

THE
MARSMAN
MAGAZINE

R Y
1975

A MONTHLY CHRONICLE
OF THE ACTIVITIES
OF THE
ORGANIZATION

FOR THE INFORMATION OF SHAREHOLDERS
OF
MARSMAN AND COMPANY, INC.
MINE MANAGERS AND OPERATORS
AND
ASSOCIATED COMPANIES

MANILA, PHILIPPINES



GOODRICH SUPERHEAT PACKING

New Possibilities in
GASKET MATERIALS



New Grades of Goodrich Superheat Sheet Packings are now available.

More pliable
Denser
Stronger both lengthwise and crosswise
More highly oil-resistant
More nearly indestructible

Types 31 and 100 are new and improved grades, of ultra-quality, containing an exceptionally high percentage of indestructible material,—very dense, and especially compounded to withstand the action of hot oil and gasoline.

These types are homogeneous—not plied together—so plies cannot separate when the packing is subjected to excessive heat, or to the vapors of gasoline and other solvents. We recommend them with confidence for steam pressures up to 400 lbs., temperatures up to 700 degrees F., hot water pressures up to 1,500 lbs. Select these grades for severest service.

SPECIFY GOODRICH PACKING

Marsman Trading Corporation—*Agents in Baguio and Paracale*

March
1938

THE
MARSMAN
MAGAZINE

Vol. II
No. 9

MARSMAN OPERATING COSTS

A comparison of operating costs of mining companies is difficult to make with accuracy, because (1) no two mining operations are exactly alike, and (2) accounting systems vary considerably. In the case of the Marsman-managed companies, however, a uniform accounting system is used, and by taking into account the various significant factors, comparisons of interest can be made.

A study of costs of Philippine mining companies as a whole (made from annual reports and balance sheets) brings out the gratifying fact that the Marsman-managed lode properties (Itogon, Suyoc, United Paracale, and San Mauricio) spend less per ton of ore handled than the average mine in the Islands. For 1936 the average cost per ton of all lode properties in the Philippines was ₱14.86, while the average cost for the Marsman companies was ₱13.80; for 1937, the Marsman figure was ₱13.51, while that of all of the mines was ₱14.53. This comparison emphasizes the economy of centralized management as effected by Marsman and Company.

The mine production tax at three of the mines jumped substantially with the going into effect of the new Mining Law. At Itogon, this tax was ₱.37 per ton in 1936 and ₱.53 per ton in 1937. At Suyoc the 1936 figure was ₱.19 and that for 1937 was ₱.47. United Paracale paid ₱.55 per ton for this tax in 1937, as compared to ₱.16 in 1936.

How do the costs of Philippine mining companies compare with those of similar operations elsewhere in the world? Conditions vary so much that a comparison that really means anything is almost impossible. For example: costs at Empire Star, United States mine which handled 244,473 tons in 1936, were ₱16.94 per ton; those at Carson Hill, which treated 284,928 tons, were ₱3.68; costs at Itogon, for 1937, during which the plant handled 261,396 tons, were ₱8.11 (all figures exclusive of depreciation, depletion, and taxes). Mining men who visit Philippine plants, and who study cost sheets, say that mining is carried on as economically here as anywhere else in the world.

FEBRUARY GOLD PRODUCTION APPROACHES MILLION MARK

Gold production from the four lodes and two placers under Marsman management totalled ₱956,917.23, from 48,533 tons of ore treated in the milling plants, 237,500 cubic yards of gravel dredged by the Coco Grove dredgers, and 18,600 cubic yards handled by the dragline dredge of Mindanao Mining. Reduced production at Itogon was caused by temporary shutdowns necessitated by the installation of the new steel ore bin.

The month's total was a substantial gain over the January figure, in spite of three days of operation less because of the shorter month. Coco Grove had a good month, one dredger working in pay ground throughout the month, the other starting on it the middle of February.

General conditions were good in both Baguio and Paracale districts. Prospects for March are excellent, and the output should exceed the million-peso mark.

ITOGON MINING COMPANY

During February Itogon treated 25,184 tons of ore from which ₱277,531.38 was produced. Average recovery per ton was ₱11.02, and extraction was 83%.

Capital development amounted to 2,553 feet, of which 766 feet were in ore; operating development, 1,387 feet of which 808 feet were in ore; total development, 3,940 feet, of which 1,574 were in ore.

The drop in tonnage delivered to the mill during February was caused by the reduction in ore bin capacity occasioned by the reconstruction of the main ore bin. It was found necessary to replace the old wooden bin with one of modern steel construction, of about 1,100 tons capacity.

The Sesame shaft has been timbered to the 500 level, and the station sets are now being put in. The Idol claim is showing satisfactory ore values, and every effort will be made to have this ore mined before the wet season com-

mences as, owing to its proximity to the surface, it may then be difficult to work.

The two new Goodman locomotives have been put into operation in the 500 level, from which the old locomotive is being transferred to speed up tramming in the drain tunnel. Another good advance of 500 feet plus was made in the 875 drain tunnel. At the present rate of progress the connection with the main shaft should be made during the latter part of March.

Tests are being run by the metallurgical staff with a view to improving the extraction. A new set of liners in No. 5 ball mill and the renewing of feed end liners in No. 3 ball mill comprised major repairs during the month.

Construction work has been confined to the steel ore bin and to the making of foundations for new pumps being installed in the mill.

During the month E. S. Geary, D. Van Eek, and L. Boomgaart joined the staff as mine shift bosses.

SUYOC CONSOLIDATED MINING COMPANY

February production at Suyoc Consolidated amounted to ₱110,062.41 from 5,602 tons of ore treated. Development work amounted to 722 feet of capital and 808 feet of operating advance.

Production was below normal during the first half of the month because of a drop in extraction and consequent lower tonnage. Some improvement was indicated in the second half when the new Wallace agitator went into operation. Metallurgical difficulties experienced

during the month, combined with the shorter month, reduced operating time and resulted in the lowering of output.

Development footage is up to requirements in spite of the adverse working conditions encountered in a large percentage of the faces. 2001A transfer raise is making good progress through wet caving ground. 2201A transfer raise is progressing very slowly because of excessive turnover of labor.

(Continued on page 4)

MANILA MACHINERY & SUPPLY CO.

INCORPORATED
675-681 DASMARINAS
—MANILA—

Exclusive Philippine Agents

FOR THE FOLLOWING MANUFACTURERS:

JEFFREY MFG. CO., Columbus,
Ohio.

Conveying and Mill Equipment

TRAYLOR ENG. & MFG. CO.,
Allentown, Pa.

Crushing and Cement Equip-
ment

WALWORTH INTERNATIONAL
CO., New York City, N.Y.

Valves, Fittings, Tools

RUSTON & HORNSBY, LTD.,
Lincoln, England

Diesel Engines, Diesel Loco-
motives

BUCYRUS ERIE CO., South Mil-
waukee, Wisconsin.

Gold Dredges & Excavating
Equipment

IDEAL ELECTRIC & MFG. CO.,
Mansfield, Ohio.

Alternators, Generators, Mo-
tors.

MINE SAFETY APPLIANCES
CORP., Pittsburgh, Pa.

Complete Mine Safety Equip-
ment, Miner's Protective
Hats.

KIMBALL KROGH PUMP CO.,
San Francisco, Calif.

Pumps for all Mill Purposes.

THE A. LIETZ CO., San Fran-
cisco, Calif.

Complete Surveying Equip-
ment.

E. H. EDWARDS CO., San Fran-
cisco, Calif.

High Grade Wire Rope.

WRIGHT MFG. CO., 230 Park
Ave., New York City.

*Division of American Chain and
Cable Co., Inc.*

Hoists, Trolleys' Cranes.

SULLIVAN MACHINERY CO.,
New York, N. Y.

Hoists, Air Compressors, Rock
Drills, Etc.

DEWAR MFG. CO., Brooklyn,
N. Y.

"I.T.P." Carbide Lamps.

Development of the 1800 level is very encouraging. The 1850 crosscut East has been opened up, and a small streak of ore cut that will probably prove commercial in the west wall from the regular ore-producing features. The raises 1844A, 1842A east and 1842B and 18242 north drift all show normal widths and good values. On the 1600 level 16154 south and north are showing encouraging symptoms as are the 1554 crosscut west and the 1560 crosscut on the 1500 level. Above the 1400 level in the 60 block, ore has been encountered slightly above normal grade, width, and lateral continuity.

UNITED PARACALE MINING COMPANY

United Paracale treated 8,330 tons of ore during February, from which ₱190,896.90 was produced. Recovered value was ₱22.91 per ton, and extraction was 88.97%.

During the month the Rocky Mountain group of claims belonging to the Northern Mining and Development Company, which adjoin the United Paracale property, were purchased by United Paracale. Consequently production from the Rocky Mountain Group is included in the total output and will not be given as a separate item as has been the practice.

Development work amounted to 1,943 feet, of which 384 feet or 19.8% were in ore. Capital development was 1,610 feet, 324 feet of that being in ore; operating development was 333 feet, of which 60 feet were in ore.

No. 1 ball mill was shut down from the morning of February 1 to the morning of February 3 during which time a complete liner change was made, the trunion bearings overhauled re-babbited, and a complete overhauling of the 8-foot Dorr bowl classifier was effected.

The construction of the ½ mile extension of the Haliguang Bato Road to the Jeff No. 6 tunnel was started during the month.

SAN MAURICIO MINING COMPANY

San Mauricio treated 8,417 tons of ore during February, with a total production of ₱195,326.65. Head values were ₱23.94 per ton, and extraction was 91%.

Development footage was 1,427 feet at the San Mauricio, Santa Monica and Santa Ana mines. Of this advance 590 feet were in ore. The Tacoma section of San Mauricio mine continues to show good results. The Tacoma No. 2 and Tacoma No. 3 veins were cut by the 1495 east crosscut on the 300 level. The No. 2 vein was 3 feet wide and the No. 3 vein was 7 feet wide.

Drifting on the 300 level at the Santa Ana mine continues to show ore. Raises 100 north and 100 south have been started. A shaft station is being cut on the 150 level. The vein will be cut on this level early in March. The drainage adit was driven 190 feet, and the ground continues to be loose and slippery.

The ore pocket on the 500 level is 50% completed.

Mechanical work on setting up the new hoist is practically completed, and only the electrical work remains to be done. The electrical work on the installation of the Sullivan compressor has been completed. A small ore bin has been built at Santa Ana. The Santa Ana road has been surfaced and is in good condition.

PHILIPPINE SMELTING COMPANY

The blast furnace at the Philippine Smelting Company operated 100% of total time, and during February 1,185.1865 tons of concentrate as sinter were smelted.

Gold-bearing matte produced amounted to 141.567 tons, and about 1.5 tons of copper bullion also resulted from the month's activities. On February 17 a shipment of 81.144 tons of matte was made to the States.

Included in the tonnage treated is 51.8965 tons of custom concentrates from another plant in the district.

Roy Smith arrived during the month to join the smelter staff.

GUMAOS GOLDFIELDS, INC.

Tunnel No. 3 drift south was advanced 150 feet during the month, and the face is now 270 feet south of the crosscut. This section is cut by many fractures and cross fractures, most of which have quartz filling; some contain sulphides but no definite vein is in evidence.

Tunnel No. 6 drift south was advanced 115 feet along the vein, and the face is 265 feet from the switch of the main crosscut. A crosscut west was driven near the face, 5 feet advance; no parallel veins were cut.

The shaft was sunk 40 feet to a depth of 246 feet. The sump was completed and the station was timbered. The 40-horsepower pump was installed and is working satisfactorily.

Total footage for development work was 310 feet. The average number of men employed during the month was 100. Conditions throughout the camp continue good.

