

MARSMAN MAGAZINE

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FEBRUARY
1940

Manila, Philippines

VOL. IV
NO. 2



SHARP & DOHME'S
Thermotabs

(Tablets Sodium Chloride and Dextrose, S & D)

Thermotabs are designed for relieving "hot weather fatigue" and to prevent heat prostration due to the loss of body salt and fluid through excessive perspiration.

Thermotabs are a scientific combination of Sodium Chloride and Dextrose. The sodium chloride replaces this salt lost from the body fluids. The dextrose supplies a quickly available source of energy.

An individual engaged in active physical duties on a hot summer day may lose as much as six quarts of body fluid through perspiration, although the average is somewhat lower. The saline content of perspiration is such that as much as 300 grains of salt may be lost from the body in a single twenty-four hour period. This loss has proved to be the cause or contributing cause of muscle cramps, excessive fatigue, heat prostration, and gastro-intestinal upsets. The consumption of water alone will not restore the salt balance essential for normal body functioning.

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AGENTS IN THE PHILIPPINES

Cebu, Marsman Trading Corp.

Iloilo, Box 302.

ASK YOUR DRUGGIST

February
1940

THE MARSMAN MAGAZINE

Vol. IV
No. 8

MR. MARSMAN SPONSORS SAFETY CAMPAIGN

A safety contest for gold mines in the Baguio and Paracale districts as a means of promoting interest in first aid and safety work, has just been announced by Mr. J. H. Marsman, who is presenting the awards. Two trophies, one for each district, are to be awarded each year to the mine making the best safety record for the previous year; the name of the company is to be engraved on the trophy, while a certificate, suitably engraved, is to be given for permanent possession.

These trophies, of original design and manufactured in Manila, are to be known as the Marsman Safety Shields. Details of the contest are being worked out by S. M. Jarrett, head of the Mine Operators' Safety Association of Baguio and H. M. Strong, head of the similar organization in the Paracale district.

In general, the awards will be based on time lost because of accidents during the year. Mines eligible to compete will be those having worked approximately a million man-hours of exposure during the year in the two districts. The relative standings of the various mines in the two districts will be published from time to time during the year in the Marsman Magazine and other publications.

The Baguio trophy will be present at the annual Safety Tournament to be held early in May in the Pines City, while the Paracale award will be made in September. Mr. Marsman hopes to be able to attend both functions and to make the awards in person.

The competition will be under the supervision of the Executive Committee of the Mine Operators' Safety Association, composed of the general superintendents of the various mines. In the Baguio district R. L. Lile of Demonstration is president for 1940; L. M. Robinson of Itogon, vice-president; S. M. Jarrett, secretary-treasurer. L. W. Lennox of Benguet Consolidated and F. B. Morehouse of Big Wedge were president and vice-president respectively for 1939.

CEBU OFFICE OF MARSMAN TRADING TO HANDLE LIBBY PRODUCTS

Mr. Herman Yaras, Vice President and General Manager of Marsman Trading Corporation, announces that arrangements have been concluded with the Manila office of Libby, McNeill & Libby whereby the distribution of the entire line of Libby's Food Products for the southern islands will be handled by the Cebu and Iloilo offices of the Marsman Trading Corporation.

Announcement is also made that distribution for the entire Philippine Islands of Swift's *Exeter* and *Plate* brands of corned beef will be handled by the Marsman Trading Corporation.

These food products are widely known and used throughout the Philippines, and take their place in the large list of quality products represented by the Marsman Trading Corporation.

GOLD PRODUCTION NORMAL

Gold production for January from the Marsman-managed mines amounted to ₱1,585,946, slightly higher than the December output. Operations were normal during the month, and conditions were excellent at the various properties. Coco Grove showed a gain of some ₱55,000 over December, and United Paracale was up slightly, the other mines maintaining regular production. During the month the Twin Rivers tailing plant, operated by Marsman Exploration Company, was shut down.

ITOGON MINING COMPANY

Gold production at Itogon for January was ₱405,789.10, from the treatment of 28,120 tons of ore, an average production per ton of ₱14.43. Extraction was 87.41%.

Development footage advanced during the month was as follows: Capital, 2,893; operating, 1,150; total, 4,043. Of the capital advance 670 feet were in ore, as were 470 feet of the operating development.

On the Sesame vein total drifting on 7 levels amounted to 302 feet, of which 188 feet were in ore of better than average grade over a width of 4½ feet.

In the Gilkison split, drifting totalled 121 feet, all on the 800 level, of which 64 feet were in ore of average grade over a width of 4½ feet.

Development work on the 31 vein brought very satisfactory work. Drifting amounted to 187 feet on 4 levels, work on the 200, 300, and 400 levels being in ore of better than average grade over a width of 5 feet.

The pocket raise from the 1000 level to the 875 level on the 23 winze was connected during the month and sinking was resumed in order to install the loading pockets at the 1000 level.

Enough ground has been opened to provide for stoping operations for some time on the Taka vein, so development work on the levels above Zero work has been discontinued. The raises on 4 level were driven a total of 233 feet, 131 feet being in ore. Results of recent work in this section of the mine has been very encouraging.

