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MARSMAN MAGAZINE

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

VOL. I
MARCH
1937
NO. 9

MARCH
1937

THE MARSMAN MAGAZINE

Vol. I
No. 9

'DIVIDENDS'

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One of the largest of American industrial firms has recently announced a change in dividend policy. This firm, E. I. Du Pont de Nemours & Company, began in March the policy of declaring individual, or interim, dividends during the year, depending on the conditions prevailing at the particular time rather than declare what have come to be regarded as regular quarterly dividends.

In announcing the change the company stated: "Heretofore the Company has followed the conventional practice in this country and has paid dividends on its common stock at a more or less uniform rate. It has endeavored to maintain this constant rate of distribution until a change seemed advisable because of a marked shift in economic or business trend. These distributions have been supplemented, from time to time, by 'extra' dividends.

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Published on or about the 20th of each month for Marsman & Company, Inc., Insular Life Building, Plaza Cervantes, 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.

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A PAGE OF PRODUCTION FIGURES

These figures are mine estimates only: final mint returns will differ slightly

| | JANUARY | | | | FEBRUARY | | | | MARCH | | | |
|--------------------------|-------------------|-------------------|-------------------|-------------------|----------------|----------------|----------------|----------------|------------------|----------------|----------------|--|
| | 1934 | 1935 | 1936 | 1937 | 1934 | 1935 | 1936 | 1937 | 1934 | 1935 | 1936 | |
| Itogon | ₱170,750 | 196,714 | 169,785 | 264,700 | 171,370 | 176,136 | 189,827 | 237,648 | 170,847 | 186,118 | 215,747 | |
| San Mauricio | | | | 241,434 | | | 80,474 | 173,491 | | | 75,305 | |
| Suyoc Consolidated | | 52,104 | 101,628 | 98,850 | | 46,768 | 92,098 | 87,873 | | 58,503 | 98,910 | |
| United Paracale | | | 103,702 | 119,686 | | | 73,280 | 109,822 | | | 76,858 | |
| Northern Mining | | | 214 | 375 | | | 5,441 | 527 | | | 3,964 | |
| Coco Grove | | | 8,157 | | | | 44,990 | nil | | | 60,647 | |
| TOTALS | ₱170,750 | 248,818 | 383,486 | 725,045 | 171,370 | 222,904 | 486,110 | 609,361 | 170,847 | 244,621 | 531,431 | |
| | APRIL | | | MAY | | | JUNE | | | | | |
| | 1934 | 1935 | 1936 | 1934 | 1935 | 1936 | 1934 | 1935 | 1936 | | | |
| Itogon | 186,700 | 189,400 | 270,859 | 182,000 | 205,173 | 216,162 | 189,763 | 206,400 | 226,335 | | | |
| San Mauricio ..... | ..... | ..... | 149,990 | ..... | ..... | 106,540 | ..... | ..... | 100,388 | | | |
| Suyoc Consolidated ..... | ..... | 86,225 | 79,411 | ..... | 91,957 | 95,731 | ..... | 75,644 | 86,080 | | | |
| United Paracale ..... | ..... | ..... | 87,755 | ..... | ..... | 109,431 | ..... | 70,481 | 101,494 | | | |
| Northern Mining ..... | ..... | ..... | 4,009 | ..... | ..... | 4,819 | ..... | ..... | 13,564 | | | |
| Coco Grove ..... | ..... | ..... | 45,531 | ..... | ..... | 53,700 | ..... | ..... | 13,345 | | | |
| TOTALS | ₱186,700 | 275,625 | 637,555 | 182,000 | 297,130 | 586,383 | 189,763 | 352,525 | 541,206 | | | |
| | JULY | | | AUGUST | | | SEPTEMBER | | | | | |
| Itogon | 177,626 | 209,218 | 253,132 | 170,268 | 71,353 | 207,423 | ₱195,603 | 172,972 | 226,538 | | | |
| San Mauricio ..... | ..... | ..... | 161,607 | ..... | ..... | 202,786 | ..... | ..... | 213,420 | | | |
| Suyoc Consolidated ..... | ..... | 68,362 | 85,672 | ..... | 75,673 | 120,719 | ..... | 81,773 | 99,931 | | | |
| United Paracale ..... | ..... | 93,344 | 110,336 | ..... | 99,045 | 111,417 | ..... | 50,232 | 123,375 | | | |
| Northern Mining ..... | ..... | ..... | 5,488 | ..... | ..... | 10,526 | ..... | ..... | 9,277 | | | |
| Coco Grove ..... | ..... | ..... | 69,010 | ..... | ..... | 88,119 | ..... | ..... | 110,701 | | | |
| TOTALS | ₱177,626 | 370,924 | 685,245 | 170,268 | 246,071 | 740,990 | 195,603 | 304,977 | 783,242 | | | |
| | OCTOBER | | | NOVEMBER | | | DECEMBER | | | | | |
| Itogon | 218,892 | 201,378 | 299,119 | ₱183,853 | 199,841 | ₱294,519 | 204,362 | 204,504 | 256,223 | | | |
| San Mauricio ..... | ..... | ..... | 224,512 | ..... | ..... | 228,235 | ..... | ..... | 250,631 | | | |
| Suyoc Consolidated ..... | ..... | 101,166 | 113,108 | ..... | 105,652 | 97,691 | ..... | 103,764 | 101,568 | | | |
| United Paracale ..... | ..... | 80,403 | 138,415 | ..... | 77,711 | 122,732 | ..... | 90,215 | 116,996 | | | |
| Northern Mining ..... | ..... | ..... | 2,444 | ..... | ..... | 5,871 | ..... | ..... | 6,732 | | | |
| Coco Grove ..... | ..... | ..... | 95,545 | ..... | 7,981 | 48,101 | ..... | 8,100 | ..... |  |  |  |
| TOTALS | ₱218,892 | 382,947 | 873,143 | 183,853 | 391,185 | 796,261 | 204,362 | 406,583 | 732,150 | | | |
| | | | | | | | | | (First 2 months) | | | |
| | | | | | | 1934 | 1935 | 1936 | 1937 | | | |
| Itogon ..... | ..... | ..... | ..... | ..... | ..... | ₱2,222,034 | ₱2,219,207 | ₱2,825,669 | 502,348 | | | |
| San Mauricio ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 1,793,888 | 414,925 | | | |
| Suyoc Consolidated ..... | ..... | ..... | ..... | ..... | ..... | ..... | 947,591 | 1,172,547 | 186,723 | | | |
| United Paracale ..... | ..... | ..... | ..... | ..... | ..... | ..... | 561,431 | 1,275,791 | 229,508 | | | |
| Northern Mining ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 72,349 | 902 | | | |
| Coco Grove ..... | ..... | ..... | ..... | ..... | ..... | ..... | 16,081 | 636,958 | ..... |  |  |  |
| TOTALS | ₱2,222,034 | ₱3,744,310 | ₱7,777,202 | ₱1,334,406 | | | | | | | | |

MARCH, 1937]

THE MARSMAN MAGAZINE

Municipal Airport Planned For Manila

The construction of a municipal airport at the end of Dewey Boulevard in Manila is being considered seriously at this time by governmental officials. On March 12 Andres Soriano, William J. Shaw, and Benjamin S. Ohnick, directors of the Philippine Aerial Taxi Company, and other prominent Manila businessmen conferred with Jorge B. Vargas, secretary to President Manuel L. Quezon, and Department officials on the matter. The Patco officials are seeking the cooperation of the Government in the concentration of efforts to advance aviation in the Philippines.