ACOJE MINING COMPANY

During February 5,421.702 tons of ore were mined at Acoje, and 5,017.699 tons were shipped.

Ore has been mined and transported to the terminal at an average rate of 233 tons per working day. The shipping ore at lense No. 11 has been exhausted. A total of 1,196.02 tons was produced from this lense.

At present chromite is being taken from lense No. 1, No. 2, and No. 4. Development is being carried on at these lenses to determine future possibilities. The work at lense No. 9 is being rushed so that this lense can be put into early production. Lense No. 7 is also being opened and developed, but it is too early to state its possibilities.

The pier is being reconstructed, and a new concrete partition is being built in the storage bins.

The road is in reasonably good shape and all repairs to bridges have been completed.

COCO GROVE, INC.

Production for the month of February at Coco Grove was ₱174,400, from 287,516 cubic yards of gravel handled; of this gravel 25,000 cubic yards were overburden removed by the "Anne Petronella" while it was digging down to the pay gravel layer.

The dredge "Mary Angus" worked on a normal operating basis during February, and dredged 155,388 cubic yards. From this ₱127,925.59 was recovered. The average depth dredged was 41.06 feet, and the area dredged was 102,162 square feet. The total operating time was 557 hours 10 minutes.

The dredge "Anne Petronella" was completed and made the first trial run on February 6. During the period February 6-14 while the dredge was digging down to the pay gravel layer, the usual adjustments were made. Since February 15 this dredge has been working on pay gravel on a full time normal operation basis. February yardage handled was 132,128, of which 107,128 cubic yards were pay ground. ₱46,474.41 were recovered from this gravel. The average depth dredged was 30.3 feet, and the area dredged was 117,675 square feet. Total operating time was 438 hours 5 minutes.

Both dredges operated satisfactorily and both are now on full time schedule.

PARACALE NATIONAL GOLD MINING COMPANY

The shaft is now down 218 feet at Paracale National. A station has been cut 207 feet below the collar and is now 16 feet from the shaft. A 5 by 7 crosscut will soon be started. Bearing timbers and station timber are now being placed.

ITOGON ANNUAL MEETING

The annual meeting of the Itogon Mining Company was held March 7, 1938, in the Marsman Building, Port Area, Manila. The following were unanimously elected directors for the coming year: J. H. Marsman, Mrs. M. A. Marsman, Benj. S. Ohnick, T. J. Wolff, and A. T. Simmie.

Mr. Marsman, who presided, called attention to the fact that a number of the original stockholders in the company when it was formed in 1925 were present, among them Mr. Simmie, who still holds certificate No. 1. Also present at the meeting were three mining engineers who have been instrumental in the growth of Itogon to its present successful condition: J. O. Enberg, R. W. Crosby, and J. B. Stapler. Each of these men served Itogon as general superintendent, and the services of each are still available to the company through their affiliation with Marsman and Company as members of the board of consulting engineers. Mr. Marsman pointed out that the technical services of these men, and of the various other engineers on the staff of Marsman and Company, were available to Itogon at a cost much less than would be possible in any other way.

Mr. Enberg then explained details of the work at Itogon during 1937, and of the prospects for the future. Late delivery of essential equipment, due to labor strikes and shipping troubles in the United States, delayed completion of construction and of the anticipated increase in tonnage milled. This resulted in considerable reduction in estimated bullion production and made it impossible to show the ore reserves at the end of the year that are now available.

Since the beginning of the year, however, the company has been able to add large tonnages of millable ore to its reserves. Ore reserves as reported in the annual statement are much lower than those recently calculated by the men who have been in close touch with Itogon for years, it was explained. After explaining details of several promising development areas, Mr. Enberg stated that Itogon had probable and possible ore amounting to some 2,250,000 tons valued at ₱32,000,000, with additional potential ore giving the mine a life of

at least 10 years based on present indications.

An increase in mill heads is expected as development work proceeds, and then with regular production at full capacity of 1,000 tons per day, profits at the rate of ₱1,500,000 per year are indicated.

The stockholders unanimously passed a resolution of thanks to the managers for their efforts during the year.

Important figures from the annual report for 1937: production, ₱3,359,330.99 from 261,396 tons of ore treated; average mill heads, ₱14.75 per ton, extraction 87.13%, production, ₱12.85. Ore reserve estimated as of January 1, 1938, 424,700 tons, average value ₱13.30, or a total of ₱5,648,510.

Development work, 38,822 feet, or 3,235 feet average per month. Important developments: the completion of the Sesame shaft to the 450 level; the advance of the 875 level drain tunnel to within 700 feet of the Sesame vein; the further development of the Sesame vein above the 500 level; the Moffat vein system; the Comet vein system; the Frog vein system.

Construction was carried on vigorously for 10 months of the year to complete all changes and additions incidental to the increase in tonnage, and Itogon now has a modern and efficient 1,000-ton-a-day milling and treatment plant, an underground primary crushing unit, and heavy-duty skip hoisting equipment including the necessary alteration to the main shaft and head-frame.

Since the increase to 1,000 tons per day, the prior low operating costs have been steadily reduced to an extremely low figure, and even further reduction is anticipated.

Itogon operating executives are: W. Gilkison, general superintendent; W. D. Peregrine, mill superintendent; C. I. Dismant, mine superintendent; F. H. King, engineer; P. A. Lewis, geologist; K. E. E. Muelling, power superintendent; M. Velarde, mechanical superintendent; E. Wagor, construction superintendent; J. E. Corgin, assayer; E. F. Selk, accountant; Dr. P. Biason, resident physician; Mrs. P. Biason, resident chief nurse.

ITOGON MINING COMPANY
BALANCE SHEET

As at 31st December, 1937

ASSETS

CURRENT ASSETS:

Cash on Hand and in Bank	P 26,586.19		
Accounts Receivable	6,492.50		
Bullion in Transit	408,419.68		
Bullion on Hand	92,511.57		
Machinery Parts & Supplies	549,879.94	P1,083,889.88	

FIXED ASSETS:

Mine and Mining Properties	P2,217,948.53		
Add—Capital Development during the year	639,284.22		
	<u>P2,857,232.75</u>		
Less—Ore Depletion Reserve	780,000.00	P2,077,232.75	
Buildings	P 692,304.13		
Mine Machinery & Equipment	841,575.05		
Mill Machinery & Equipment	965,053.58		
Assay Office Machinery & Equipment	15,377.56		
Power House Machinery & Equipment	497,406.17		
Carpenter and Blacksmith Shops Machinery & Equipment	52,089.49		
Water, Light & Powder Systems	123,948.63		
Miscellaneous Equipment	103,030.65		
Furniture and Fixtures	52,023.21		
Roads, Trails and Bridges	46,778.71		
Flood Control	80,707.04		
	<u>P3,470,294.22</u>		
Less—Reserve for Depreciation	1,433,582.48	2,036,711.74	4,113,944.49

DEFERRED ASSETS:

Prepaid Charges			14,280.13
-----------------------	--	--	-----------

P5,212,114.50

LIABILITIES

CURRENT LIABILITIES:

Marsman & Company, Inc.	P 178,420.10		
Marsman Trading Corporation	59,848.47		
Accounts Payable	236,851.84		
Due to Banks	489,093.89		
Bank Advances Against Bullion and Concentrate Shipments	365,604.26		
Accrued Payrolls	46,691.21		
Accrued Taxes	34,182.09		
Bills Payable	106,700.00		
Uncollected Dividends	3,432.99		
Accrued Expenses	4,695.87		
Notes Payable	395,876.29	P1,921,397.01	

RESERVES:

Income Tax		41,479.89	
------------------	--	-----------	--

NET WORTH:

<i>Capital—</i>			
<i>Authorized—</i>			
20,000,000 shares of 10c each	<u>P2,000,000.00</u>		
<i>Issued and Subscribed—</i>			
20,000,000 shares of 10c each			
fully paid	P2,000,000.00		

SURPLUS:

Balance as at 1st January, 1937	P 538,101.84		
Net Profit for year 1937	691,331.11		
	<u>P1,229,432.95</u>		
Less—Dividends No. 27 and No. 28 paid in 1937	300,000.00	929,432.95	

STOCK PREMIUM

	319,804.65	3,249,237.60	
--	------------	--------------	--

There is a contingent liability for Machinery Parts and Supplies ordered under Irrevocable Letter of Credit amounting to P39,200.00.

P5,212,114.50

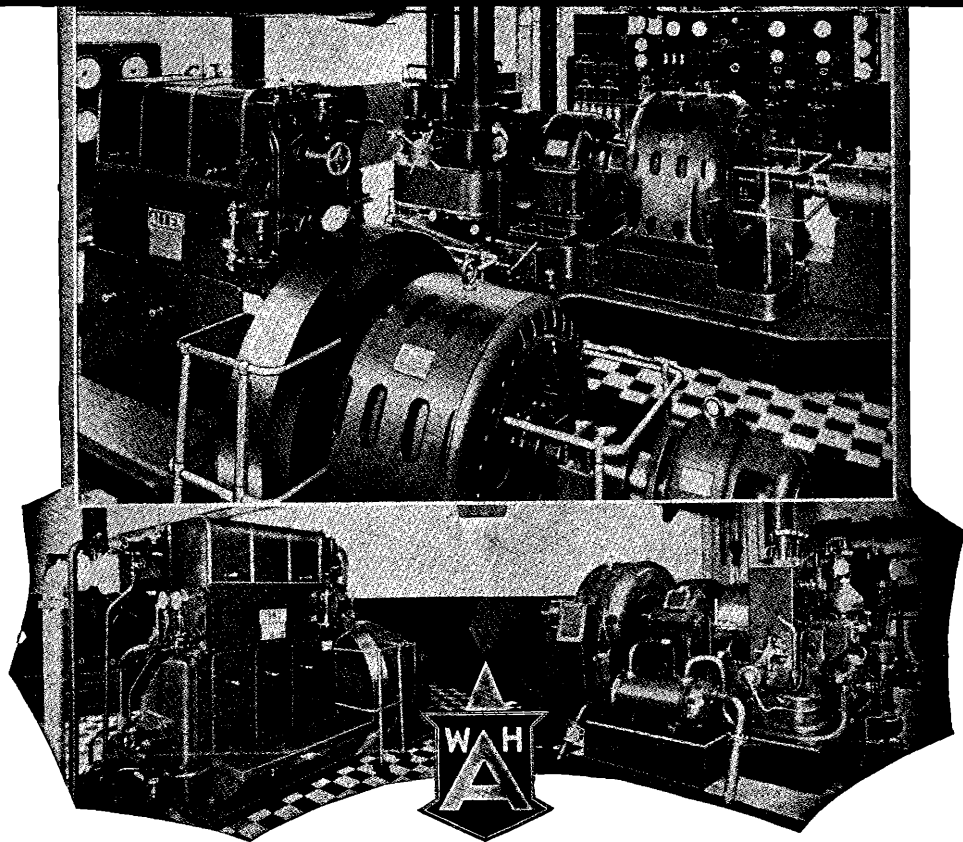
ITOGON MINING COMPANY
OPERATING ACCOUNT
For the Year ended 31st December, 1937

To Direct Operating Costs— Mine Operating P1,132,773.53 Mill Operating 469,209.86 Mine General 254,128.54 P1,856,111.93		By Bullion and Concentrates Produced P3,359,330.99
To Indirect Operating Costs— Mill Operating P 189,122.65 Mine Operating 395,423.96 584,546.61		
To General Overhead 150,254.25 To Operating Profit 768,418.20		
	P3,359,330.99	P3,359,330.99

PROFIT AND LOSS ACCOUNT
For the Year ended 31st December, 1937

To Administration Expenses P 61,620.05 To Income Tax 42,086.08 To Net Profit for the year 691,331.11		By Operating Profit P 768,418.20 By Interest Earned 22.72 By Rents Received 2,527.72 By Net Receipts from Cine Operations 9,553.71 By Miscellaneous Income 14,514.89
	P 795,037.24	P 795,037.24

ALLEN POWER PLANT



TURBINE AND OIL ENGINE RUNNING IN PARALLEL—

The ideal combination and most economical method for producing power where process or heating steam is employed and the electrical load exceeds the load obtainable by passing the steam through a turbine.