On the Itoe vein the face of the drift east cut on the last day of January showed ore of very good value. On 300 level the drift east was advanced 69 feet in better than average ore over a width of 4½ feet.

There was but little construction work during the month, but there will

SUYOC CONSOLIDATED MINING COMPANY

During January the Suyoc plant treated 6,624 tons of ore, from which ₱162,342.59 was recovered, an average recovery per ton of ₱24.51. Extraction was 87.83%.

The development advance was 1,546 feet: 803 feet of capital development of which 171 feet were in ore and 743 feet of operating development of which 167 feet were in ore.

The No. 1 shaft was sunk 20 feet. The 2244 winze was sunk 17 feet on the vein which is of average grade. The 2238 crosscut east cut a quartz vein 4 feet wide, of low grade. More work is being done to obtain definite information regarding the width and value of the vein.

The 2062-A raise has been started off the 20262 No. 2 drift north. The raise is on the No. 2 vein and the ore is of better than average grade.

The 1864-E raise reached 1700 level and a drift is being started to the south to connect to 17262 drift north. In the 1647 crosscut east, air and water pipes have been put in the crosscut and the heading will be pushed to cut under the No. 1 vein. Some 1,000-1,200 feet remain to go, and indications are that results will be favorable.

be more activity along this line during the next few months.

Improved extraction was brought about in the flotation plant due to the retreatment of the sand portion of the flotation tails.

Work has been started on the extension of the Hospital apartment.

The Suyoc Club is sponsoring the submittal of ideas to improve production and decrease costs; some worthwhile ideas have been submitted for consideration.

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SAN MAURICIO MINING COMPANY

The San Mauricio plant treated 15,147 tons of ore during January, from which ₱557,420.93 was recovered, an average recovery per ton of ₱36.80. Extraction was 94.96%.

Development footage was 2,025, of which 1,621 feet were capital and 404 operating development. Of the capital development, 444 feet were in ore, as were 174 feet of the operating advance.

In the San Mauricio mine: The south drift on the Spokane vein, 300 level was advanced 109 feet in ore over a width of 14 inches. The south drift on the Tacoma No. 1 vein, 300 level, was advanced 55 feet in ore giving better than average assays over a width of 10 inches. The north drift on the 2230 vein, 400 level, was advanced 43 feet in ore of higher-than-average value, over a width of 11 inches. The Spokane shaft was sunk 91 feet and is now at the 200 level. The Tacoma No. 3 shaft was sunk 14 feet and is at the 625 level. The shaft station on the 625 level of Tacoma is 90% completed.

Santa Ana mine: Crosscut zero, 300 level, was driven 24 feet; this crosscut will eventually connect with the Santa Monica and San Mauricio workings. The drift on hangingwall split 800 north, 425 level was driven 67 feet in ore, giving high assays over a width of 12 inches.

The dynamite magazines for United Paracale and San Mauricio were completed. Excavation for the foundation for Diesel electric generating unit No. 7 at the main power plant was 80% completed. Excavation work has been started on the recreation building. Construction of the building for the Diesel-driven compressor at Santa Ana was started; the P.O.C. compressor at Santa Ana was moved to its new location.

UNITED PARACALE MINING COMPANY

Gold production at United Paracale for January was ₱257,837.15, from the treatment of 9,421 tons of ore, an average recovery of ₱27.37 per ton. Extraction was 91.75%.

Of the total development advance of 1,083 feet, 780 feet were capital and 303 feet operating, 138 feet of the former being in ore and 130 feet of the latter.

The Baluarte counter shaft No. 3, Baluarte 525 level, was sunk 44 feet to a total depth of 144 feet below the 525 level, after which the 650 level station cutting was begun.

The 152 drift north, Longos 150 level, was started from 120 north crosscut west and advanced 27 feet along the vein 1.3 feet wide with average assays.

The 301 drift north, Longos 300 level, was advanced 53 feet along the vein 6.8 feet wide showing excellent assays, while the 301 drift south was advanced 85 feet along the vein 7.6 feet wide in better-than-average ore.

Shaft No. 3, Longos 300 level, was sunk 37 feet in peridotite to a total depth of 47 feet below the 300 level.

North Camarines-United Paracale

Development advance during the month was 182 feet. The 535 north crosscut was advanced 182 feet in granite, cutting a vein 11 inches wide with good average assay values. No stoping was done, and no ore was delivered to the mill during the month.

The excavation for the Longos power house extension was started and is 90% completed.

COCO GROVE, INC.

The January operations at Coco Grove resulted in a production of ₱139,020.14, as follows:

The dredger "Mary Angus" dredged 26,450 cubic yards of pay gravel from which ₱15,093.28 was recovered. In addition the dredger was stripping from January 1 to 22, the overburden stripped being 135,055 cubic yards. The total area dredged was 130,040 square feet, to an average depth of 33.5 feet.

The dredger "Anne Petronella" handled 108,780 cubic yards of pay gravel from which ₱123,926.86 was recovered. Overburden removed amounted to 58,615 cubic yards. Total area dredged was 92,375 square feet, to an average depth of 48.9 feet.