It has been pointed out that Manila is the center of aviation in the Far East and should, therefore, have a public airport. An appropriation of P300,000 has been authorized for the proposed airport and more funds have been promised for later release. Already the Government has issued P100,000 for landing fields in various other parts of the Islands and P54,000 more will be released for this purpose in the near future.

Pan American Airways is taking an active interest in the municipal airport project. Juan P. Trippe, president and general manager of Pan American, stated several months ago that it was planned to have a terminal for the Clipper ships in operation on the site of the proposed municipal airport by the end of June, 1937. Mr. Marsman, who is president of the Philippine Aerial Taxi Company, conferred recently in Washington, D. C. with Mr. Trippe and Albert Plesman, president of the Royal Netherlands Indies Air Line, regarding aviation in the Philippines. It is believed that a regular Manila-to-Batavia passenger and mail service will be inaugurated in the near future while a feeder line to the trans-

Pacific service of Pan American Airways within the Islands is more than likely.

The trans-Pacific air transport service of Pan American is to be extended to Macao and Hongkong in April. Regular passenger service is expected to start in May.

A committee has been formed to consider a possible plan of the Government of taking over temporarily a local flying field in course of construction on the Fort McKinley road.

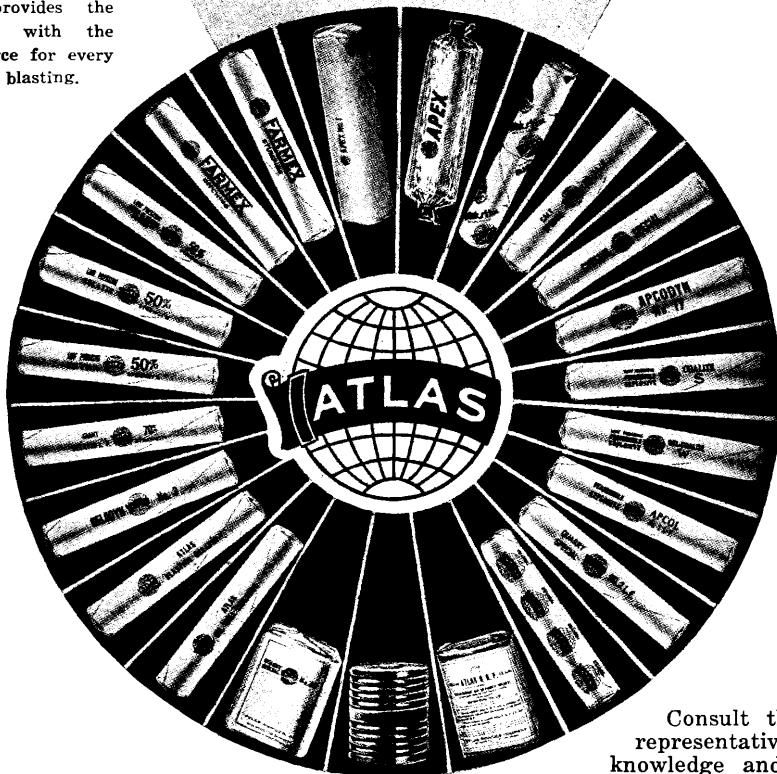
The committee is composed of Major Harvey W. Prosser, chief of the division of aeronautics, department of public works and communications; Benj. S. Ohnick, of the Philippine Aerial Taxi Company; Salvador Araneta, of the Iloilo-Negros Air Express; J. Parker Van Zandt of Pan American Airways; L. R. Nielson and W. H. Pratt, of the American Far Eastern School of Aeronautics; and A. D. Williams, technical adviser at Malacañan.

The bay front project consists of the extension of the present available area at the southern end of Dewey Boulevard by reclaiming some 10 hectares of shoreland facing Fort San Antonio Abad on which to build a modern airport suitable for both airplanes and seaplanes. The whole project completed would cost several million pesos, making the airport probably one of the world's finest. A smaller sum might be sufficient to make the reclaimed area available temporarily for landing purposes.

The project was favored when it was presented for the first time during the sessions of the Commonwealth Assembly because it was believed that it offered great conveniences to airline companies operating both land and sea planes and to the general public in view of its proximity to the city.

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WARREN GILKISON
General Superintendent

During the month of February 15,453 tons of ore, with a recovered value of ₱15.71 per ton, was milled with a gross production of ₱237,647.62. The percentage of extraction for the month was 88.44%.

Development

The total development for the month was 3,452 feet, 2,476 of which was in operating development and 976 feet in capital development.

The Sesame Shaft was advanced 20 feet, has now been connected, and is being timbered.

The 875 Drain Tunnel was advanced 139 feet and was 900 feet in from the

portal at the end of the month.

Development footage for February was the highest on record for a month's work.

Construction

Construction of the camp restaurant is practically complete. It should be finished and open for business sometime during March.

The road to the staff houses is now in use, although there is a small amount of retaining wall work yet to be completed.

The foundation work for the main shaft hoist has just been started and will probably be completed during March

TINGA GOLD MINING COMPANY

The raise from the No. 1 tunnel level has been cribbed and completed to the No. 3 tunnel level. The No. 3 tunnel is being advanced.

Retimbering and spiling through caved ground is being carried on in tunnels 10, 11, 12, and 13, and has been completed in tunnel No. 3.

A cribbed wall is being built which will allow ore to be loaded rapidly into trucks. All ore mined will be delivered to the stock pile at this point. Work is now being directed to mine and pile as much ore as possible from the vein sections now accessible.

DAYAKA MINING COMPANY

Total development footage for February was 204, of which 17 feet was on the 100 level, 40 feet on the 200 level, 9.5 on the John level, and 137.5 feet on the 300 level.

The assay office was completed, and with the arrival of the new furnace this unit will be placed in operation.

Work on the new staff house is half done, and it should be ready for use by the end of March. One native house was completed, and two more started.