An example of this arrangement is illustrated above. The Allen back-pressure turbine generates an output of 400 kW. from process steam at practically no cost. This output, being insufficient for the factory's electrical requirements, is efficiently augmented by the 70 kW. Allen oil engine-driven generating set running in parallel. As manufacturers of steam turbines and steam engines, oil engines and electrical equipment, we are in a unique position to undertake complete power plant installations for every industrial requirement.

Enquiries are invited for all types of power plant

W.H. ALLEN, SONS & Co. Ltd.

TELEGRAMS
PUMP, BEDFORD
PUMP, SOWEST, LONDON

BEDFORD, ENGLAND.

LONDON OFFICE: 5 VICTORIA STREET, WESTMINSTER, S.W.1.

TELEPHONES
BEDFORD 2201
ABB EY 2712

MARSMAN TRADING CORPORATION

Factory representatives are in the Islands

Distributing Agents

Full line of spare parts available

SUYOC CONSOLIDATED ANNUAL MEETING

The annual meeting of the Suyoc Consolidated Mining Company was held March 2, 1938, in the Marsman Building, Port Area, Manila. The stockholders unanimously reelected their directors, as follows: Amos G. Bellis, president; Benj. S. Ohnick, J. H. Marsman, J. O. Enberg, and M. H. Ruppel.

A most encouraging outlook for 1938 was presented to the shareholders. Increasingly good results from development work, higher values in stoping areas and lower operating costs featured the description of the activities of 1937 and of the prospects for 1938. The capacity of the Suyoc plant will be increased from 6,000 to 7,000 tons a month in the near future, stockholders were told, with a further expansion planned for later in the year.

One of the most promising results of the work of 1937 was the completion of the Palidan-Suyoc deep level drain tunnel, which intersected the Suyoc workings late in December, 1937. This tunnel, which was completed in record time for work of its kind, will bring about greatly lowered pumping costs for Suyoc, will permit the disposal of waste material without the hoisting now necessary, and will make possible the exploration and development of considerable areas of property hitherto unexplored.

A resolution was passed at the meeting authorizing the president to enter into negotiations with the Palidan-Suyoc Deep Level Tunnel Company for the purpose of the acquisition by Suyoc of the assets of the tunnel company. By the terms of the contract between the two companies, the tunnel company now receives 15 per cent of the profits of Suyoc Consolidated, but must maintain the tunnel in good condition. A plan whereby the capital stock of Suyoc Consolidated will be increased, and this stock issued to stockholders of Palidan-Suyoc for their interests in the tunnel, is to be considered.

R. W. Crosby, general superintendent of Suyoc Consolidated for several years and now manager of the northern divi-

sion of Marsman and Company, manager of Suyoc, explained details of operations at Suyoc. The company has at present 45 working stopes, from which mill ore is being drawn. Ore reserves were increased during 1937 to 258,700 tons valued at ₱5,348,700 (as of January 1, 1938) a gain of 76,580 tons and ₱1,783,880 as compared to the 1937 estimates. These reserves insure a 3½ years' supply for the Suyoc mill with prospects extremely bright for still further increases in 1938.

New sections of the mine are now being opened at depth, on the 1600, 1700, 1800, and 2000 levels, and the completion of the drain tunnel will make mining down to the 2200 level possible. Several areas in the Suyoc mine which are virgin ground can thus be worked, with every indication of ore of excellent quality.

Important operating figures from the annual report: 1937 production, ₱1,445,477.84, from 75,972 tons of ore treated, representing an extraction of 86.78% or ₱19.03 per ton. Development work for the year, 16,443 feet, an increase of 4,149 feet over the year 1936. During 1937 ₱156,495.78 was spent for capital improvements and ₱155,553.22 for capital development. Operating profit was ₱340,777.22. Suyoc declared its first dividend, of 10%, as of December 31, 1937.

At the close of the annual meeting the shareholders unanimously passed a resolution of thanks to the management for the successful undertakings of the past year.

Operating heads of Suyoc Consolidated: L. M. Robinson, general superintendent; C. C. Heinrich, mine superintendent; P. L. Funkhouser, mill superintendent; J. W. Harman, engineer; W. T. Roeseler, geologist; G. A. Vierich, accountant; H. Keller, power superintendent; S. L. Rohrer, head assayer; Dr. G. A. de Venecia, resident physician; Mrs. G. A. de Venecia, resident chief nurse.

SUYOC CONSOLIDATED MINING COMPANY
BALANCE SHEET
As at 31st December, 1937

ASSETS

CURRENT ASSETS:

Cash on Hand and in Bank	P 127,088.14	
Accounts Receivable	17,741.35	
Bullion and Concentrate in Transit	175,465.10	
Bullion and Concentrate on Hand	58,667.68	
Machinery Parts and Supplies	273,865.78	P 652,828.05

FIXED ASSETS:

Mine and Mining Properties	P 493,985.57	
Add—Development to Date	745,313.58	
	P1,239,299.15	
Less—Reserve for Ore Depletion	36,000.00	P1,203,299.15
Buildings	P 420,258.92	
Mine Machinery and Equipment	279,980.59	
Mill Machinery and Equipment	417,545.53	
Assay Office Machinery and Equipment	12,980.02	
Powerhouse Machinery and Equipment	326,611.70	
Carpenter and Blacksmith Shops Machinery and Equipment	33,029.32	
Miscellaneous Tools and Equipment ..	99,938.63	
Light, Water and Power Systems ...	13,275.96	
Furniture and Fixtures	19,950.47	
Roads, Trails and Bridges	181,042.73	
	P1,804,613.87	
Less—Reserve for Depreciation	486,858.68	1,317,755.19
		2,521,054.34

DEFERRED ASSETS:

Prepaid Charges		8,343.55
		P3,182,225.94
		P3,182,225.94

LIABILITIES

CURRENT LIABILITIES:

Accounts Payable	P 51,234.96
Bank Advances Against Bullion and Concentrate Shipments	157,918.60
Accrued Payrolls	10,683.16
Accrued Expenses	1,941.79
Accrued Taxes	5,863.46
Dividends Payable	125,000.00
	P 352,641.97

RESERVE:

Income Tax	16,751.18
------------------	-----------

NET WORTH:

<i>Capital—</i>	
<i>Authorized—</i>	
12,500,000 Shares at 10c each	P1,250,000.00
<i>Issued and Subscribed—</i>	
12,500,000 Shares at 10c each Fully Paid ..	P1,250,000.00
<i>Surplus—</i>	
As at 1st January, 1937	P 210,568.68
Net Profit for Year 1937	279,186.32
	P 489,755.00
<i>Less—Dividend Declared and Payable 15th January 1938</i>	
	125,000.00
	364,755.00
<i>Stock Premium</i>	
	1,198,077.79
	2,812,832.79

There is a contingent liability for Machinery Parts and Supplies ordered under Irrevocable Letter of Credit amounting to P22,200.00.

P3,182,225.94

**SUYOC CONSOLIDATED MINING COMPANY
OPERATING ACCOUNT**

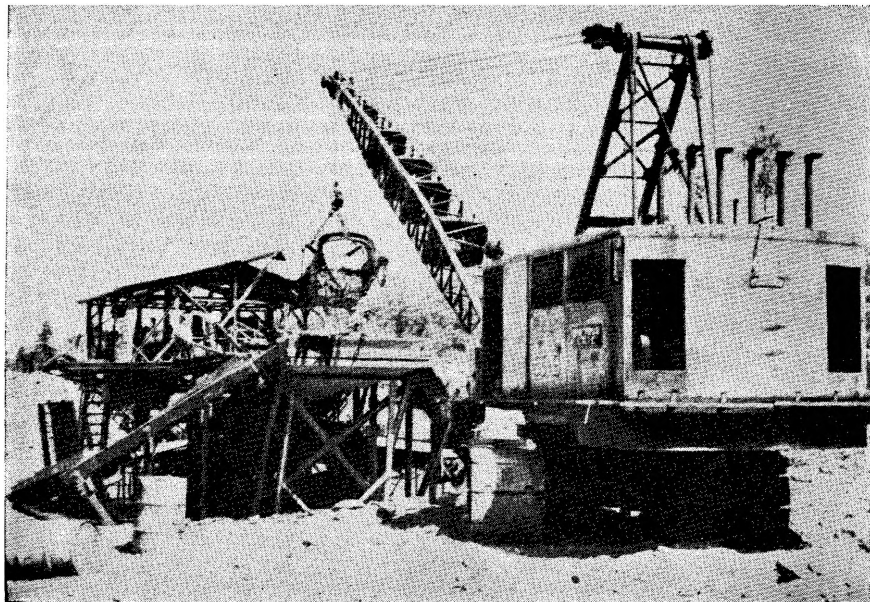
For the twelve months ended 31st December, 1937

To Direct Operating Costs—			By Bullion and Concentrates Produced	P1,445,477.84
Mine Operating	P 378,298.68			
Mill Operating	290,614.68			
Mine General	115,637.60	P 784,550.96		
To Indirect Operating Costs—				
Mill Operating	P 93,263.59			
Mine Operating	170,664.36	263,927.95		
To General Overhead		56,221.71		
To Operating Profit		340,777.22		
		P1,445,477.84		P1,445,477.84

PROFIT AND LOSS ACCOUNT

For the year ended 31st December, 1937

To Administration Expenses	P 50,225.50		By Operating Profit	P 340,777.22
To Income Tax	16,991.73		By Interest Earned	2.92
To Net Profit for the Year	279,186.32		By Rents Received	20.07
			By Miscellaneous Income	5,603.34
				P 346,403.55
	P 346,403.55			



The dragline discharging on to the gold-saving plant.

MINDANAO MINING COMPANY

The dragline dredging plant handled 18,600 cubic yards of gravel during February, and recovered ₱8,700. Operations are proceeding normally although the plant is not working full time in pay dirt as yet.

The directors of Mindanao Mining were reelected at the annual meeting held on March 14, 1938, as follows: W. R. Cothran, Geo. C. Dankwerth, A. L. Velilla, A. F. Kelly, and R. F. Kong. The balance sheet and annual report were unanimously approved.

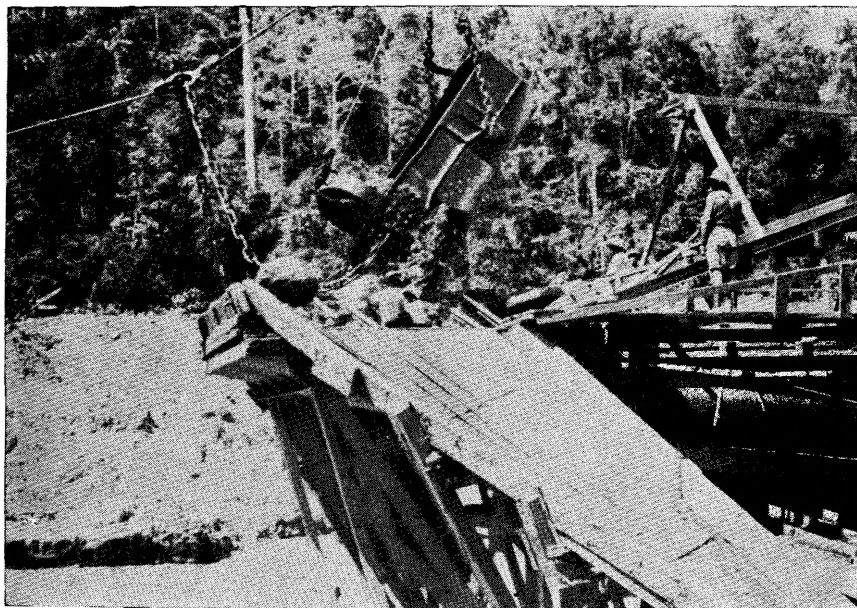
Equipment at Mindanao Mining was ordered early in 1937 and the last shipment of machinery was delivered to the mine at the end of May, 1937. Progress in assembly was slowed by a very early rainy season, which caused very soft roads and difficulty in moving heavy machinery. Erection was completed

and trial runs started in September.