During January the "Mary Angus" continued operations in non-pay ground

southwest of the Paracale lighthouse heading for the tailing area in the Paracale River bend. During the last ten days of the month the dredge was working in pay dirt again; the recovery was fair, as anticipated. As the drill holes ahead of the dredge show good values, an improvement is expected in February.

The dredge "Anne Petronella" is now working in old tailings and partly in virgin ground heading for the bay again. By the middle of March the dredge is expected to reach the beach area where a satisfactory production may be expected.

The mechanical performance of both dredges in general was satisfactory. The operations of the suction dredge "Rotterdam" have been suspended and will be resumed when weather conditions improve.

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Mr. Lyman, confers with Mr. Yavas.

PENNZOIL LUBRICATION ENGINEER JOINS MARSMAN TRADING

H. G. Lyman who has been granted a leave of absence from his position as manager of the industrial sales division of the Pennzoil Co. of California, arrived in Manila February 10 to take up his new duties as Lubrication Engineer with the Marsman Trading Corp., exclusive distributors of Pennzoil lubricating oils and greases in the Islands.

The Pennzoil Company is one of the oldest refiners of crude oil in the United States having been organized not long after Drake brought in his first well in Pennsylvania. Today it operates the world's largest and most complete refinery running premium Pennsylvania crude oil exclusively, and with its associated company control or produce 60 per cent of the world's stocks of this type of oil.

United Air Lines and Western Air Express, the two pioneer transcontinental air lines in the United States have used Pennzoil Aircraft oils exclu-

sively since their first ships took to the air. Union Pacific has used Pennzoil Diesel Engine oil in its renowned high speed diesel trains, City of San Francisco and City of Los Angeles, running between the Pacific Coast and Chicago in thirty-nine hours and forty-five minutes.

Mr. Lyman has been actively associated with the application of lubrication upon all types of engines and machines for many years. He has taken an active part in various technical societies in California and until his departure was sub-chairman of the committee on fuels and lubricants of the Southern California Section of the Society of Automotive Engineers. Besides warehousing the complete Pennzoil Industrial line, Marsman Trading Corporation operates a complete technical laboratory under the direction of Mr. Lyman, for the evaluation of lubricating oils in service.

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(Far Eastern Electrical Development Company)

Operated by

MARSMAN TRADING CORPORATION



Spokane shaft headframe.

SHAFT SINKING RECORD AT SAN MAURICIO

During the month of December, 1939, the Spokane shaft of the San Mauricio Mining Company was sunk from a depth of 195 feet to a depth of 313 feet, or a total of 118 feet in very hard granite gneiss. It is a 3-compartment shaft and is 7 feet by 18 feet outside of the timber.

While this footage would not be considered particularly noteworthy by any of the large shaft sinking or development companies, it is excellent work for shaft sinking in routine mine operations. It is a record footage for this

district, and considering the hardness of the rock, it is probably a sinking record for the Philippine Islands.

The sinking operations at this shaft are on an 8-hour, 3-shift basis, under the supervision of Fritz N. Carpentier. Each shift has a personnel of 1 capataz, 10 shaftmen, 2 topmen, 1 compressor operator, and 1 pumpman. The entire Filipino crew are natives of the Bicol region and have received all of their mining experience at San Mauricio. All work including timbering is done by the regular shaft crews.



One of the three record - breaking shaftcrews.