The foundation for the new compressor was started, as was the construction of a new cooling water tank. A ditch is being dug to bring water from Schilling Creek for the mine pressure system.

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Suyoc Consolidated Mining Company

L. M. ROBINSON

General Superintendent

The Suyoc plant treated 6,740 tons of ore during February with a recovered value of ₱13.24 per ton, and a gross production of ₱87,842.79. Percentage of extraction for the month was 82.34%.

Test work carried out in the mill laboratory resulted in the starting of grinding in cyanide solution and an increase in extraction. It is expected that if no complications arise, it will be possible to treat all of the mill concentrates in the Suyoc mill and thereby avoid shipping them to the smelters. The higher extraction will proportionately increase the profit per ton.

Development

Total development work during the month amounted to 1,033 feet, of which

526 was in capital development and 507 in operating development. Of the capital development, 129 feet, or 24.5% were in ore, while 103 feet, or 20.3% of the operating development were in ore.

The timber in the main shaft has been nearly all relieved between the 1900 and 2000 levels, thereby permitting the passage of cages to the 2000 level. Excavation for the pump station on the 2000 level was expected to start about the middle of March.

General

Foundations for the No. 3 Allen Diesel electric unit were completed. Two banks of three 333-Kva transformers were installed to replace the 100-Kva transformers, and the transmission line was increased to 4,000 volts.

United Paracale Mining Company

R. H. CANON

General Superintendent

During the month of February a total of 9,575 tons of ore was milled, with a gross production of ₱110,348.72. Sulphide mill No. 1 treated 3,622 tons of ore during the month with a gross production of ₱89,117.72. The percentage of extraction for the month was 89.19%. Oxide mill No. 2 treated 5,953 tons of ore for a gross production of ₱21,231.00. The percentage of extraction in this mill was 42.55%.

Included in the Sulphide mill production is ₱457.14 resulting from the treatment of 55 tons of ore from the Rocky Mt. Fraction of Northern Mining & Dev. Co.

Development

Total development for the month was 1,210 feet, of which 275 was in operating development and 935 in capital development.

Baluarte Shaft No. 2 was sunk 38 feet and was 270 feet deep by the end of February.

Staff House No. 16, which is being erected, is partially finished.

The forms for the power house cooling tower were finished, all concrete was poured, and the erection of the cooling superstructure was started.

Excavation for the power house extension and drill shop building were continued throughout the month of February.

San Mauricio Mining Company

H. L. BARR

General Superintendent

The gross production at San Mauricio during February was ₱173,491.06, a total of 4,265 tons of ore having been milled. The recovered value was ₱40.68 per ton and the percentage of extraction was 91.8%.

Development

A total of 454 feet was advanced in operating development and 675 feet in capital development, a grand total of 1,129 feet for the month.

At the San Mauricio mine, the new Main Shaft was sunk 45 feet in hard granite gneiss and was 251 feet deep February 28. The old shaft was sunk 35 feet in hard granite gneiss and was

477 feet deep by the end of the month.

The Santa Monica Shaft was sunk 43 feet in hard granite gneiss and was 143 feet deep at the end of the month.

General

The mill operated satisfactorily throughout the month.

The results of the diamond drilling on the Santa Ana Vein have been very satisfactory to date.

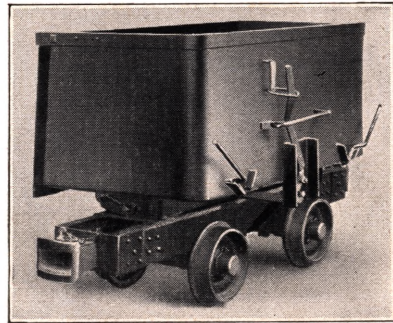
The 150-ton fuel oil tank for the power plant was completed during the month, as was Staff House B of the native staff camp.

Work has been started on the erection of the No. 3 Allen Engine.

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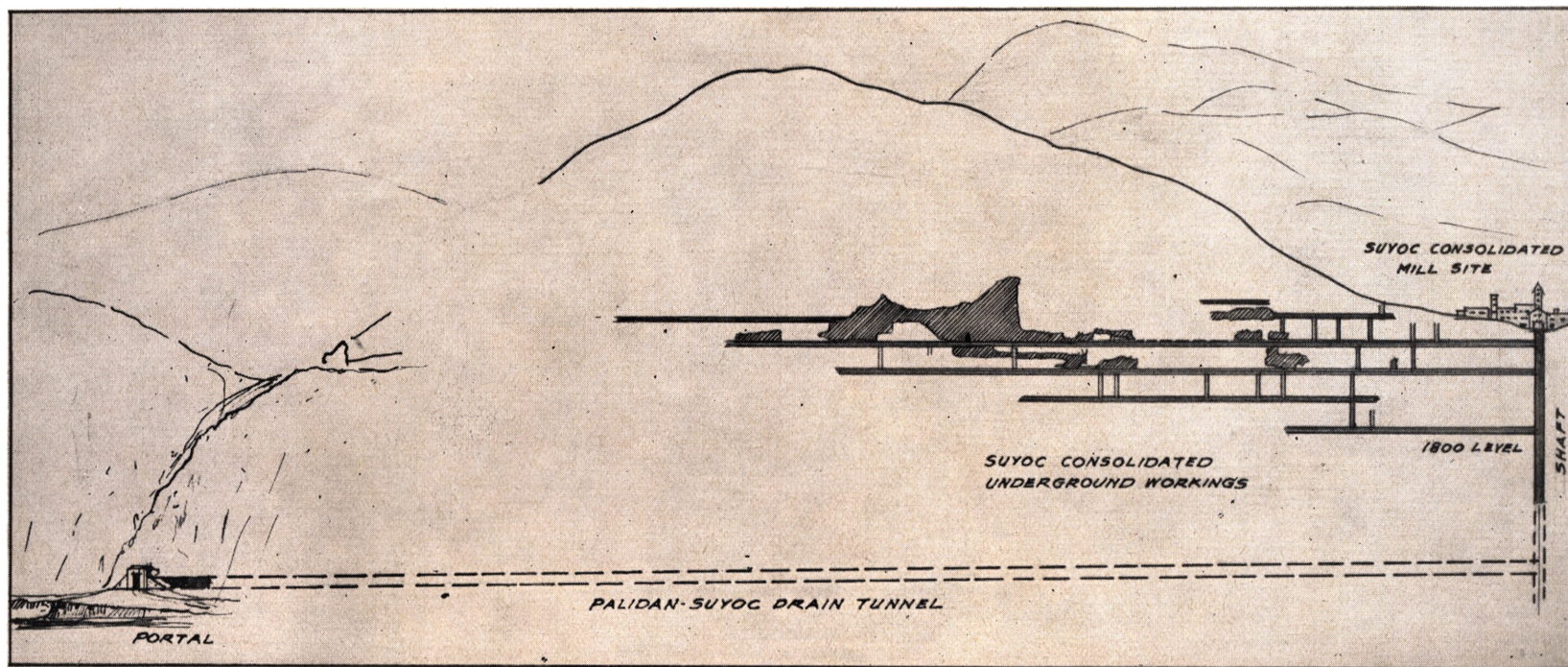
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The Route of the Palidan—Suyoc Drain Tunnel



This sketch, drawn by Emilio Vito of the Manila office, shows how the Palidan-Suyoc drain tunnel will intersect the Suyoc Consolidated workings at the 2200 level—400 feet below the present deepest level. The tunnel is to be 9,000 feet long; it is already in 230 feet. The project will be completed in a little more than a year, and, as may be seen from the sketch, will permit the exploration of a considerable area. This sketch, because of space limitations, is not drawn to scale, but gives the general layout only.