It was soon discovered that it would be necessary to divert the river channel before the pay ground could be reached. The area worked is flanked by a steep hillside, and slides were common. This type of deposit is most difficult to work, and it augurs well for the future of the venture that the digging equipment has been able to handle the clayey material.

Operations to date, the annual report states, although showing a working profit, must be considered in the light of being development work, chiefly to safeguard future operation by diverting the river and leaving the main channel and the values it contains more safely accessible.

This channel has been completed, and operations will proceed to the better grade area.



Another view of the plant at Zamboanga. This type of equipment, technically known as a dragline dredge, is commonly called by the mining fraternity a "doodlebug".

SAN MAURICIO ANNUAL MEETING

The annual meeting of the San Mauricio Mining Company was held March 3, 1938 at the Marsman Building, Port Area, Manila. The stockholders reelected the 1937 board of directors; J. H. Marsman, Major A. Beckerleg, P. W. Meyer, Benj. S. Ohnick, S. J. Wilson, and H. P. L. Jollye, and one new member, Dr. Antonio Vasquez.

The production of San Mauricio is expected to increase substantially this year, stockholders were informed. Development work has brought excellent results, the haulage problems of the mine have been successfully solved, and the mill is now running at its full capacity of 300 tons a day.

The stockholders present agreed that it would be beneficial and advantageous to the company and to shareholders to terminate the financing agreement with Marsman and Company by the exchange of a corresponding share interest through increase of authorized capital which could provide sufficient means for liquidating the outstanding obligations of the company, if the directors considered it desirable. To that end a resolution was adopted recommending to the board of directors that such proposal, after study and after having been made feasible, be submitted to Marsman and Company. Should Marsman and Company accept, a further meeting of the shareholders will be called for ratification.

Major A. Beckerleg, first vice-president and consulting mining engineer of wide experience, explained the situation which exists at San Mauricio. Production was lowered during the last few months of 1937 for three reasons, he said: shaft trouble, which resulted in insufficient haulage capacity, excessive water underground, which made it impossible to mine the richer portions of the mine, and the failure of the rich ore chute to continue as anticipated.

Development during the last four months has brought very good results, Major Beckerleg reported. The bringing into operation of the new main haulage shaft has made it possible for the

mine to feed the mill with ore to full capacity.

Since the beginning of the year a good tonnage of high grade ore has been developed on the Santa Ana vein, and this has raised the mill heads considerably.

Steps have been taken to avoid the recurrence of troubles experienced last year. A new drainage tunnel has been started, and it is expected that it will be completed before the next rainy season.

Both mining and milling costs have been reduced substantially through the increased capacity and the use of the new main haulage shaft. A considerable saving is being effected through the treatment of concentrates at the smelter of the Philippine Smelting Company rather than shipping them to the States.

Major Beckerleg explained for the benefit of the stockholders who were not familiar with mining practice that the ore reserves of San Mauricio, about 1½ years supply, were exceptionally good for a mine that had only been in operation two years. He went into detail as to the theory of estimating ore reserves and stated that the accomplishment of San Mauricio in doubling its mill capacity supplying its plant, and developing ore for 1½ years ahead was excellent.

As a result of the work of 1937, San Mauricio now has a better dissemination of values, since several ore chutes are supplying the mill.

Important figures covering 1937 operations: 68,539 tons of ore milled, with a recovered value of ₱27.42 per ton, or a total of ₱1,879,164.00. Extraction for the year was 93%. Net profit for the year, ₱371,348.03. Ore Reserves as of Jan. 1, 1938, 143,198 tons with an average value of ₱24.29, a total of ₱3,477,422. These figures do not include the Tacoma 300 level reserve or the Santa Ana developments, which represent substantial tonnages of high grade, nor do they include ore indicated by diamond drilling in depth on any of the vein systems, as these developments were insufficient at the date of preparing the report to bring the ore into the positive brackets.

Development work for 1937 amounted to 14,942 feet; 7,121 feet of diamond drilling were completed with very encouraging results.

Expenditures for the year on capital development were ₱487,998.17, and on capital investments, ₱538,450.42, a total of ₱1,026,448.59. An investment of ₱100,000 was made in the Philippine Smelting Company.

At the close of the meeting the stockholders unanimously passed a resolution

of thanks to the managers for their untiring efforts and their outstanding accomplishments of the year.

San Mauricio operating executives are: H. L. Barr, general superintendent; C. F. Carpenter, mill superintendent; C. H. Reed, mine superintendent; T. L. White, engineer; H. T. Hutchison, master mechanic; J. C. Hammond, surveyor; T. A. DeVore, assayer; C. V. Mittelstaedt, accountant; Dr. P. D. Ferrandiz, resident physician; Mrs. M. V. Moya, resident chief nurse.

Close Human Relationships

—exist between this bank and the people of this Community.

THERE are no dividing lines between the interests and welfare of this bank and the interests and welfare of its neighbors, whether or not they are customers.

Our depositors who entrust their funds to our keeping represent a broad average of the men and women of the Community. Our borrowers are men and women engaged in active business enterprises which, we feel, entitle them to the use of the bank's credit resources created with the aid of our depositors' money.

This bank, as a center of the financial interests of these men and women, makes possible interchange of practical helpfulness.

PEOPLE'S BANK AND TRUST COMPANY

Manila, Philippines

Four Provincial Branches at your Service

Baguio, Mountain Province
Tarlac, Tarlac—San Pablo, Laguna
San Fernando, Pampanga

SAN MAURICIO MINING COMPANY

BALANCE SHEET

As at 31st December, 1937

ASSETS

CURRENT ASSETS:

Cash on Hand and in Bank	P	34,931.40	
Accounts Receivable		2,320.25	
Bullion and Concentrates on Hand and in Transit...		319,227.62	
Machinery Parts and Supplies		236,275.96	P 592,755.23

FIXED ASSETS:

Mine and Mining Properties	P	322,234.45	
Land Leases		71.28	
Development to Date		815,689.90	P1,137,995.63
<hr/>			
Buildings	P	291,843.35	
Mine Machinery and Equipment		275,714.07	
Mill Machinery and Equipment		240,785.98	
Assay Office Machinery and Equipment		10,521.87	
Powerhouse Machinery and Equipment		346,958.90	
Carpenter and Blacksmith Shops, Machinery and Equipment		33,994.85	
Power, Light and Water Systems ...		102,129.44	
Miscellaneous Equipment		65,528.48	
Furniture and Fixtures		35,771.79	
Roads, Trails and Bridges		47,364.83	
		<u>P1,450,613.56</u>	
Less—Reserve for Depreciation		878,674.01	2,209,935.18

INVESTMENT:

Philippine Smelting Company		100,000.00	
-----------------------------------	--	------------	--

DEFERRED ASSETS:

Prepaid Charges		10,184.82	
-----------------------	--	-----------	--

P2,912,875.23

LIABILITIES

CURRENT LIABILITIES:

Marsman & Company, Inc.	P	691,467.81	
Marsman Trading Corporation		191,506.69	
Accounts Payable		57,870.63	
Bank Advances Against Bullion & Concentrate Shipments		149,566.54	
Bills Payable (Guaranteed and Interest Paid by Marsman Trading Corporation)		200,000.00	
Accrued Taxes		15,450.90	
Accrued Expenses (Production Marketing)		44,205.49	P1,350,068.06

RESERVE:

Income Tax			22,576.09
------------------	--	--	-----------

NET WORTH:

Capital Authorized—

8,000,000 shares of 10c each P 800,000.00

Issued and Subscribed—

8,000,000 shares of 10c each fully paid P 800,000.00

Surplus—

Balance as at 1st January, 1937 ... P 363,962.97

Add—Prior Years Adjustments during 1937 4,920.08

P 368,883.05

Add—Net Profit for the Year 1937.. 371,348.03 740,231.08 1,540,231.08

There is a contingent liability for Machinery Parts and Supplies ordered under Irrevocable Letter of Credit amounting to P110,400.00.

P2,912,875.23

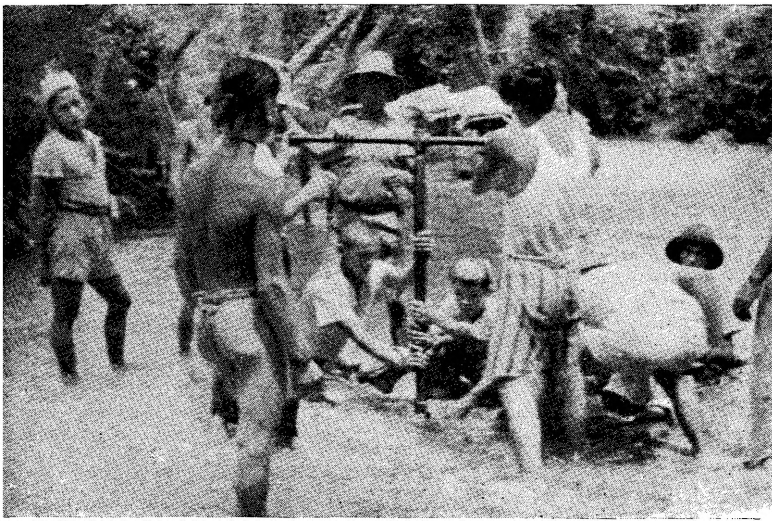
**SAN MAURICIO MINING COMPANY
OPERATING ACCOUNT**

For the Year ended 31st December, 1937

To Direct Operating Costs—			By Bullion and Concentrates Produced	P1,879,164.00
Mine Operating	P 343,255.46			
Mill Operating	168,961.40			
Mine General	141,432.67	P 653,649.53		
" Indirect Operating Costs—				
Mill Operating	P 389,818.17			
Mine Operating	247,854.40	637,672.57		
" General Overhead		43,833.13		
" Operating Profit		544,008.77		
		P1,879,164.00		P1,879,164.00

**PROFIT AND LOSS ACCOUNT
For the Year ended 31st December, 1937**

To Administration Expenses	P 60,468.85		By Operating Profit	P 544,008.77
" Payments made under financing agreement with Marsman & Co., Inc., dated 6th August 1935 authorized by Stockholders 15th July 1935		108,760.84	" Rents Received	2,679.37
" Income Tax		22,683.54	" Miscellaneous Income	16,573.12
" Net Profit for the Year		371,348.03		
		P 563,261.26		P 563,261.26

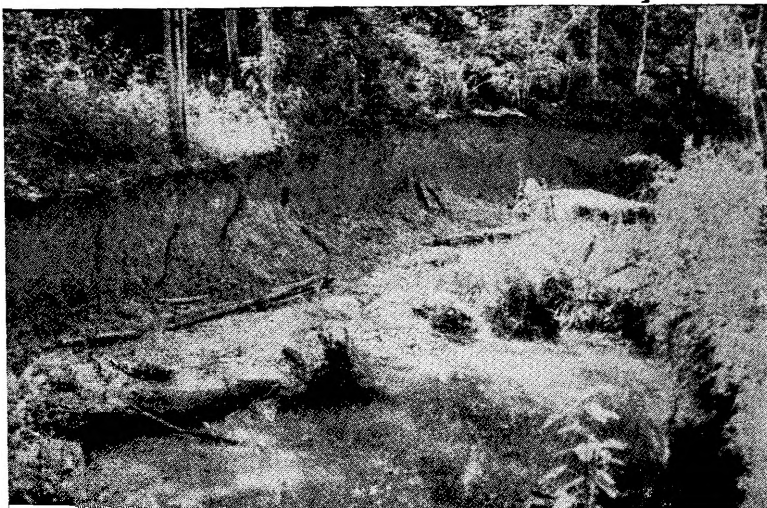


Boring to test the gold-bearing gravels.