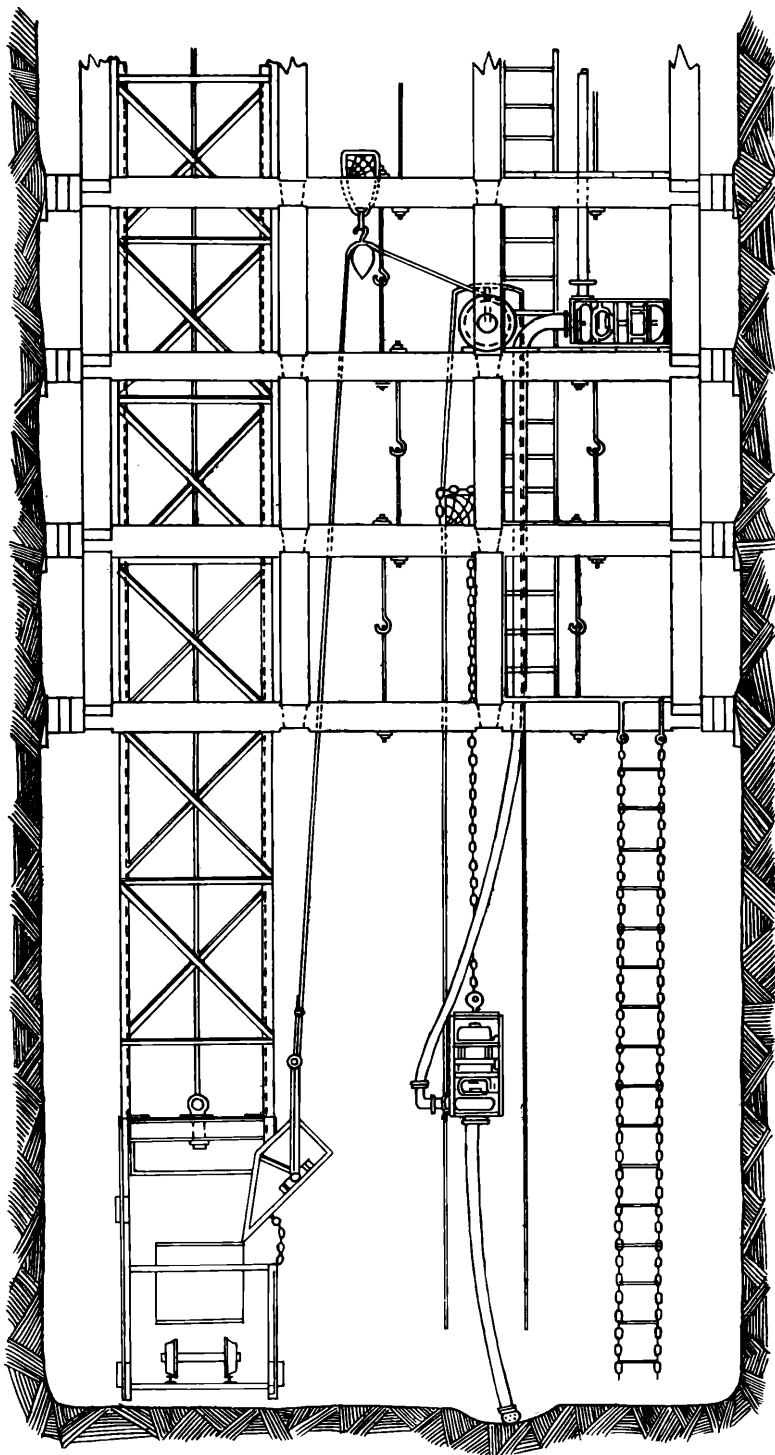


Figure 2—Showing details
of "Mucking Pan" device.



Spokane shaft headframe.

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One of the three record - breaking shaftcrews.

A 30-hole and cut round, a diagram of which is shown in Figure 1, is used to great advantage. This type of round minimizes timber breakage and piles the muck in one end of the shaft which is a great help in "mucking pan" operations. Drilling equipment consists of 3—3-inch drifters equipped with handle bars and chucks for 1 1/4" round lugged steel, 6—55-lb. machines of the jackhammer type with chucks for 7/8" hex. steel, and 3—55-lb. moilers. The drilling is done with 3 drifters and 4 jackhammers. A round is usually drilled out and blasted in 8 hours.

60% gelatin dynamite is used with electric detonators from 0 delay to No. 9.

It was in the mucking portion of the

cycle that the greatest amount of time was saved. This was accomplished by the use of the "Mucking Pan" which, while it has been used in other places, was further developed by Mr. Carpentier to fit conditions here. The main feature of this operation is the ability to get the cage to the bottom of the shaft at all times. This is accomplished by means of an extension head on the cage to which are attached extension shoes. This is illustrated in Figure 2. The mucking pan is constructed something like the body of an open end car. The sides are about a foot high and obviate the high lift usually encountered in mucking. The men turn the open side toward the muck pile and roll the material in. Its



Figure 1

San Mauricio Mining Company
30-Hole Shaft Round

capacity is about 20 cubic feet and when loaded is hoisted and dumped into the car on the cage. The pan is handled with a tugger hoist that is located a short distance above the mucking operations. The maximum lift required to dump is about 8 feet. Muck is removed as fast as cars can be hoisted and lowered. 75 cars have been mucked in one 8-hour shift. Timber must be kept within 45 feet of the bottom to allow the cage to operate.

All timbering is done by the regular shaft crew. 10 x 10 Oregon pine is used with 1" hanging rods. Sets are spaced at 6' centers with 5" x 6" Apitong guides. Timbering is kept to within 45 feet of the bottom.

In order to do away with the necessity of handling the large heavy pumps that are necessary for high lifts, we install a 5 H.P. centrifugal pump at each 100 feet of depth. These are all connected to one starting box and pump in series. If a greater amount of water is encountered than can be handled over 100 feet of static head by a 5 H.P. pump, we will install the pumps of the necessary size. Pump

installations are shown in Figure 2.

DATA FOR DECEMBER, 1939.

Miscellaneous

No. of 8-hour shifts worked	93
Man shifts	1360
Total advance	118 feet
Number of rounds blasted	21
Sets of timber placed	18
Total lost time	96 hours
Average blasting cycle	35 hours
Advance per round blasted	5.6 feet
Drill steel used per round	246 bits

Cost Per Foot

	<i>Per Foot</i>
Labor (Including Bonus)	P36.59
Explosives	6.57
Timber	9.91
Other Supplies	4.32
Supervision (Capataces)	1.48
Mine Distributive (Staff Supervision, Machine Drills, etc.)	7.71
Power	1.83
Engineering	0.41
Assaying
Total Cost Per Foot	P68.82

