into our operations, possibly the most serious one we have had to face. Three years ago there was a mining boom in the Philippines. New companies were coming out daily and each of these new companies had to have immediately a superintendent to sign development reports and a Filipino foreman in the field. Our companies, having developed the expert nersonnel that I have just described through years of operation, was continuously raided for expert personnel both among the American operating staff and among skilled Filipino personnel such as mine foremen, mechanics, electricians and so forth. In each case there was only a man or two concerned, hence almost any wages could be paid. The public was paying the bill anyway. These raids were so extensive that in a short time we found that a sufficient number of our key men had left to seriously affect our operations. Operating costs and accident rates started to go up. Since that time, many of these men have returned and others have been educated so that we are now back on a normal operating basis.

Cheap labor comes high.

Along with the deficiencies of training found in the ordinary Filipino laborer, there are other deficiencies which are in themselves serious problems. For instance, the average Filipino weighs probably not more than 125 pounds so that no matter how willing he may be, in many cases he is simply not physically able to do heavy underground work. Moreover, he has behind him generations of malnutrition due to a limited rice and fish dict, so that he has little stamina. We have met this problem first by issuing a daily rice ration to each of our employees, thus assuring him and his family of food, and secondly, by establishing very complete commissary stores in which our employees are given credit privileges and where they can buy. not only native foods, but all of our standard American foods. We have gradually developed in them a liking for the more strengthening foods such as we are accustomed to and a desire for a more varied and balanced diet. Accurate records of physical examinations made by our medical department show that there is a marked improvement in the general average of our laborers both in physical measurements and in resistance to disease. They will, of course, never be the equal of the American miner physically and it will always take a great many more of them to do a specified piece of work than it would here in the States, which nullifies the effect of lower wages. In spite of the much lower wages-we pay an average of about \$.95 a day-our labor costs per ton of ore are just as high as they are there.

Another problem arising out of the native worker is the psychological one. Not only his mental processes, but his whole outlook on life is entirely different from ours. He has the fatalism of the Orient which makes him mentally lazy and unmindful of danger. This same fatalism makes him an individualist in his work. He will not give a helping hand to a fellow workman in trouble nor does he expect to receive one. A man gets his car off the track for instance. Dozens of other men will walk past him without saying a word nor will he ask any of them to help him. He sees another man in a dangerous situation, under some bad ground, for instance. He will not warn him

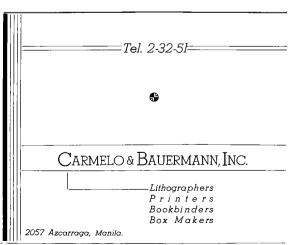
of the danger and he will not expect to be warned under similar circumstances. There is no natural cooperation whatever. This attitude led to a great many unnecessary injuries to our workmen. Gradually, however, we have developed in them an idea of team-work and cooperation and an intense interest in safety first movement. They like first aid drills and mine rescue drills, and the rivalry between teams and between different levels in the matter of safety records has become so effective that I am glad to say that our mines now show a better record than any underground mine in the United States, according to the records of the National Safety Council. Balatoc has twice passed the 500,000 man hours mark without a single lost time accident while Benguet has one such record to its credit. These records are really remarkable when you remember the difference in the mentality of the average Filipino workman as compared with the average American workman.

Another problem which can be traced to the psychology of the oriental is his utter disregard for the future. Usually, he will not save any part of his wages. If, for instance, a man is paid \$1.00 a day and it is necessary for him to work six days a week in order to support his family on that wage, a wage increase to \$2.00 would usually result not in an increased income to him but he would simply work three days instead of six days. Thus, we have the rather anomalous condition that an increase in wages results not in more contented personnel but in a large labor turnover. If left to his own devices, the average workman, rather than have any responsibility whatever as to the future, would rather work for a very low cash wage with the employer responsible for the clothing and sustenance of his family. This, no doubt, is an outgrowth of the old patron system followed during the Spanish regime.

The "clippers" are a godsend

Aside from our native labor problems which, as you can see, contrary to the general belief, tend to increase labor costs rather than decrease them, we, of coure, also have to contend with higher cost of materials due to the long ocean freight involved. Such increase in the cost of supplies, I should say, amounts of 10% of the first cost. This is not all, however. Particularly in these later years when there has been almost a continual threat of shinping strikes here on the West coast, we have been forced to carry at least a year's sunplies on hand. Furthermore, due to the time element involved in obtaining spare parts, we are forced to carry spares of large items, such as Diesel engine crankshafts, for instance, a burden which in this country would ordinarily fall on the manufacturer. Thus, we have a great deal of money, tied up in inventories. Again because of our isolated position, we cannot obtain the manufacturer's service that is made available to mine operators here. We have to look out for ourselves and be prepared to make almost anything.