Panning in the river bed.

Gold-bearing gravel banks near the river.



MARSMAN N. E. J.

A number of exploratory and prospecting expeditions were sent out in the field throughout the Dutch East Indies in the course of the past twelve months. Most of this work was done in Sumatra, Borneo and Celebes, although several properties were also examined in Java and on some of the smaller islands.

Prospecting applications and licenses covering enormous tracts of land, aggregating hundreds of thousand hectares had to be prospected rapidly. For this purpose a number of Dutch geologist, engineers and prospectors familiar with the country, people, language, and conditions were engaged, in addition to a number of American personnel already in the field.

Organization of an expedition is an exacting task and carrying it out to accomplish the objectives is always fraught with numerous difficulties. Invariably the coun-

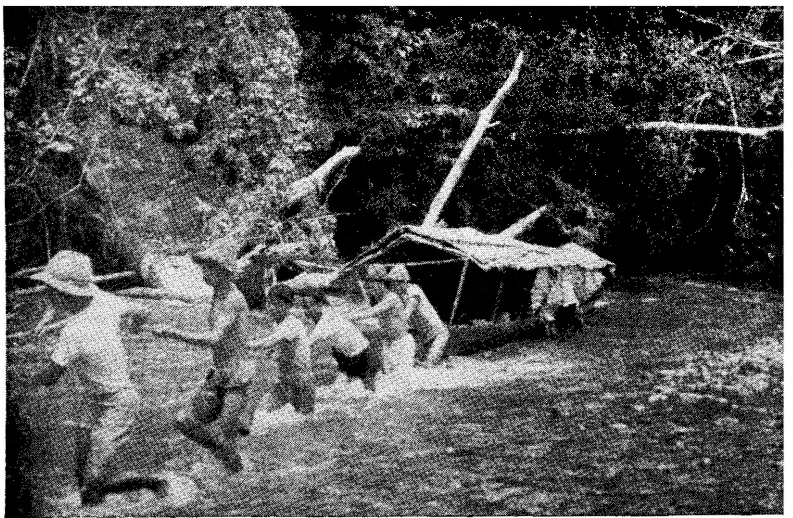
EXPEDITIONS

try is a remote jungle, sometimes uninhabited, with no roads or navigable rivers. Only occasionally it is possible to use small boats or prahus to go part way up to the objective in the field. The biggest portion of travel has to be made on foot, cutting a trail from the dense jungle and using local natives as porters.

Food rations, prospecting and boring tools, explosives, medicines, firearms and a number of other indispensable items of camp equipment have to be compactly arranged into parcels of standard weight for porters and protected against damage by water.

Such expeditions may be of from two to six months duration. Communication with the nearest town has to be maintained to procure additional supplies and labor, to receive and dispatch messages, and to ship samples.

Pictures show one such expedition enroute into the interior of Borneo.

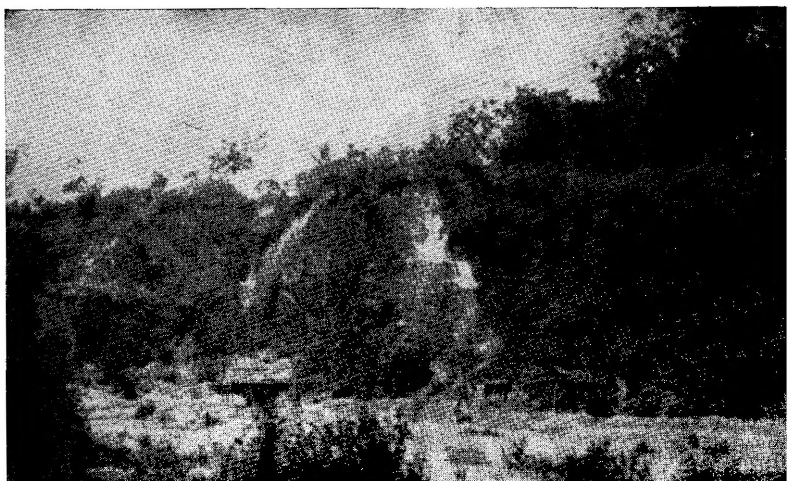


Shallow upper reaches of the Miroeh River



Motorboats and prahus being rearranged to go up the rapids

Native sluicing operations (Dayaks are very much like the Igorots of the Mountain Province of the Philippines.)



UNITED PARACALE ANNUAL MEETING

The annual meeting of the United Paracale Mining Company was held March 1, in the Marsman Building, Port Area, Manila. The following board of directors was unanimously elected for the year: J. H. Marsman, Major A. Beckerleg, H. P. L. Jollye, E. Heybroek, E. Madsen, A. F. Kelly, and S. J. Wilson.

Major Beckerleg, director and member of the board of consulting engineers of Marsman and Company, explained developments at the property during the year. United Paracale treated 106,689 tons of ore in 1937, from which ₱1,902,050.74 was recovered. Of this tonnage, 65,913 tons were sulphide ore from the mine, 39,617 tons of oxide ore from the Haliguang Bato talus deposit, and 1,159 tons of sulphide ore from the Rocky Mountain Fraction of the Northern Mining and Development Company; production was ₱1,668,515.11 from the mine sulphide ore; ₱215,777.81 from the oxide ore, and ₱17,757.82 from the Rocky Mountain Fraction. Recovered value per ton of sulphide ore was ₱25.31, while that for the oxide ore was ₱5.44.

Ore reserves as of January 1, 1938 were estimated at 121,083 tons with an average value of ₱23.11 per ton, or ₱2,798,073.64. This estimate does not take into account ore indicated by diamond drilling. It was explained that only very conservative tonnages had been taken into account from parallel vein system on which considerable work is in progress.

The company made a net profit of ₱386,690.56 during 1937. A dividend of 10% was declared payable on March 15, 1938 to stockholders of record as of March 1. This will absorb ₱110,000 of the earned surplus of 1937. Expenditures during 1937 for capital development amounted to ₱565,391.28, and for capital investments, ₱331,456.79, making a total of ₱896,848.07. The company invested ₱100,000 in the Philippine Smelting Company, which operates the

smelter which is treated concentrates from the United Paracale mill. This treatment locally effects a considerable saving to United Paracale, stockholders were informed.

At the meeting the stockholders authorized the board of directors of United Paracale to enter into negotiations with Marsman and Company for the purpose of eliminating the present financing agreement. If the directors conclude satisfactory arrangements, and if an agreement is reached with Marsman and Company, a special meeting of United Paracale shareholders will be called to discuss and act on such arrangements. No action has as yet been taken towards this end. Any increase in capital stock must, under the by-laws of the company, be approved by a two-thirds vote of the subscribed capital stock.

The present arrangement, by which Marsman and Company receives 15% of the profits of United Paracale in return for financial aid given during the past few years, is entirely satisfactory to Marsman and Company, stockholders were told, and any action taken will react to the financial benefit of the United Paracale shareholders. The matter was discussed at some length in the meeting.

The meeting was well attended, more being present than at any other annual gathering of shareholders. A resolution of thanks to Marsman and Company, managers, for the excellent results of the 1937 work, was unanimously passed.

United Paracale operating staff: R. H. Canon, general superintendent; C. R. Smith, mill superintendent; J. C. Alexander, mine superintendent; C. R. Hubbard, chief engineer; C. F. Fletcher, mechanical and power superintendent; C. E. van Landingham, accountant; G. W. Cotton, assayer; Dr. P. C. Palencia, resident physician; Mrs. P. C. Palencia, resident chief nurse.

UNITED PARACALE MINING COMPANY

BALANCE SHEET

As at 31st December, 1937

ASSETS

CURRENT ASSETS:

Cash on Hand and in Bank	P 144,302.83	
Accounts Receivable	15,256.69	
Machinery Parts and Supplies	327,478.28	
Bullion and Concentrates in Transit	238,846.90	
Bullion and Concentrates on Hand	150,074.78	P 875,959.48

FIXED ASSETS:

Mine and Mining Properties	P 480,423.14	
<i>Add</i> —Capital Development	1,045,786.18	P1,526,209.32

Buildings	P 264,423.10	
Mine Machinery and Equipment	258,564.81	
Mill Machinery and Equipment	220,347.39	
Powerhouse Machinery & Equipment ..	409,869.88	
Assay Office Machinery & Equipment	12,132.18	
Blacksmith and Carpentry Shops		
Machinery and Equipment	45,375.25	
Miscellaneous Machinery and Equipment	98,079.92	
Furniture and Fixtures	49,889.86	
Water, Light and Power Systems	78,625.94	
Roads, Trails and Bridges	40,454.71	

	P1,477,763.04	
<i>Less</i> —Reserve for Depreciation	523,289.53	954,473.51 2,480,682.83

INVESTMENTS:

Philippine Smelting Co.		100,000.00
------------------------------	--	------------

DEFERRED ASSETS:

Prepaid Charges		1,812.09
-----------------------	--	----------

P3,458,454.40

LIABILITIES

CURRENT LIABILITIES:

Accounts Payable	P 105,738.15	
Bank Advances Against Bullion & Concentrate Shipments	221,203.92	
Accrued Expenses (Production Marketing)	39,829.20	
Accrued Taxes	17,183.30	P 383,954.57

RESERVES:

Income Tax		23,193.28
------------------	--	-----------

NET WORTH:

<i>Capital Authorized, Issued and Subscribed—</i>		
11,000,000 shares at 10c each	P1,100,000.00	
Surplus as at 31st December, 1936 ...	P 2,251.77	
<i>Less</i> —Prior Years Adjustments during		
1937	135.78	
	2,115.99	
<i>Add</i> —Profit for the year to date	386,690.56	388,806.55
Stock Premium	1,562,500.00	3,051,306.55

P3,458,454.40

UNITED PARACALE MINING COMPANY OPERATING ACCOUNT

For the Year ended 31st December 1937

To Direct Operating Costs—			By Bullion and Concentrates Produced	P1,902,050.74
Mine Operating	P430,871.54			
Mill Operating	192,817.60			
Mine General	156,985.73	P 780,674.87		
<hr/>				
" Indirect Operating Costs--				
Mill Operating	P287,070.41			
Mine Operating	227,527.43	514,597.84		
<hr/>				
" General Overhead		42,885.45		
" Operating Profit		563,892.58		
<hr/>				
		<u>P1,902,050.74</u>		<u>P1,902,050.74</u>

PROFIT AND LOSS ACCOUNT For the Year ended 31st December 1937

To Administrative Expenses	P 52,500.00		By Net Operating Profit	P 563,892.58
" Payments made under financing agreement with Marsman & Co., Inc., dated 19th June 1935, authorized by Stockholders 17th June, 1935	104,714.08		" Rents Received	2,408.57
" Income Tax	23,347.55		" Miscellaneous Income	951.04
Net Profit for the Year	386,690.56			
<hr/>				
	<u>P 567,252.19</u>			<u>P 567,252.19</u>

Boyles Bros. Drilling (Philippine) Co.

MARSMAN BUILDING

Manila

In order to have the name of our company correspond with our affiliated companies, we have changed the name of
B. B. PHILIPPINE DRILLING COMPANY to
BOYLES BROS. DRILLING (PHILIPPINE) CO.