PAINTS, VARNISHES, ENAMELS, WATERPROOFING PREPARATIONS, TECHNICAL PAINTS

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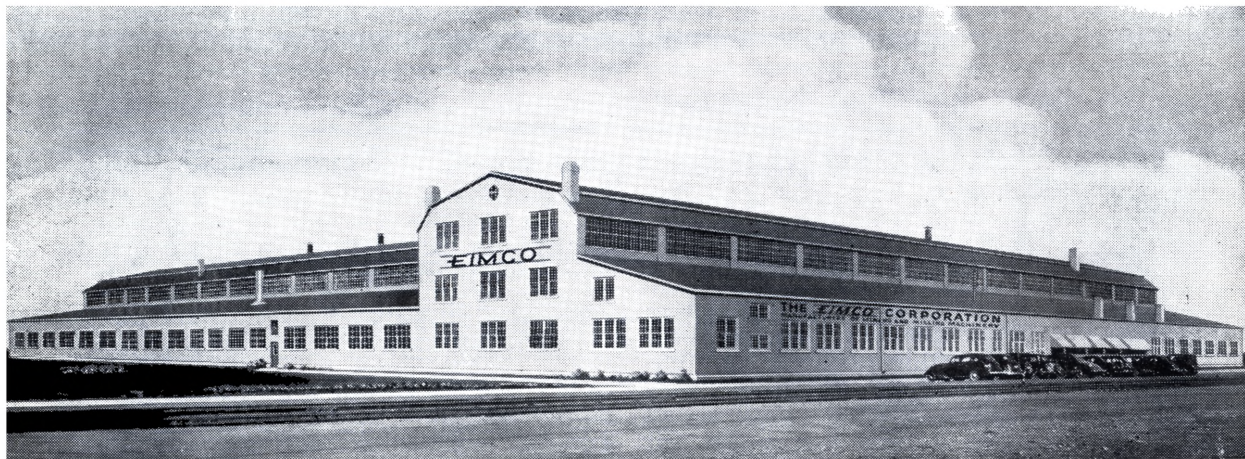
Manufacturers of Paints, Varnishes, Enamels, Waterproofing Compounds, Technical Paints, Insecticides.

Executive offices: Fisk Building, Broadway and Fifty Seventh Street, New York
Factory and laboratories: Ridgefield, New Jersey



These are two of the shaft sinking crews who made record time at San Mauricio.





Main building of The Eimco Corporation in Salt Lake City, Utah. This building contains machine shops, assembling departments, and general offices.

EIMCO—PROGRESSIVE MACHINERY MAKER

By consolidating three adjoining old-established iron- and steel-product companies under one alert, efficient management, The Eimco Corporation of Salt Lake City, Utah, has forged to the front very rapidly, within the past ten years, as one of the most progressive and successful manufacturers of modern mining and milling machinery in the United States.

Headed by the world-famous Eimco-Finlay Mine-Car Loader, the Eimco line now includes electric hoists, jaw crushers, ore feeders, ball mills, Super-Moly-chrome liners for ball, rod and tube mills, drum- and disc-type filters, agitators, classifiers, thickeners, diaphragm pumps, precipitation units—prac-

tically everything, in fact, required for complete equipment of a modern mill or concentrating plant.

Two features of the Eimco management policy are especially interesting, and have undoubtedly contributed largely to its outstanding success. One is the special emphasis placed upon *experience* in the selection of its engineering and production executives. Besides retaining the officials previously associated with their three affiliated companies—several of them for more than a quarter of a century—practically all of the engineers and department heads subsequently added to the staff have been drawn from key positions in other organizations manufacturing compar-

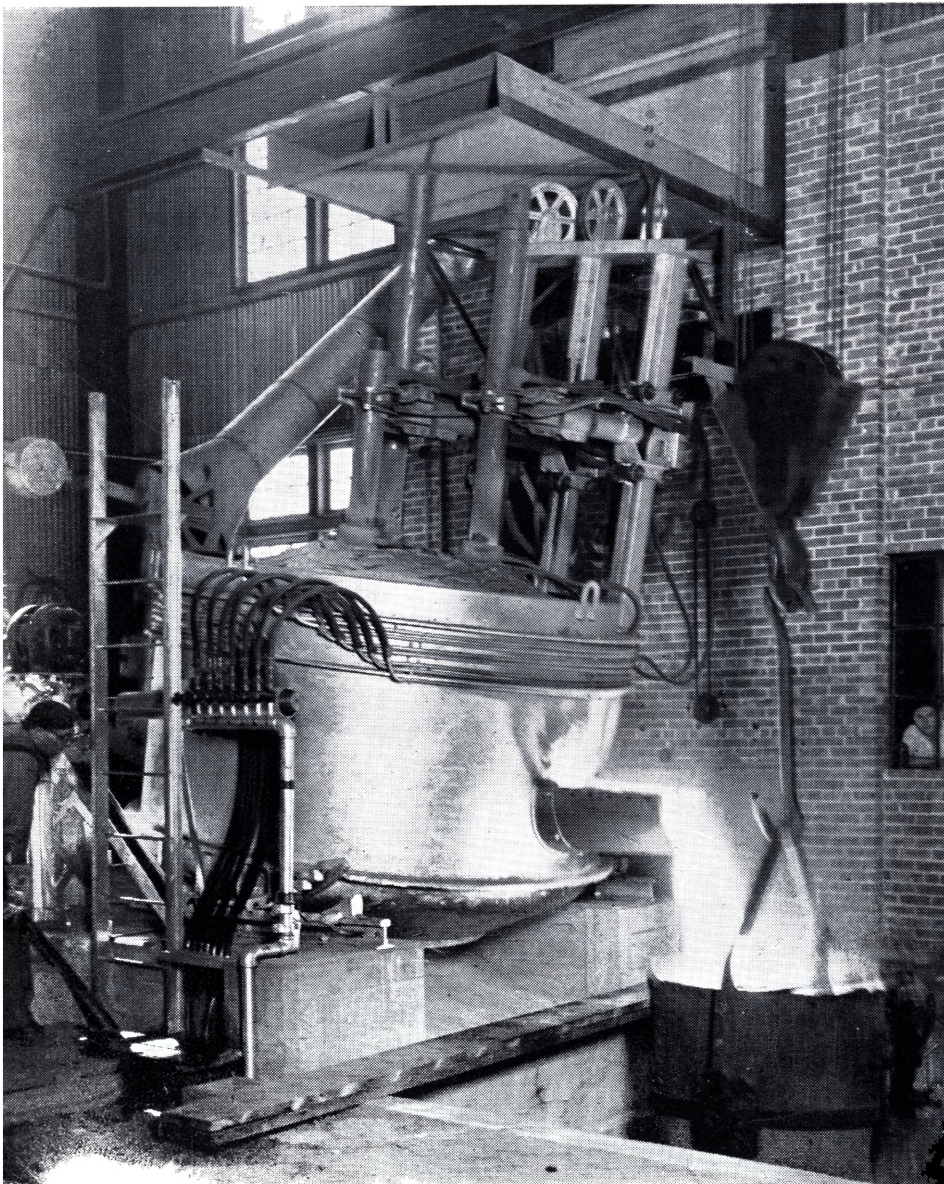
EIMCO Power-Horse pulling horse-drawn-type cultivator in beet-sugar field.