PALIDAN-SUYOC DEEP LEVEL TUNNEL COMPANY

During the month of February the tunnel face was advanced 98 feet, making the total distance from the portal 230 feet.

Work on the waste dump tippie has been completed for the present; the equipment was tested and proved satisfactory.

As soon as the motor is received for the 1,000-cubic-foot Pennsylvania compressor, it will be ready to operate, since as it has already been set up. Likewise the drill carriage, or Jumbo, is only waiting for accessories to arrive before going into service.

It is hoped that all machinery and equipment will be operating by April 1st.

ELIZABETH-ANACONDA MINING ASSOCIATION

Assessment work for 1936 was completed and the assessment affidavits recorded.

Staff house No. 1 is progressing and it is expected that this building will be completed by the end of March. The eight-room bunk house for laborers was practically finished.

The road from Suyoc to the mess house was widened and culverts and drainage ditches were completed.

Some surveying was undertaken and the triangulation system has been connected to the Suyoc Consolidated system.

Due to the increased freight handling the number of daily workmen at the tunnel site is now 79.

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RESERVOIR

Engineering Achievement

ing, was opened on January 30, 1937. Achievement in engineering construction. Reservoir is believed to be the highest in the river bed to the crest.

Director of Marsman Hongkong-China, 1937 Jubilee Reservoir project from its magazine will be interested in the following which has added considerably to the reputation of men in his profession.

granite on the upstream or water side, and with rock fill on the downstream side.

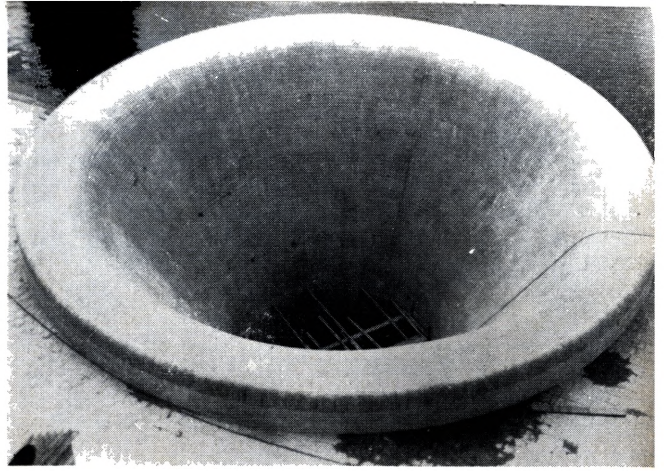
Construction was begun early in 1933. At first malaria was the worst enemy to be overcome, but when the site was reached by the road anti-malaria works were carried out. Ultimately, 986 acres were drained by permanent concrete drains totalling 22 miles in length, and the disease was conquered.

At the end of 1934, the concreting work was begun. At first there was considerable anxiety felt because of the floods common to the wet season in the district but they were safely controlled. By August of 1935 sufficient work had been done to allow impounding to commence and the inlet to the diversion tunnel was closed by a concrete plug on September the 2nd. By May of 1936 the dam could safely impound 700,000,000 gallons and the permanent supply to Hongkong through the Valve Tower was commenced in that month.

There are certain parts of the works which deserve special mention.

Bellmouth Overflow

When the level of water in the Reservoir reaches a level of 625 feet, surplus water begins to flow over the circular lip of the bellmouth, through the tunnel, and so to waste down the river bed below the dam. The disadvantage of this type however is that a vortex invariably forms in it at certain stages of flow which reduces discharge, causes



Main Dam, overflow Bellmouth.

turbulence, and sets up in addition undesirable vibrations in the structure. After lengthy and elaborate experiments these disadvantages were overcome and on the information gained the Shing Mun bellmouth was designed.

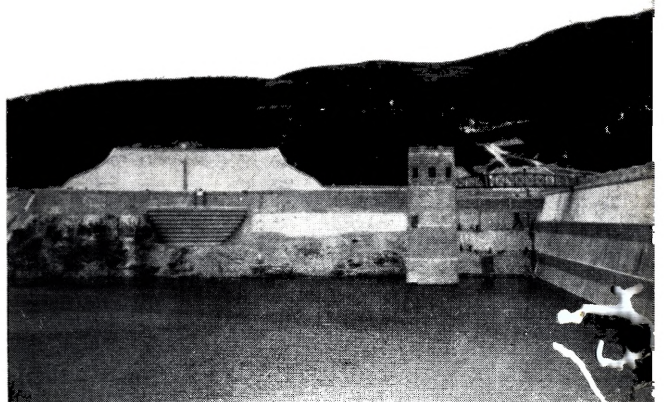
The Siphon Spillway

Incorporated in the dam was a subsidiary spillway, consisting of 6 siphons. This spillway was designed to assist the bellmouth in providing a total discharge of about 90,000 gallons per second, and comes into action when 1 foot 6 inches of water is flowing over the main spillway.

The siphons discharge 3,600 cusecs into a tunnel 11 feet in diameter and through a masonry channel on the quarry bench at level 450. The water from there falls over the rock cliff 100 feet high to the old river bed at a place well clear of the dam.

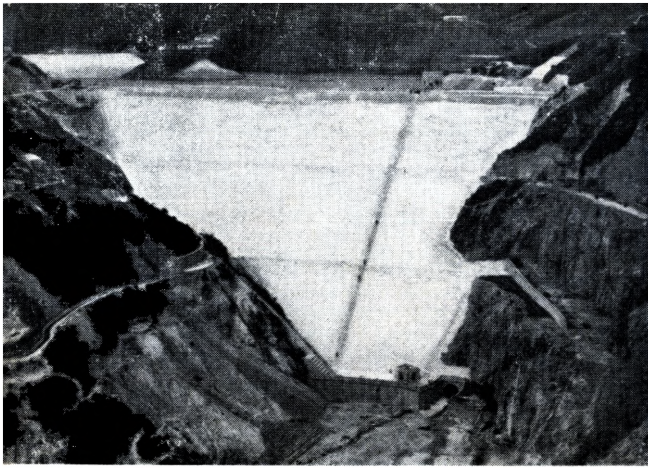
(Continued on page 17)

Main Dam, South bank, showing overflow Bellmouth valve tower and siphons.