Diamond Drilling Specialists

We Carry In Stock

A Complete Line of Diamond Drills

Diamond Drilling Supplies

Bortz

Carbon

Ready-Set Bits

When contemplating diamond drilling

Consult us

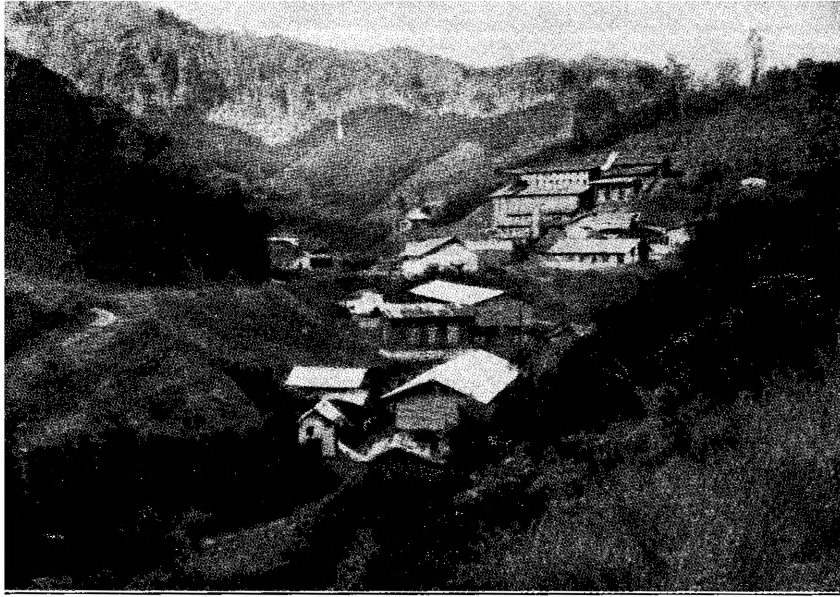
No Job Too Small—No Job Too Large

Tel. 2-32-32



**Head Office
and Factory:**
**Boyles Bros.
Drilling Co., Ltd.
Vancouver, B. C.**

Branch:
**Boyles Bros.
Drilling Co., Inc.
Salt Lake City
U. S. A.**



*General View of the
Mangani Mine*

Marsman Mangani Ope

This property is situated 50 kilometers north of Fort de Kock, a picturesque mountain city on the Sumatra's Westkust. A good auto-road was built to the mine during former operations by Equator Mining Company, permitting easy access to the property. Although located right on the equator line, the camp has an elevation of over 1000 meters above sea and enjoys a cool, invigorating climate very much like that of the Baguio City.

Early development work was started in 1912 and two important ore bodies were eventually brought into production, which continued as late as 1931, when the mine was shut down, having produced 23 million guilders in gold and silver. The mine remained dormant until Marsman interests took an option on the property early in 1937 and a new program of development work was started.

Several veins were known to exist on the property and were superficially prospected during former operations. However, no extensive development program was ever launched to prospect in depth, with the result that when known reserves were exhausted, the mine was shut down, leaving these potential ore bodies intact.

Our present development program started with a careful geological survey of the property to relocate and to tie-in all known veins and other geological features of importance. Extensive sampling was undertaken next, and sufficient data were soon gathered and systematized to outline the most advantageous program of diamond drilling.

Personnel and equipment were shipped from Manila a year ago and diamond drilling was in progress continuously since then, with very satisfactory results.

**COMPLETE LINES OF STAPLE & FANCY
GROCERIES • LIQUORS & WINES
STATES FRESH FRUITS & VEGETABLES**

DIRECT IMPORTERS

AMERICAN GROCERY

217-19 Echague

Tels. 2-16-14—2-16-15

*Close-up of the Maygani Mill
dismantled in 1931*



tion, Sumatra, N. E. I.

Concurrently with deep diamond drilling a comprehensive program of underground development work has been carried on continuously in a number of headings on several veins, likewise with good results.

Physical characteristics of the property are generally very favorable. In addition to the already existing good road, there are three hydro-electric power plants, one of which is in use and the other two ready for operation capable of delivering 1000 KVA.

Much other mine equipment and electrical equipment is stored on the property. This includes mine hoists, cables, cars and vails, crushers, ball-mills, a number of electric motors and transformers, much of the machine shop equipment, and saw mill.

Many of the buildings on the property are quite serviceable; among those in use are large bodegas, garage, mine office, hospital, assay-building, store, three residential cottages and two large coolie-lines for laborers.

Present staff consists of an American Mining Engineer in charge, a Dutch geologist, 4 Canadian diamond drillers, two German mine shift-bosses, and one Filipino surveyor.

Recently a large representative bulk sample of the ore arrived in Manila for metallurgical test work, with a view of working out a suitable flow sheet.

Mr. James E. Atkinson, who has been in immediate charge of recent development on the property has arrived in Manila to discuss future development work and matters pertaining to installation of the mill on the property. He expects to return to Sumatra in the near future.

I. BECK, INC.

**Provided Miners Since 1898
Retail & Wholesale**

**Wearing Apparel. Haberdashery for Men, Women & Children.
Big Line of Household goods. Radios. Phonographs. Beds. Toys.**

Send for Catalogue

For Reference ask any old Mining Man

VETERAN PATCO PILOT LOST

A tragic accident, the details of which will probably never be known, is believed to have taken the life of Burton H. Hall, veteran pilot of the Philippine Aerial Taxi Company, early in March—the first serious mishap to befall the company since its organization in 1931. Although the plane in which Pilot Hall took off from Grace Field in Manila the morning of February 28 has not been found, pieces of wreckage found a week later along the coast of Tayabas made it almost certain that he had been obliged to make a forced landing of the southeastern coast of Tayabas. A careful search of the many islands in the vicinity is being made, and the waters are being explored for further traces of the plane, but the chances of finding the pilot alive are considered extremely remote.

Every effort was made by the company, by the United States and Philippine Army Air Corps, the United States Navy, and by private planes, to locate the missing plane. As many as 26 planes were in the air at one time during the week following the disappearance. Fog and rain, which are blamed for the disaster, hindered the search considerably.

Reports were received a few days after the plane left Manila that it had been seen flying low along the coast near barrio Talaan, Sariaya, Tayabas, apparently in trouble. The entire Tayabas peninsula was covered by searching parties, with no results. Finally, a week after the disappearance, bits of wreckage were found on the beach near Capaluhan. Within the next few days other pieces

which were later identified as coming from an airplane of the same type as that flown by Hall, were found.

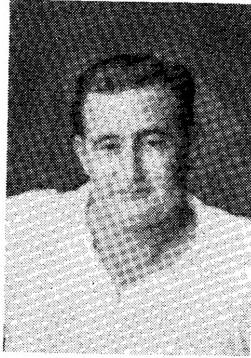
The news of the loss of Pilot Hall came as a shocking blow to all who knew him. "Burt" Hall was one of the most popular pilots ever to fly in the Philippines. His friends were legion, and he was respected by all who had ever flown with him as a most competent pilot.

Hall was one of the first to land at Paracale, when the district was revived in 1933, and he had been making regular flights to that district since. He flew the Manila-Baguio run regularly with the other Patco pilots, and with them did considerable charter flying for various mining executives. Until his disappearance he had never had a serious accident.

Hall was born in Tucson, Arizona, and was about 32 years old. He received his early flying training at the March and Kelly flying fields in the United States, and was a reserve officer in the United States Army Air Corps. He flew in China for the China National Aviation Corporation before coming to the Philippines in 1933. He came to the Philippines highly recommended, and added to his reputation as a thoroughly reliable flyer by his work for Patco.

Mr. Marsman, president of Patco, said of him: "I am grieved beyond words at the tragedy. Burt Hall had the respect and friendship of all of us who knew him, and it is hard to believe that he has gone. He did his job well, and his loss leaves a vacancy that will be hard to fill."

Hall was married, Mrs. Hall coming with him to the Philippines.



Burton H. Hall

The accident which took the life of Burton H. Hall was the first to be suffered by PATCO in its six years of operation. During that time some 30,000 passengers were flown 1,540,404 miles in safety to Baguio, Paracale and other points in the Philippines. Regular mail schedule to Baguio and Paracale have been maintained, four years to Baguio and two to Paracale, with but few cancelled flights a year. The policy of Baguio that safety comes first has made this excellent record possible.

Since regular flights were started in Paracale, in October, 1935, there has been 858 flights, during which 222,620 miles were flown in 1800 hours and around 5,000 passengers carried.

While the exact cause of the accident can not be determined, it is believed that heavy fog and rain caused Hall to fly off his course in search of better flying conditions.

There were no passengers in the plane with Hall.

COCO GROVE ANNUAL MEETING

The annual meeting of Coco Grove, Inc. was held March 7, 1938, at the Marsman Building, Port Area, Manila. The stockholders elected H. P. L. Jollye, Major A. Beckerleg, S. J. Wilson, T. M. Jordan, and G. W. Kerr as directors for the coming year.

Operating costs at Coco Grove are well below the estimated figures, the stockholders were informed. Actual operating costs to date have been around ₱.12 per yard, it was announced, while recoveries have averaged ₱.735 per yard; estimated recoveries were based on ₱.67 a yard. Coco Grove costs compare most favorably with similar operations elsewhere in the world, it was reported.

George W. Kerr, director of Coco Grove and member of the board of consulting engineers of Marsman and Company, explained these facts, prefacing his remarks with a brief account of the history of the area. For some 10 years, from 1911 to 1922, about 80 per cent of the gold production of the Philippines came from dredging in the Paracale area. Mr. Kerr himself has been con-

nected with placer mining operations in the district since 1911, coming to the Islands after similar experience in Alaska.

Ore reserves of Coco Grove are at present estimated to be 26,000,000 cubic yards valued at around ₱15,000,000, Mr. Kerr stated, but these figures do not include additional areas on the Malaguit River, and beyond the present area being worked. The property has a life of at least 10 to 12 years, and should net a sizeable profit.

Mr. Kerr explained the precautions taken to safeguard the dredge against the northeast monsoon. The dredgers in use last year were employed to build a breakwater in the bay, and this is to be extended to give even further protection, so that the dredgers can work during the monsoon season without being endangered.

A resolution of appreciation to Marsman and Company, managers of the property, for the work accomplished during the year was unanimously passed.

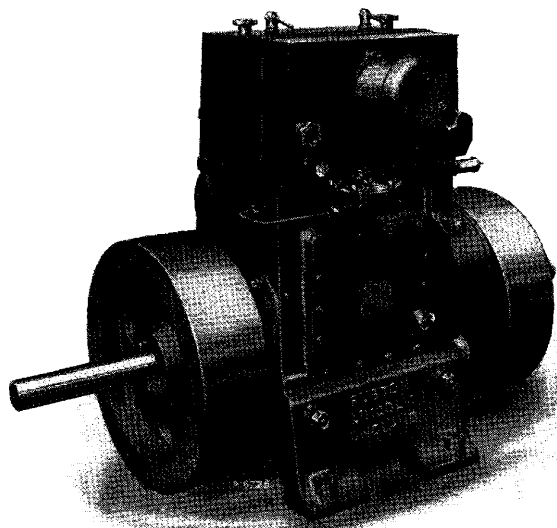


Illustration shows one of the small verticals in powers from 3 to 30 B.H.P.

RUSTON

*units for
the small
power user*

Ruston small vertical oil engines are the ideal units for driving machinery or supplying light where only a limited supply of power is required.

They are easy to start, totally enclosed yet readily accessible, cheap to run on light diesel oil and unfailing in service.

Britain's Largest Builders of Oil Engines.