In this connection, I should like to pay a word of tribute to Pan-American. Their Clipper service has been a godsend to the mining industry in the Philippines. Hereto-



fore, any drawings showing specifications so detailed that they could not be cabled. took a month to reach here. Allowing a week for reply and another month for the reply to reach the Philippines, over two months was necessary for each exchange of correspondence. Now, in addition to ordinary business correspondence, all such matters can be sent by Clipper. For instance, we place an order for a certain piece of machinery. The foundation plans come forward on the next Clipper and within a week after placing the order, we can start work on foundations. Furthermore we can avail ourselves of the Clipper express service and bring out small repair parts. thus in many cases, saving a month's delay. Considering the problems that Pan-American has had to face in establishing this service, I think the results accomplished have been wonderful.

A word of warning

Speaking of mining supplies, we have another element which you do not have here, namely, competition from European manufacturers. Here, tariffs are so high that generally speaking mining machinery and supplies of European origin are not used. The Philippines, however, has its own tariff laws. American products are admitted duty free. There is rather heavy duty on European products but in spite of this, production costs are evidently so low and the desire for cash so great, that European manufacturers often underbid American manufacturers by a substantial amount. They have their agencies and service facilities established there and get considerable business. Moreover, there is severe Japanese competition. Before this trouble started, they submitted prices on standard mining supplies such as dynamite, cyanide and carbide which are only about half of the American prices on these articles. We, ourselves, have never patronized Japan and have only patronized European manufacturers in rare instances. However, I would issue a word of warning to American manufacturers that they should not overlook these competive elements which exist in the Philippines if they want the Philippine business.

Another problem we have to face, which grows out of this same question of increased cost of mining supplies, is the abnormally high cost of power. A great deal is said about hydro-electric power possibilities but I can tell you that on the Island of Luzon, at least, these do not exist. It is true that there is a much heavier rainfall than here but this rainfall is so seasonal and so destructive, that it cannot be taken advantage of in the development of hydro-electric power. The trouble is that the topography offer no storage areas. The dams built in connection with hydro-electric projects now operating, are not storage dams but merely diversion dams which give an increased head. During the dry season, the flow dwindles down to a mere trickle

so that auxiliary power plants must of necessity be installed, while in the wet season there is so much erosion due to the heavy rainfall that any dam which could be built would be filled with debris in a single season. Hence, there is no cheap electric power available. As to steam plants, there are no adequate coal resources in the Philippines. The coal now being used is imported mostly from Japan.

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The only solution to our power problems, therefore, lay in Diesel engines. We installed our first Diesel engines as a dryseason standby for our Agno hydro-electric plant of 1,500 kilowatt capacity. Now we have altogether over 10,000 installed horse power in Diesel engines and are at the present time installing an additional 2,500



horse power. All of the fuel oil used must be transferred from Manila in tankers about 200 miles and then hauled by tank truck another 40 miles to the mines. Power costs are, therefore, materially higher in the Philippines than they are here.

Probably the greatest obstacle that we have had to face has been political uncertainty. During all of the 40 years that I have been in the Philippines, there has always been in the back of the minds of Americans in business there, the idea that every item of capital invested should be predicated on a quick return because there was great possibility of limited life. This constant feeling of uncertainty as to what the future held for us, caused us to lead a hand to mouth existence so far as capital investment was concerned. You can readily see the unsettling effect which this would have on a mining venture. An allowance of say two years for the develonment of the mine and another year for erection of the mill, with possibly the first two or three years of production for return of capital, always carried us so far into the future that there were grave doubts as to whether we would run the mine long enough to get any profit and even as to whether we would be able to get our capital back. As it has turned out, these doubt were not well-founded but you must remember that the Filipinos themselves have always been clamoring for independence and President McKinley stated at the outset that such independence would be given them when they were ready for it. As the administration gradually passed from the hands of the Americans into the hands of the Filipinos, this uncertainty as to the future became more marked and a more immediate uncertainty arose due to the question of mine taxation. I have already told you of the uncertainty which still exists regarding the status of mining claims located before the inauguration of the Commonwealth Government, many of which contain proven ore bodies and some of which have mills built on them representing very large investments.