THE JUBILEE

An Outstanding Engi



Main Dam, downstream view, showing overflow and siphon tunnel outlets, stone toll and rockfill pitching.

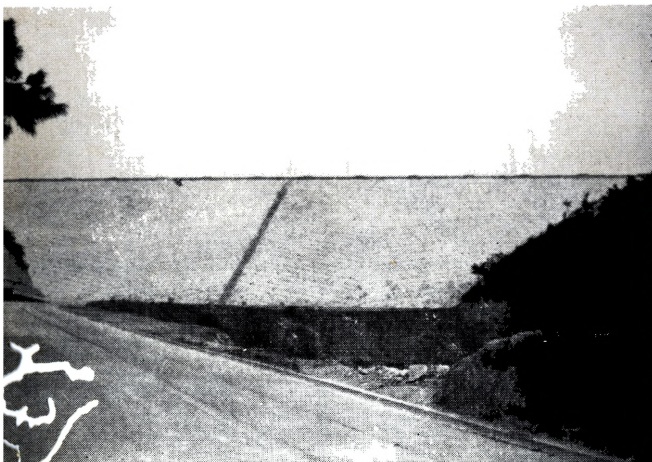
The Jubilee Reservoir, named to commemorate the Jubilee of his late Majesty King George V, is situated about twelve miles from Kowloon, in the Shing Mun Valley in the New Territories. The object of this construction was to afford an additional supply of water to the people of Hong Kong and Kowloon. To accomplish this end a pipe line was laid on the bed of the channel that separates the two cities.

The reservoir is formed by two dams, the Shing Mun Dam and the Pineapple Pass Dam, and has a total capacity of 3,000,000,000 gallons.

The Shing Mun Dam, which is of unusual design, consists of four different parts, namely:

(1) *The Watertight Diaphragm*, containing 9,000 cubic yards of reinforced concrete, forming the face of the dam, built in 20 feet and 25 feet panels separated by copper strips to allow for expansion and contraction.

Pineapple Pass Dam, downstream view showing rockfill pitching.



The Jubilee Reservoir, near Hongk
The project represents an outstanding
One of the dams which form the Reser
British Empire, being 285 feet from the
Mr. G. B. Gifford Hull, managing
Limited, was in direct charge of the en
inception. Readers of the Marsman M
ing brief description of the project whi
tion of Mr. Hull as one of the outstand

(2) *The Thrust Block* which consists of about 140,000 cubic yards of plain concrete with buttresses on its upstream side which carry the water-tight "face" of the dam and permit of its inspection from behind. The thrust block is not of itself stable against the water pressure and stability is given by—

(3) *The Rock Fill*, which is a mass of closely set stones, set by hand, amounting to about 700,000 tons in weight. The rock fill is not built on a rock foundation and is therefore susceptible to settlement, and to ensure that the water thrust is transmitted to it during such settlement, and to avoid "point" contact with the thrust block, a wedge-shaped mass of sand has been introduced between the rock fill and the thrust block. This is called—

(4) *The Sand Wedge*, and apart from fulfilling the above functions it gives a certain amount of elasticity to the whole structure, and renders it better able to withstand earthquake shocks.

To form a cut-off throughout the length of the dam, a tongue trench, varying from 6 to 20 feet deep, was cut to watertight rock and filled with about 20,000 cubic yards of concrete.

This Shing Mun Dam is 285 feet from river bed to crest and it is believed to be the highest in the British Empire.

The Pineapple Pass Dam is 82 feet high, consisting of a concrete core wall carried to rock 72 feet below ground surface, with earth filling pitched with

MARSMAN & COMPANY

has agreements with the following companies, on either a profit-sharing or fee basis, or both:

Itogon Mining Company

Suyoc Consolidated Mining Company

United Paracale Mining Company

San Mauricio Mining Company

Coco Grove, Inc.

Acoje Mining Company

Dulong Mining Company

Mindanao Mining Company

Gumaos Goldfields, Inc.

Filipinas Mining Corporation

Valley Placer Mining Company

Tinga Gold Mining Company

Kowloon Tungsten Project

Homestake Gold Mines, Inc.

Palidan-Suyoc Deep Level Tunnel Company

Elizabeth Anaconda Mining Association

Dayaka Mining Company

In addition, the company carries on a consultation service with a competent staff of mining engineers, geologists, and metallurgists available for such work.

Further information will be furnished upon request.

The Jubilee Reservoir

(Continued from page 15)

Pitching

The stone pitching on both of these dams was considered to be unique. As a general rule, stones forming pitching are laid horizontally, but as the rock fill forming the downstream part of the Shing Mun Dam is not founded on rock but on comparatively soft material it was certain that it would settle. It was thought that if the pitching were laid at an angle of 45° in a series of alternating slopes, the settle would not so easily be noticed, especially if joints were broken every few stones. So it was that the design of the pitching was first evolved purely to dissemble the effects of settlement, but on working out details it was noticed that the changing slopes led to the formation of a pointed arch and that the arches gave additional strength to resist any tendency which the pitching may have had to slide downwards. It was decided to "break joint" every third stone by half the height of a course, which involved the insertion of snecking stones, and as blue granite was locally available it

was decided to use it for this purpose. The central part of the rock fill has settled to date about 4 feet, part of the settlement having occurred since the pitching was laid, but there is no apparent evidence of this in its appearance.

Steps on Face of Dam

Although it is unusual to bring up a dam in higher lifts than 5 or 6 feet, it was decided to construct the diaphragm in 20 foot lifts on the Shing Mun Dam. It is customary to bolt "soldiers" to the face of a dam to carry sliding panels between them against which to place the concrete but at Shing Mun, with the special and comparatively thin diaphragm, it seemed better to do away with bolts, and the steps on the dam are the result of a study to that end. They have proved very successful and likewise afforded very convenient walkways from one side of the dam to the other.

The estimate of cost of the works was \$9,200,000, and although nearly \$300,000 worth of extra works have been added, the whole works were completed for approximately \$8,000,000.

Dulong Mining Company

The total advance for the month of February on the Sampagueta, Aurora, and Luna sections was 1,019.5 feet.

A crew of 12 men completed 780 meters of road on the Bimmace-Bolañget project.

The survey to all the portals was completed during February and the map is expected to be completed in about six week's time.