RUSTON & HORNSBY LTD. • LINCOLN • ENGLAND

COCO GROVE, INC.
BALANCE SHEET
As at 31st December, 1937

ASSETS

CURRENT ASSETS:			
Cash on Hand and in Bank	P 5,672.31		
Accounts Receivable	3,102.15		
Special Consignment Account	19,276.70		
Insurance Claim Receivable	37,776.45		
Machinery Parts and Supplies	96,657.62	P 162,485.23	
<hr/>			
FIXED ASSETS:			
Capital Development	P1,701,578.41		
Land Leases	202.14	1,701,780.55	
<hr/>			
Dredge No. 1 (Mary Angus)	P631,265.49		
Add—Cost of erection and installation	122,035.49	P 753,300.98	
<hr/>			
Dredge No. 2 (Anne Petronella)	P606,248.11		
Add—Cost of erection and installation	117,687.21	723,935.32	
<hr/>			
Camp Buildings	66,645.06		
Floating Equipment	2,044.11		
Slipway Construction	4,463.58		
Light and Power Installation	154,124.18		
Roads, Trails and Bridges	4,942.57		
Tools and Engineering Equipment	3,038.31		
Water Supply Installation	11,040.15		
Blacksmith Shop Building	9,863.68		
Blacksmith Shop Machinery and Equipment	24,135.21		
Wharf Construction	2,457.88		
Hospital and Schoolhouse	14,789.64		
Miscellaneous Equipment	83,536.55		
Furniture and Fixtures	14,622.41		
<hr/>			
	P1,872,939.63		
Less—Reserve for Depreciation	120,984.11	1,751,955.52	
<hr/>			
DEFERRED CHARGES		5,829.41	
<hr/>			
		<u>P3,622,050.71</u>	

LIABILITIES

CURRENT LIABILITIES:			
Accounts Payable		P 58,150.57	
Advances—Marsman & Co., Inc.		144,602.55	
Marsman Trading Corporation		17,268.30	
Notes Payable		300,000.00	
Bills Payable		11,795.00	
Guaranty Deposits		500.00	
Chapa Deposits		378.00	
Unclaimed Wages		740.06	P 533,434.48
<hr/>			

NET WORTH:

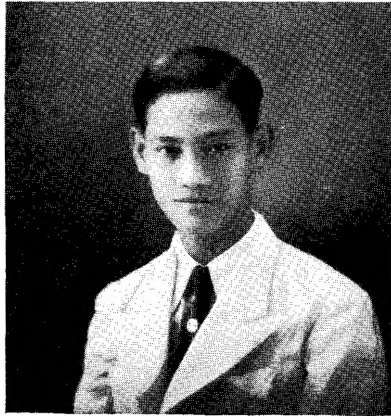
<i>Capital—</i>			
<i>Authorized, Issued and Subscribed—</i>			
15,000,000 shares of 10c each		P1,500,000.00	
Stock Premium		2,250,000.00	
<hr/>			
		P3,750,000.00	
<i>Deduct—Deficit as at 31st</i>			
December, 1936		P 664,212.94	
<i>Less—</i>			
Credits to Deficit in 1937	2,829.17	661,383.77	3,088,616.23
<hr/>			

There is a contingent liability for Machinery Parts and Supplies ordered under Irrevocable Letter of Credit amounting to P101,694.00

P3,622,050.71

MARSMAN PROTEGE WINS HONORS

Jones R. Castro, pensionado sent from the Philippines to the Colorado School of Mines by Mr. Marsman, was one of three seniors to win a place on the Dean's Honor Roll for the first semester of the school



minimum of 45 hours and must maintain an "A" average in his courses with no grade lower than a "B" and no incomplete work. Castro carried 48 hours.

year 1937-1938, it was recently announced. He was the only Filipino of the 30 students from the Islands at the school who won this much-coveted honor. To be eligible for the Dean's Honor Roll a student must carry a

graduated in May, 1938, thereby finishing the four-year course in three years. He plans to spend a year at the Massachusetts Institute of Technology where he will take post-graduate work in metallurgy.

E. E. Elser, Inc.

All Forms of Insurance

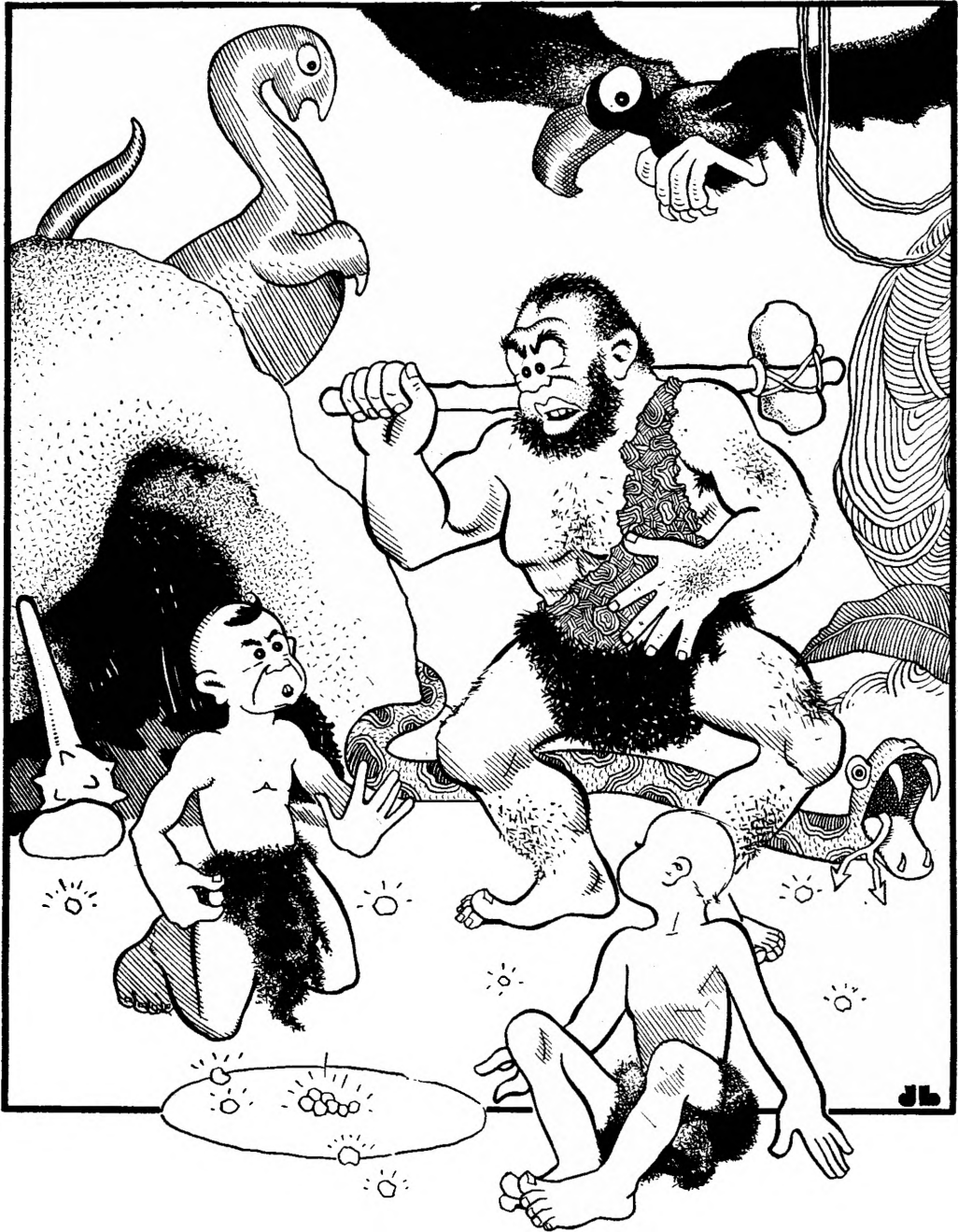
Telephone 2-24-28

P. O. Box 598

MANILA

MYSTERIES OF MINING

This is the third in a series of features describing various interesting phases of mining and the mining industry.



"Why are you kids wasting your time with that yellow trash?" this prehistoric father is telling these youngsters—for at the dawn of civilization gold was considered of little or no value. Only children and women had any desire for the soft metal—for the men could not make weapons out of it, they couldn't eat it, and they couldn't build a house out of it! Gold—the worthless metal, might well have been what the ancients first called it.

MYSTERIES OF MINING

Gold! The very word excites the imagination. Since the dawn of civilization the search for the precious yellow metal has been one of the most driving impulses which mankind has felt.

The first discovery of gold, of course, is veiled in the dim past. It is known, however, that the ancients found glittering nuggets in stream beds. It was soon recognized that the beautiful yellow substance was of no practical value, it could not be used in the manufacture of weapons of war or of the chase because of its softness.

And so gold was first used as a plaything for children, and as ornaments for men and women. Not much attention was paid to the metal, and whatever store of it accumulated resulted entirely from accidental discoveries in stream beds.

The historians tell us that about 2000 B. C. gold first became an article of commerce. Even then it was used only for decorative purposes.

Asia, the center of early civilization, saw the first gold. The bill of lading of a ship that returned to the Persian Gulf in 2048 B. C. after an absence of two years shows a cargo of ivory, copper ore, and gold.

Gold was the first commodity mentioned in the Bible after the institution of the Garden of Eden, and six different words for the metal are found in the Old Testament alone.

The comparative rarity of gold soon impressed the ancients with its value, and it soon became the standard medium of exchange. In all the first writ-

ings that the world knows, the purchasing power of gold is mentioned, because, with the dawn of civilization, man realized that a means of barter would have to be adopted.

Because of its rarity, then, its durability and its fascinating luster, gold became the backbone of commerce. Most of the knowledge of the early trade routes that archeologists have today has been gathered by golden clues left by the first traders of this world of ours, back in the centuries, before Christ.

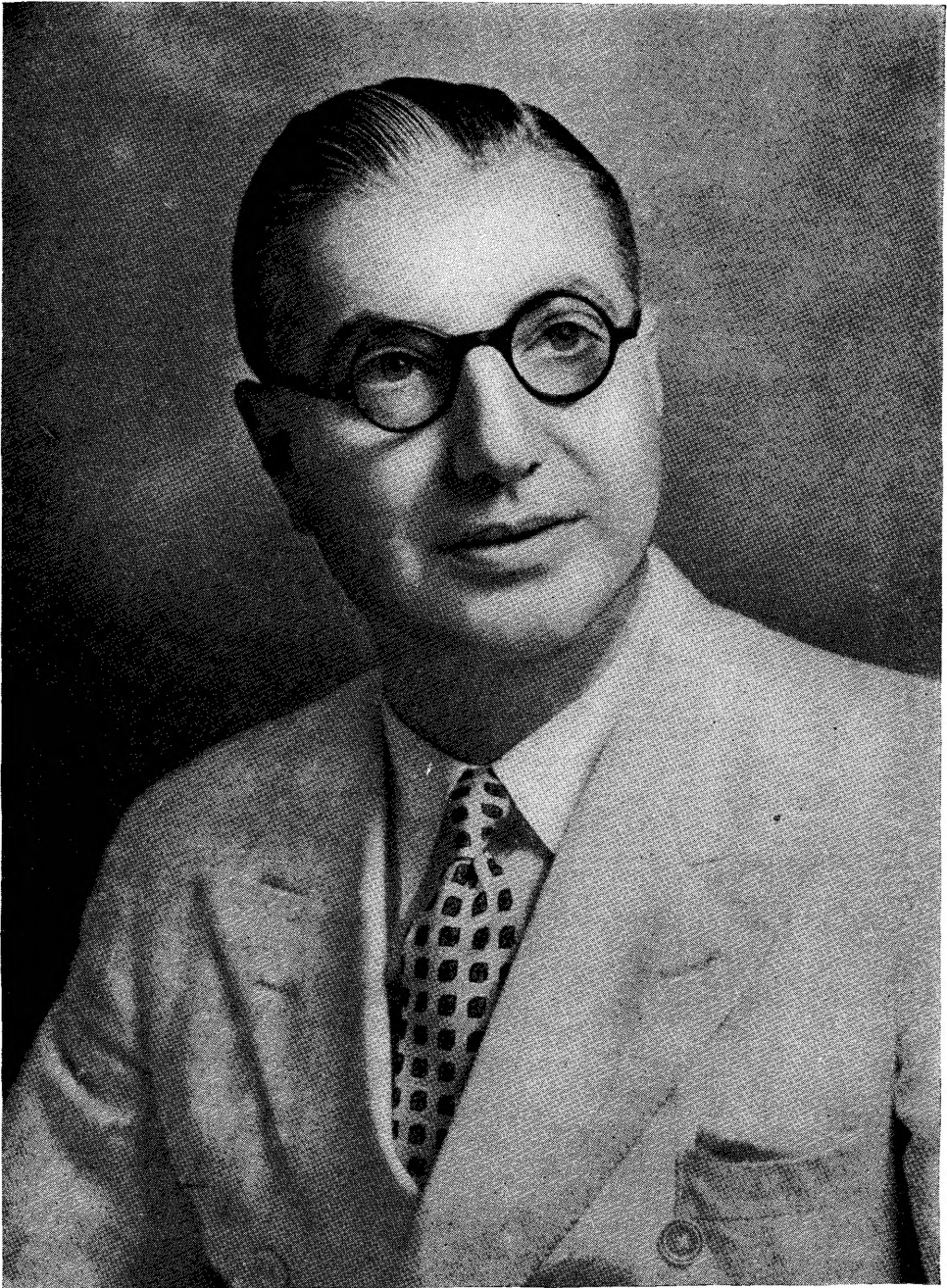
The search for this precious metal has been going on with more and more skill and concentration with the years. It is estimated that from the discovery of America in 1492 to the end of 1935 the world had produced 1,194,913,216 ounces of gold—which if cast into a single mass would make a cube about 41 feet on each edge—about the volume of a two-story American home.