able products. Although The Eimco Corporation, as such, is a comparatively young organization with all of the vigorous enthusiasm that the term implies, it is, nevertheless, composed very largely of men with long experience in their respective fields of engineering activity. This combination of an unusually progressive, forceful management, with thoroughly experienced and correspondingly conservative department heads, has proved ideal for the successful development of new designs with maximum speed and with minimum necessity for subsequent modification.

The other outstanding feature of Eimco's management policy is constant

improvement and expansion of their manufacturing equipment. Ample financial resources, and a long-term view-point, permit them to figure that any new machine or plant extension which can pay for itself within five years is a profitable investment. Acting on this basis they spent several hundred thousand dollars during the depths of the "recession" for addition to their foundry, machine shops, structural steel and forge plant, testing laboratory, etc.—all of which have since proved necessary to take care of their rapidly increasing business. Most of these modern machines have been operated two, and even three shifts, per day since their installation, and the schedule of



New-type Electric Furnace in Eimco Steel Foundry.

additions and replacements is constantly being accelerated.

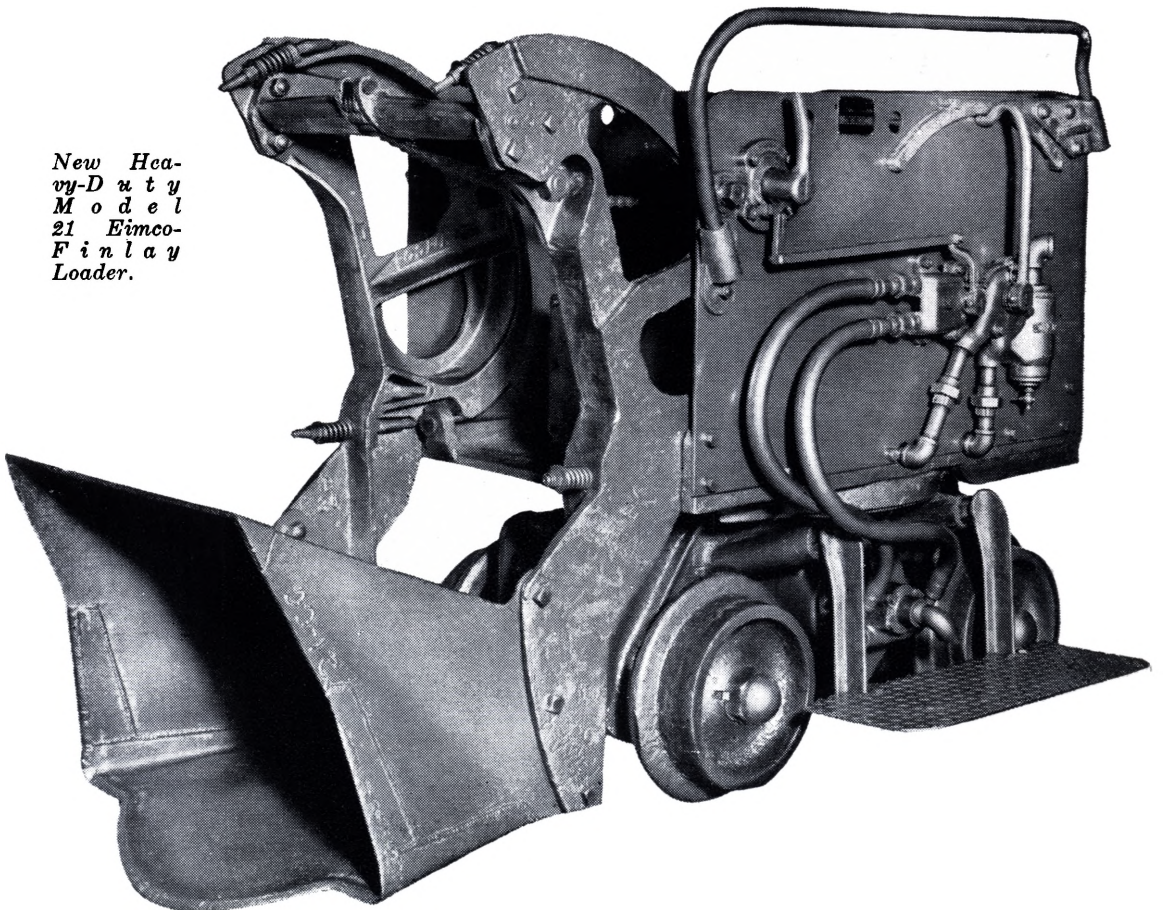
Although best known as manufacturers of mining and milling machinery, The Eimco Corporation also supplies large quantities of gray iron and electric-furnace steel castings, steel forgings, structural steel and plate work, machine tool work, and special machinery of all kinds to leading mining, railroad, and industrial organizations throughout the United States and other countries. Eimco Continuous-Vacuum Filters, and accessory equipment are widely used, also, in sugar, starch, paper-pulp, coal preparation, cement manufacture, sewage disposal and many other types of chemical processing plants.