An epidemic of influenza caused some trouble last month but all employees have recovered.

Marsman Activities In Java Arouse Considerable Interest

Considerable interest is being shown in Java in the activities of Marsman and Company. Mr. J. O. Greenan, of the Board of Consulting Engineers, has been in the area for some time investigating mineral possibilities.

The following clippings, which have been translated from newspapers in Java, will be of interest to readers of the Marsman Magazine.

COPPER IN THE MINAHASSA EXPLORATION BY THE MARSMAN CONCERN

"The Batavia Newspaper announces, that the well-known Marsman concern, of which mention was made recently, has started investigation of the famous copper deposits of the Minahassa (N. Celebes), on the North shore of the Gulf of Tomini.

"A number of years ago, about 1904, the Minahassa had been explored by the well-known mining Engineer Koperberg, who was very much attracted by the rich copper ores and who has written very scientific and interesting communications about same in the Yearbooks of the Mining Department.

"As is well known, in the years 1900-1907 many gold mining companies have been established in that district and have gradually disappeared again. Copper has never had so much public interest, but now the young and ener-

getic Marsman concern has arrived and will interest itself for this absolutely indispensable metal.

"Mr. Bornhaupt has been directed to proceed on the spot in order to make the first investigations and undoubtedly there will be some news about the process made within short."

—(De Indische Courant)

MINING

"The activity developed by the Marsman concern makes it appear that several possibilities of mining in this country will be carefully investigated. For the investigation of a number of concessions offered this concern by Netherlands Indies explorers two very capable American engineers are busy.

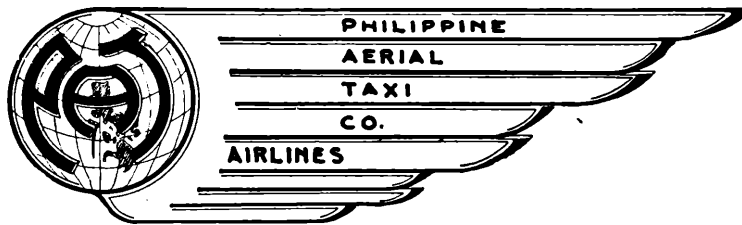
"For the nickel ores in Central Celebes there are several applicants on the market. The negotiations are interrupted pending receipt of the report of the professors Reinders and van Oyen, concerning the process to be applied. It is well known that the ore is rather poor but Professor Caron as well as the firm of Krupp, Germany, invented a process which makes the winning of this ore payable. We understand that the process proposed by Krupp will have preference. As soon as the experts will have reported on this matter the further negotiations between the Government and the applicants will be carried on."

—(Bataviaasch Nieuwsblad-Batavia)

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 Arrive Baguio.. 7:30 "
 Leave Baguio.. 7:40 "
 Arrive Manila.. 8:40 "

ONE WAY - - - P25
 ROUND TRIP - P45

PARACALE - MON. Leave Manila.... 9:00 a.m.
 TUES. Arrive Paracale... 10:00 "
 WED. Leave Paracale... 10:00 "
 THURS. Arrive Manila.... 11:00 "
 FRI.

ONE WAY - - - P35
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J. H. MARSMAN, President

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| Manila Hotel | " 2-20-22 |
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| Grace Park Airport | " 2-43-30 |
| Baguio | Royal Garage |
| Paracale | Marsman & Co. (H. Maclean) |

SPEED

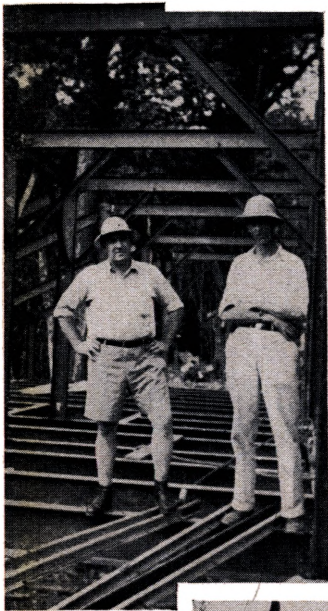
SERVICE

The new Smelter at Mambulao takes shape.

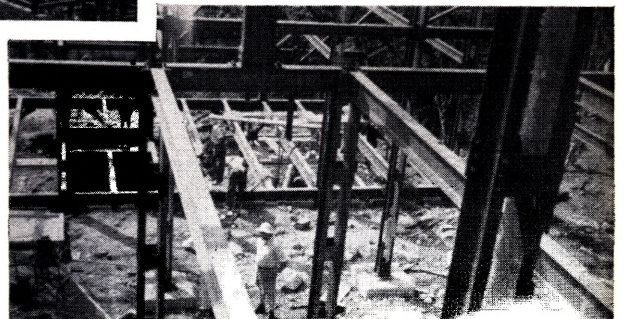


Rapid progress is being made in the construction of the 50-ton Smelter at Mambulao, near the San Mauricio Mining Company. These pictures were taken by William Barr, son of

the San Mauricio general superintendent. At the top may be seen the outlines of the sample mill and pressing plant...The next picture shows a different view of the same unit with part of the Smelter itself at the left. In the center Clarence Weekley, general mill superintendent for Marsman and Company, is discussing the project with S. W. Norton, who is Mr. Weekley's assistant in the supervision of the Smelter construction. Mr. Norton will be Smelter superintendent. He has had considerable smelting experience in Montana, Utah, and South America. Mr. Weekley himself has had some twelve years of smelting experience in Arizona, Mexico, and South America. The two bottom pictures show the steel structure of the varied buildings, which will comprise the Smelter plant, being placed in position. The Smelter buildings, of course, are



entirely of steel construction. It is expected that the Smelter will be completed by the first part of May.



"DIVIDENDS"

(Continued from page 1)

"The company has decided that there are important objections to this policy and, further, that it is subject to some misunderstanding on the part of the stockholders and the investing public.

"One objection, from the standpoint of the corporation management has been that the board of directors, in the interest of uniformity, has felt somewhat constrained to maintain the uniform dividend rate at times when the company's financial position or the current economic conditions warranted a change in the rate.

"Further, the stockholders as well as the investing public have been encouraged by this practice to expect this uniform rate to maintain more or less permanently. The earnings on a common stock rise and fall with the current trend in the fortunes of the company and current business conditions and the management feels that the dividend distribution should reflect such changes position.

"The practice followed to date has had the further objection in that the so-called 'extra' dividend has been misinterpreted in some quarters as representing a distribution of unexpected or immoderate earnings, whereas, in fact the 'extra' dividend has been paid to make a total distribution, in combination with the uniform quarterly dividends, consistent with the earnings of the company, and its general financial position."