The use of copper, silver, and other alloying metals has made gold useful as well as ornamental. Today it is employed in dental construction, and in the manufacture of many delicate scientific instruments.

It is not its practical uses that have won for gold its supreme position, of course, but its early adoption as the foundation of the monetary system of the world and the basis of credit structure.

And so throughout the years the yellow indestructible metal has reigned supreme; and today gold plays a most vital part in the financial structure of the world.

Let's Get Acquainted



Bernard W. Mason

LET'S GET ACQUAINTED

Outstanding among financial figures of London is Bernard W. Mason, Managing Director of the Hollybush Trust Limited and of Lairds Securities Limited. It was through the efforts of Mr. Mason, working in cooperation with Mr. Marsman, that the shares of Marsman Investments Limited were introduced to the London Stock Exchange in April 1935. Mr. Mason is chairman of the London committee of Marsman Investments, and he arrived in Manila early in February.

Mr. Mason was born at Northfleet, Kent, England, and received his early education at the Colfe Grammar School and Westminster School, London. He entered the international banking firm of Lazard Brothers and Company Ltd. in 1914, and started his financial training there. The World War interrupted his career for a time: he joined the British Army in 1916, was invalided home in 1918, and after the war rejoined this firm and remained with them for a considerable time.

During his affiliation with Lazard Brothers he served in the accounting department, secretariat, and passed through all the various departments thus gaining a thorough insight of international banking practice. For a period he served as chief cashier and had control of the firm's dealings with the London Discount Market, and finally was joint manager of the securities department.

At a later date Mr. Mason formed the Hollybush Trust Limited, and from its inception has been Managing Direc-

tor, acting in a similar capacity for Lairds Securities Limited, both being important investment trusts.

The Trust has been responsible for several successful public issues, including the introduction of the shares of Marsman Investments Limited to the London Stock Exchange. This action followed a visit to London of Mr. Marsman during which he interested Mr. Mason in active participation in Philippine mining activities. Associated with the Hollybush Trust was Capel-Cure and Terry, old established London Stockbrokers, who acted as brokers to this issue. The offices of the Hollybush Trust at 149 Leadenhall Street, London, E. E. 3, are also the European headquarters of Marsman and Company, Inc., and Marsman Hongkong China apart from being the registered offices of Marsman Investments Ltd.

During his visit to the Philippines Mr. Mason has visited the various mining operations of the organization, and has expressed himself as being much surprised at the wide extent and modern technique of mining in the Islands, and as being favorably impressed by the achievements of the various Marsman-managed projects.

Mr. and Mrs. Mason had planned on leaving Manila about the end of March to return to London by way of the United States, but important business has caused a change of plans and after a short visit to Hongkong to get acquainted with the activities of the Marsman Hongkong China Company they planned to fly back direct to England.

MARSMAN AND COMPANY, INC.

Producing Mines

<i>Name</i>	<i>Location</i>	<i>Type Property</i>	<i>Plant Capacity Daily</i>	<i>General Superintendent</i>
Itogon Mining Company	27 km S. of Baguio	Gold Lode	1,000 tons	Warren Gilkison
Suyoc Consolidated	98 km N. of Baguio	Gold Lode	200 "	L. M. Robinson
United Paracale	Paracale, Camarines Norte, 200 km Sw of Manila	Gold Lode	300 "	J. C. Alexander
San Mauricio	15 km N. of Paracale	Gold Lode	300 "	H. L. Barr
Coco Grove	Paracale	Gold Placer	1,300 cubic yards	F. A. Nowacki
Hongkong Wolfram Project	Kowloon, Hongkong	Wolfram Lode		J. Gifford Hull
Acoje Mining Company	14 km. E. Barrio Lucapan, Sta. Cruz, Zambales	Chromite Lode		S. Foley
Mindanao Mining Company	Zamboanga, Zamboanga		Gold Placer	Frank Erno

Properties under Development

<i>Name</i>	<i>Location</i>	<i>Type Property</i>	<i>In Charge</i>
Gumaos Goldfields, Inc.	Camarines, Norte	Gold Lode	A. W. Dixon
Paracale National Gold Mining Co.	Camarines Norte	Gold Lode	O. A. Wilson
Tuba Project	Tayabas	Gold Lode	L. H. Hinckley

EDITORIAL

Table Of Contents

RENEWED INTEREST

A most encouraging indication for the future of mining in the Philippines has been the interest shown recently in the details of mining and milling operations. During the boom days of the past few years, altogether too much attention was paid to the speculative possibilities of a mining venture, and too little to its potentialities as a producer.

The attendance at all of the annual meetings of the Marsman-managed companies this year was excellent. Most significant was the fact that at every meeting a majority of those present came from the ranks of the stockbrokers and traders of Manila. For the most part, each broker represented a number of stockholders who were unable, for one reason or another, to be present. Thus hundreds of investors were represented by men whose job it

(Continued on page 36)

	<i>Page</i>
Marsman Operating Costs	1
February Gold Production Approaches Million Mark	2
Itogon Mining Company	2
Suyoc Consolidated Mining Company..	2
United Paracale Mining Company	4
San Mauricio Mining Company	4
Philippine Smelting Company	4
Gumaos Goldfields, Inc.	5
Acoje Mining Company	5
Coco Grove, Inc.	5
Paracale National Gold Mining Com- pany	5
Itogon Annual Meeting	6
Itogon 1937 Balance Sheet	7
Itogon 1937 Operating Account	8
Suyoc Consolidated Annual Meeting ..	10
Suyoc 1937 Balance Sheet	11
Suyoc 1937 Operating Account	12
Mindanao Mining Company	13
San Mauricio Annual Meeting	14
San Mauricio 1937 Balance Sheet	16
San Mauricio 1937 Operating Account	17
Netherlands East Indies Exploration..	18-19
United Paracale Annual Meeting	20
United Paracale 1937 Balance Sheet ..	21
United Paracale Operating Account ..	22
Marsman Mangani Operation, Sumatra	24-25
Veteran Patco Pilot Lost	26
Coco Grove Annual Meeting	27
Coco Grove 1937 Balance Sheet	28
Marsman Protege Wins Honors	29
Mysteries of Mining (special feature)	30-31
Let's Get Acquainted—Bernard W. Mason	32-33
Marsman Producing Mines Directory ..	34
Editorial—Renewed Interest	35

THE MARSMAN MAGAZINE

Published each month for Marsman & Company, Inc., Marsman Building, Port Area, Manila, Philippines. P. O. Box 297

The magazine is sent to all stockholders of Marsman managed properties and to all staff members of the companies associated with the Marsman interests.

NOTE: *All ore values, bullion figures, etc., given in this magazine are expressed in pesos based on gold at \$35.00 an ounce and silver at the market price. Figures given in monthly reports are based on mine assays, and may differ to some extent from final mint or smelter returns.*

SUBSCRIPTION PRICE, ₱5 A YEAR.

RALPH KEELER, Editor and Business Manager

was to interpret the results of the year's work for the benefit of their clients.

The questions asked at the meetings reflected a desire to learn the true picture at each respective property. Engineers who have been in close touch with each project from its very start explained the results of 1937 work and the possibilities for the years to come. While it is not easy to explain the complicated operation of a mine, a mill, a smelter, or a dredging plant, it is safe to say that those who did go to the meetings went away with a clearer picture of what was going on than ever before.

For the benefit of those stockholders who could not attend, a resume of each meeting is published in this issue of the Marsman Magazine, with each balance sheet, operating statement, and a general summary of the year's work. In addition, a general description of

the Marsman operating figures as compared to other similar projects in the Philippines and elsewhere in the world, is given.

Too often the small investor has the mistaken idea that the company is not interested in him, and does not care to give detail information. This is, of course, quite contrary to the true situation. Marsman and Company, as well as every other well-managed enterprise, is more than willing to keep stockholders informed of what is being done with his property. The main difficulty is a lack of understanding on the part of the non-technical investor, and the impossibility of explaining in a minute detail the whys and wherefores of every action.

It is hoped that the information furnished, will give participants in Marsman projects a more true conception of the existing status of their companies.

Marsman and Company, Inc.

Insurance Department

Representing

The Employers' Liability Assurance Corporation, Ltd.

Insurance Company of North America

North China Insurance Company, Ltd.

The Manufacturers Life Insurance Company of Canada

Filipinas Life Assurance Company

Crown Life Insurance Company of Canada

Occidental Life Insurance Company of U.S.A.

Asia Life Insurance Company



PRINTING !
that pays ●

CARMELO & BAUERMANN, INC.

LITHOGRAPHERS
PRINTERS
BOX MAKERS

Telephone 2-32-51
2057 Azcarraga, Manila

MARSMAN TRADING CORPORATION

offers efficient service and tested, quality products to the
Philippine Mining Industry with complete stocks of

MINE AND MILL SUPPLIES

Assay Equipment &
Supplies
Heavy Chemicals
Bone Ash
Borax Glass
Litharge
Pine Oil
Xanthates
Zinc Dust
Dynamite, Caps, Fuse
Drill Steel & Detach-
able Bits
Steel Balls
Mine Cars
Rails & Accessories
Carbide Lamps
Safety Hats
Waterproof Clothing

**Carbide, Picks,
Shovels, Wire
Rope, Hose and
Hose Couplings,
Pipe and Fittings,
Cement, Galvan-
ized Iron, Gaso-
line, Oils, Greas-
es, and all other
supplies required
by the Mining In-
dustry.**

Agitators
Akins Classifiers
Ball Mills
Crushers
Diesel Engines
Flotation Machines
Magnetic Pulleys
Mine Hoists

Pumps
Cameron
Wilfley

Reagent Feeders
Redwood Tanks
Thickeners
Streamline Oil Filters

BAGUIO

MANILA

PARACALE