An especially interesting development at the present time is the Eimco Power-Horse here illustrated. More than four years of intensive development and testing under a wide variety of typical

operating conditions have preceded the introduction of this novel new tractor which can be driven, like a team of horses, by an operator seated upon the wagon or implement being pulled. Another distinctive feature is its positive drive to all four wheels, and positive power steering by varying, or reversing, the speed of the two wheels on one side with respect to the two on the opposite side. Although designed primarily for farm use, it is equally advantageous for many industrial requirements because of its simple powerful design, unequalled maneuverability, and caterpillar-like capacity for maintaining traction and easy steering on rough or slippery ground.

All Eimco products are sold, throughout the Philippines, and the Dutch East Indies, by the Marsman Trading Corporation who will welcome an opportunity to supply further information regarding any of the items mentioned above.

*New Heavy-Duty
Model
21 Eimco-
Finlay
Loader.*



PERSONAL NOTES

DEVORE-KOVALEVA

The marriage of Miss Tania Kovalova and T. Alden Devore took place at the home of Mr. and Mrs. F. A. Nowacki in Paracale, January 14, at 7 a.m. Following the ceremony, a breakfast was served at the Paracale Country Club.

Mrs. Devore, formerly of Tientsin, has been in the Philippines for over two years, and is a sister of Mrs. Nowacki.

Mr. Devore is assayer and chemist at the San Mauricio Mining Company.

The couple made a honeymoon trip to Manila and Baguio.

* * *

Mr. and Mrs. Chas. Hubbard returned February 16, on the *m.s. Tai Yang*, after spending several months in the United States.

* * *

Leaving for the United States, February 24, on the *m.s. Torrens*, are Mr.

and Mrs. H. T. Hutchinson of San Mauricio; Robert Leleu, geophysicist at San Mauricio; Miss Sara Hayden, sister of Mrs. J. B. Stapler; and Mrs. Harry Barr.

* * *

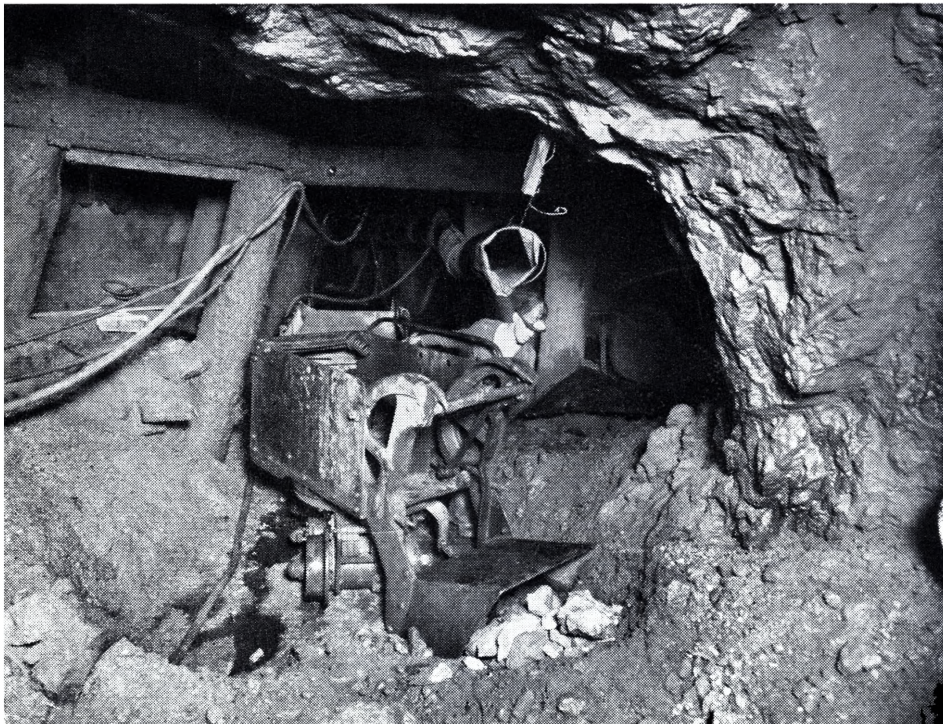
Mrs. Barr will attend the commencement exercises in which her two sons, Bill and Pat, will participate at the Kemper Military College at Booneville, Missouri. The former is graduating from the academy, while the latter, from the prep school.