The Philippine Mining Industry is a chip off the old block

Once this last uncertainty of the properyrights of Americans both during the remainder of the transition period and after independence is removed, we will have left only the uncertainty as to mine taxation which, of course, is present in every country. At the present time mines are taxed on gross output on a sliding scale, in the case of gold mines, ranging from 1½ per cent to 5½ per cent. In addition to this, we pay a corporate income tax of 6 per cent on the net profits.

So much for our problems. I have tried to include only those points which are peculiar to our operations in the Philippines. To offset these, we have, of course, many advantages which are peculiar to the Philippines, such as the absence of cold weather; freedom from wars and insurrections and comparative freedom from social unrest and from the regimentation which are now so seriously affecting industrial operation in this country. say that the Philippine Government, although still the youngest government in the world, has adopted a tolerant and fairminded attitude towards industrial enterprises which might be emulated to advantage in many other countries. In the mining industry, this is possibly due to the respect for the oldtime Americans connected with the mining industry, which has grown out of long association. Both the Filipino people and administrative officials recognize and appreciate the material benefits growing out of the establishment of this industry. The Americans who have been there since the early days and have watched the present administrative officials grow up from boyhood, have always been fair and aboveboard with them and have tried to advise them in their growing responsibilities. I, for my part, am very proud of the part which I have played in this development and am most happy to have lived long enough to have seen the establishment of such a stable industry. The Philippines produced in 1937 more gold than any state in the union including Alas-

(Continued on page 42)

it has to date, is the looseness of the so-called boycott. It is still possible to buy plenty of Japanese-made goods in local Chinese stores. As time goes on, and stocks dwindle, this situation may change. But the establishment of more and more Japanese shops, and Indian shops, and Filipino stores, all of them stocking Japanese merchandise, may at the same time tend to take up the slack created by a stringent Chinese boycott, assuming that a really effective boycott on the part of the business-minded Chinese is a possibility

What, then, accounts for the very considerable increase in U. S. export business to the Philippines, which the figures show is *not* business taken away from the Japanese?

We must look to various contributing factors for the answer.

One of these is the upset situation:
In Europe, with principal nations there vieing with each other for armaments supremacy, and consequently sacrificing their export trade to do it. This is largely true of Germany, Italy, E n g l a n d, France, and more lately of the smaller countries, such as Czecho-Slovakia. The Japanese situation contributes, but only slightly.

Another factor is undoubtely an increase in the Philippine trend to-

ward industrialization, led by various projects of the National Development Company. Examples of this are textile factories, canning factories, expansion of the cement industry, sugar refining, and so on; with still more development along these lines as a definite governmental program for the immediate future. This program leads to increase in the present demand for machinery, for example; although some observers hold the view that in the long run it must lead to serious curtailment of American exports to the Philippines once the industrialization program has been substantially realized.

In other words, a sale of textile weaving machines now may mean fewer sales of U. S.-made textiles or machines in the future, when specified textiles in sufficient quantities shall be woven here.

The United States is now in a position to take advantage, so far as her exports to the Philippines are concerned, of conditions in Europe and Asia, and of increased local consumption along certain lines, notably machinery. Japan is not in a position to take advantage of these conditions, but she is holding her own in exports to the Philippines, which in itself is remarkable. Such gains as the United States has made this

year, and they are considerable in total, have not therefore, been made to the cost of Japan. The United States gained a total of P38,180,381 in the first 8 months of 1938, but in that time Japan lost only P1,045,684 of her 1937 business, and she bids fair to make up this loss by the end of the year.

Mining in the . . .

(Continued from page 38)

ka, with the sole exception of California. It entered the world chrome markets and established itself favorably in spite of the high cost of delivery of chrome ore in this country. It is estmiated that during the current year, the Philippines will produce P60,000,000 worth of gold and I believe this record will be easily attained. The American mining industry may therefore be proud of its child and certainly, it is a child of the American industry in every sense of the word. The industry was started by American capital and American initiative. Up to four years ago, there was still practically no Philippine capital invested in mining. The industry has been developed entirely by American engineers and geologists and the products of the industry have been sold almost entirely in this country. Let me tell you that you have in the Philippines a very healthy offspring that is a real credit to you.

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