The situation confronting Du Pont is similar to that which faces mining companies the world over. In addition, however, to the ordinary risks

of operation which an industrial concern such as Du Pont must meet, mining companies offer even more problems. The profits of a mining company are controlled by many varying factors. Production is affected by underground conditions which often are misunderstood. The monthly output of a mine may decrease because an area of lower grade ore has been encountered; rather than abandon such ore, it is good judgement to work it, even though the profits are lowered for a time.

Heavy cash outlays are often required for the expansion of mining and milling operations. Climatic conditions, such as the severe typhoons which occur here occasionally, frequently cause a drop in production which in no way means that the ultimate value of the mine is lessened.

Stockholders in mining companies should not expect regular fixed dividends. Often mining companies do pay such dividends, because of an established precedent, and in so doing handicap their future activities.

Because a mining company does not pay regular quarterly dividends does not mean that it is not a paying proposition. Often a delay in dividends means simply that the officials of the company are carrying out plans which will ultimately benefit the stockholders far more than any premature dividends. As earnings of a mining company do become properly available for dividends they should be promptly distributed.

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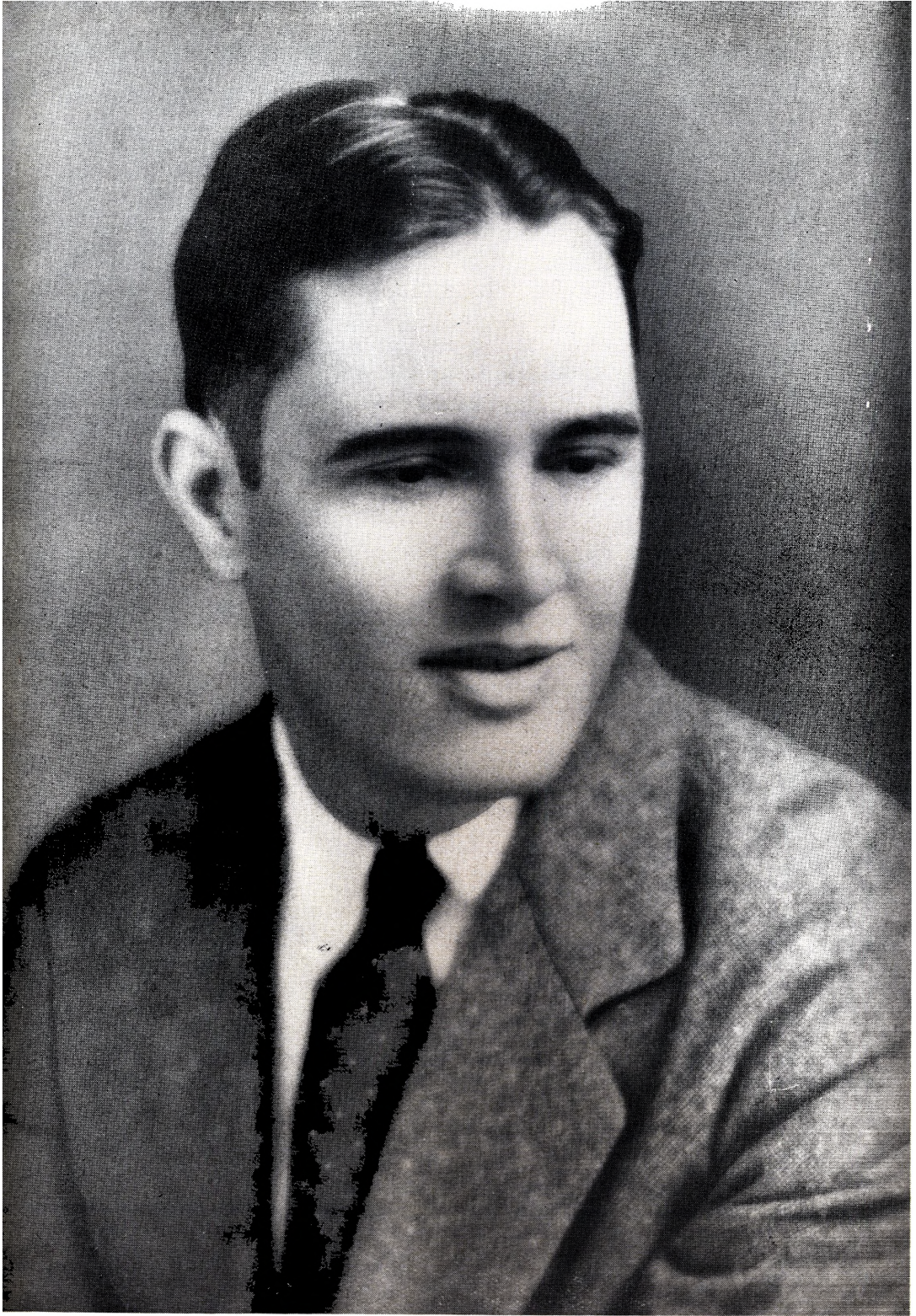
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nd MILL
IES and
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Ralph W. Crosby

Let's Get Acquainted

To be a "veteran" mining engineer at the age of thirty-three is an unusual accomplishment and speaks well for the training and experience of the man.

Ralph W. Crosby, youngest member of the Board of Consulting Engineers, is such an engineer. He will not celebrate his thirty-fourth birthday until next November but his mining experience and his accomplishments in the industry give him the rating of "veteran."

Mr. Crosby was born at Waverley, Nova Scotia and is a Canadian citizen. He received his early education in Mexico, Canada and the United States and attended the Texas College of Mines at El Paso, from which he received his degree of B.S. in mining in 1924.

His first job was with the United Verde Copper Co. at Jerome, Arizona. He was mucker and timberman helper, engineering helper, and draftsman for the steam shovel department, of that organization.

He came to the Philippine Islands in December, 1924, to become engineer and assayer of the Benguet Consolidated Mining Company. He served in that capacity until January 31, 1926, when he transferred to the Benguet mill as mill shift boss. In May, 1926, he was placed in charge of exploration work on the Gomok lease of Benguet, later returning to his position as engineer.

From October 1926 to November 1927 he was construction engineer at Benguet and was in charge of hydro electric pipe lines and flumes, camp construction and sanitation, construction of shops, camp, etc., and was in charge of the first 1200 feet of the driving of the Colbath drain tunnel.

In November 1927 he was transferred to the Balatoc Mining Company. He

was superintendent in charge of mine development, installation of mine machinery, aerial tramway, 100 ton cyanide mill and construction of camps, water supply systems, etc.

From January 1929 to May, 1930, Mr. Crosby was general superintendent at Balatoc in charge of operations.

He joined the Marsman organization May 23, 1930, as mine superintendent of Itogon Mining Company. While he was mine superintendent he also assisted in the supervision of mill construction and general expansion work.

In May 1933 he became acting general superintendent of Itogon, serving in this capacity until October.

From October 16, 1933 to October, 1936, Mr. Crosby was general superintendent at Suyoc Consolidated, one of the then-newly-organized projects of the Marsman interests.

At Suyoc he was in direct charge of mine development, the installation of mine machinery, the installation of a 100 ton flotation cyanidation mill, the installation of a power plant and water system and the construction of camps, roads, bridges, etc.

Under his supervision Suyoc Consolidated was developed and brought into successful producing stage and its activities greatly expanded.

In October, 1936, he was promoted to the position of assistant manager of the Northern Division of Marsman and Company.

Mr. Crosby has distinguished himself particularly by the excellence of his detail work. His reports on operations are comprehensive and accurate, and his estimates on various engineering projects invariably hit the nail on the head.

Mr. Marsman Addresses A. I. M. E.

Members of the American Institute of Mining and Metallurgical Engineers at their annual meeting in Washington on March 6 were told by Mr. Marsman that he believed the gold production of the Philippines would exceed twenty-five million dollars for 1937. Insular production will be valued at forty-five million dollars annually by 1945, Mr. Marsman predicted. Considerable interest was shown by the organization, which is the largest of its kind in the world, in Philippine mining. Mr. Marsman commented on the favorable outlook for chromite ore in the Philippines. He predicted that general industrial activity in the United States would eventually result in large scale scrome production here.

Extensive exploration, working toward the development of the oil resources of the Philippines, is being conducted, Mr. Marsman reported, and he added that the outlook was encouraging.

Great Britain and Japan, as well as the United States, have been showing active interest in expanding mining in the Philippines, he said.

Mr. Marsman arrived in New York from London early in February. Part of his time in the United States was spent in conference with President Manuel L. Quezon and his party in Washington. Mr. Marsman is a member of the National Economic Council and his arrival in Washington was timed so that he could be of assistance to President Quezon.

Mr. Marsman plans to leave the United States late in March for Amsterdam. The Marsman interests are investigating mining possibilities in the Dutch East Indies and Mr. Marsman plans to complete negotiations with the Dutch Government.

LET'S GET ACQUAINTED

(Continued from page 25)

Mr. Crosby was married in 1929 to Miss Flora Colbath, daughter of the superintendent of Benguet Consolidated at that time. Mr. and Mrs. Crosby have one child, Jimmie, and they now make their home in Baguio.

They are both interested in outdoor sports, and in their spare time may usually be found on the Baguio Country Club golf course.

HOMESTAKE GOLD MINES, INC.

Prospecting operations went ahead during the month of February as planned. Intensive work on the northwest section of the property revealed several interesting old workings.

The two groups of field prospectors did a great deal of trenching in shallow open cutting during the month. Tunnelling operations were carried out in several places.

Mr. Hull Appointed Adviser To South China Government

G. B. Gifford Hull, managing director of Marsman Hongkong China, Limited has been invited to serve as technical adviser to the South China Administration. The Hongkong Telegraph stated that the engaging of Mr. Hull was part of the movements towards closer Sino-British contacts in South China.

Mr. Hull, outstanding British engineer, was in charge of the construction of the Jubilee Reservoir, in the Shing Mun Valley in the New Territories, about 12 miles from Kowloon. (Further details as to this project will be found elsewhere in this issue of the Marsman Magazine).

In addition to his work in China, his activities for the British Government in Malaya have added to his engineering reputation; the Telegraph stated that

officials in Canton consider him eminently fit for his new duties.

Mr. A. F. Kelly, treasurer of Marsman and Company and of Marsman Investments, Ltd., will arrive in Manila on the "Victoria" on March 25. Mr. Kelly left Manila last October on a combined business and health trip and has spent the last six months in the United States, England, and on the Continent.

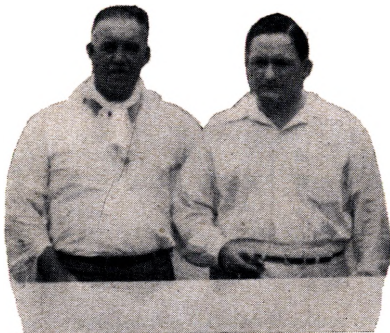
Mrs. Kelly and their daughter Alice left Manila on the President McKinley to travel to Singapore where they will meet Mr. Kelly and return to Manila with him.

* * *

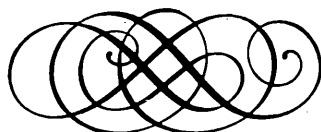
Mr. and Mrs. E. J. Sanders of Itogon left on the S. S. Empress of Canada on March 15 for a vacation trip to the United States. Mr. Sanders is mine accountant for the Itogon Mining Company.

* * *

At a wedding to be held in Manila on March 30, Miss Helen Bryan will become the bride of Mr. S. Lewis Rohrer. Miss Bryan is a sister of E. R. Bryan of Antamok Goldfields while Mr. Rohrer is engineer and assayer at the Suyoc Consolidated Mining Company.



Mr. Hull and Mr. Marsman, snapped at Paracale a few months ago.



GUMAOS GOLDFIELDS, INC.

During February, eight new barriohouses were completed, which makes a total of 36 to date. One of the Filipino staff houses was completed and two others were started.

Six hundred twenty-five feet of road was surfaced during the month and 640 feet of trail was cleared, with some additional trailing done to facilitate the moving of the diamond drill.

The Gardner-Denver Caterpillar compressor operated satisfactorily, as did the Skandia light plant.

Development

Development during the month went ahead as planned in the six tunnels. Diamond drilling was carried on in holes 3, 4, and 5.

The contract between Marsman and Company and the Mother Lode Mining Company for the operation of the latter's property in the Paracale district has been cancelled by mutual consent of both parties. Prospecting on the Mother Lode claims has been going on for the past few months under the supervision of the southern division of Marsman and Company.

FILIPINAS MINING CORPORATION

During February the work consisted of gathering float on the Don Pedro No. 1, the Princesa, and the Queen lenses.

On the Princesa Lens, the chromite was gathered from miscellaneous patches of float around the outer rim of the Lens.

Development on the Queen Lens indicates that a considerable portion of the estimated tonnage is in the form of fine loose chromite.

Marsman and Company, Inc.

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MANILA, PHILIPPINES



LUZON

Dayaka
 Valley Placer
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PARACALE DISTRICT

- 1 San Mauricio
- 2 Mother Lode
- 3 Tinga Gold

- 4 United Paracale
- 5 Coco Grove
- 6 Gumaus Goldfields

TO HONG KONG
631 NAUTICAL MILES

MINDORO

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BORNEO

120°

125°

20°

15°

10°

5°

15°

10°

5°