* * *

R. P. Barnes, formerly of Mountain Mines, has joined the staff of Tuba Project as head accountant.

* * *

Mrs. E. R. Begole arrived recently from the United States to join her husband, who is assistant assayer at San Mauricio.



Model 21 Eimco-Finlay Loader in operation at Mt. Con Mine of Anaconda Copper Mining Company near Butte, Montana.

TUBA MINES

The production at Tuba Mines for January was ₱52,281.87, from the treatment of 1,911 tons of ore, an average of ₱27.36 per ton. Extraction was 93.3%.

Development advance for the month was 882 feet with 536 feet in capital and 346 feet in operating. Of the capital advance, 75 feet were in ore, as were 176 feet of the operating development.

Preparation were made for repairing the main shaft timbering above the 150-foot level.

Mill operations were normal during the entire month. Construction of an Auxiliary Clarifier Tank was completed, and a new precipitation pump was installed. Preparatory work was arranged for the construction of the No. 3 staff house. A Stream Line Oil Filter was received by the power department and put into service.

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.

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COMPARATIVE PRODUCTION TABLE

	January—1940			December—1939		
	Tons	Per Ton	Value	Tons	Per Ton	Value
<i>Coco Grove</i> (<i>cu. yds.</i>)	328,900	P .42	P139,020.14	250,529	P .34	P84,842.67
<i>Itogon</i>	28,120	14.43	405,789.10	28,397	13.32	378,343.58
<i>Twin Rivers</i>	17,682	1.20	21,256.00	15,991	1.57	25,086.53
<i>Tuba Mines</i>	1,911	27.36	52,281.87	1,687	30.47	51,400.00
<i>San Mauricio</i>	15,147	36.80	557,420.93	15,002	39.89	598,490.93
<i>Suyoc</i>						
<i>Consolidated</i>	6,624	24.51	162,342.59	6,387	25.78	164,637.57
<i>United</i>						
<i>Paracale</i>	9,421	27.37	257,837.15	9,704	25.72	249,586.68
Totals			P1,595,946.88			P1,552,387.96

ONE-MONTH PERIOD (January)

	1 9 4 0			1 9 3 9		
	Value	Tonnage	Recovery Per Ton	Value	Tonnage	Recovery Per Ton
<i>Coco Grove</i> (<i>cu. yds.</i>)	P139,020.14	328,900	P .42	P142,587.58	351,545	P .40
<i>Itogon</i>	405,789.10	28,120	14.43	346,242.52	29,266	11.83
<i>Twin Rivers</i>	21,256.00	17,682	1.20
<i>Tuba Mines</i>	52,281.87	1,911	27.36
<i>San Mauricio</i>	557,420.93	15,147	36.80	504,168.56	9,453	53.33
<i>Suyoc</i>						
<i>Consolidated</i>	162,342.59	6,624	24.51	141,337.32	6,363	22.22
<i>United</i>						
<i>Paracale</i>	257,837.15	9,421	27.37	238,355.11	9,426	25.29

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EDITORIAL

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SAFETY—FIRST

While every precaution has been taken by mining operators in the Philippines to insure the safety and well-being of their employees, it has only been in the past two years that first aid and safety work has been handled systematically. During the development and construction days of the industry, which for most properties was from 1933 to 1938, there was but little opportunity or real need for such work. Now, however, the industry has to a great extent completed its expansion as far as building and enlarging plants is concerned, and has settled down to routine operation.

The Marsman Safety Competition, details of which are announced in this issue of the Marsman Magazine, is planned to stimulate this safety work by introducing the element of competition. Campaigns of a similar nature
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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.

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RALPH KEELER, Editor and Business Manager

have been outstandingly successful in the United States and other mining countries, and there is every reason to expect that this new one will be equally successful in the Philippines.

Organized first aid and safety work, as introduced under the supervision of Mr. Jarrett in the Baguio district and Mr. Strong in the Paracale-Mambulao area, has effected a very considerable decrease in accidents in both districts. The workers are taking a real interest in the training; practically the entire populations of both areas turned out at

the annual safety tournaments held last year.

Safety training is, of course, primarily planned for the prevention of accidents in the mines. It is also of great value in training for citizenship; for the worker who learns to be careful at his job will carry that training to his home and outside life.

Mr. Marsman, in starting this safety campaign, is continuing the policy that has marked his activities in the Philippine mining industry—a policy of initiative in projects for the advancement of the industry.

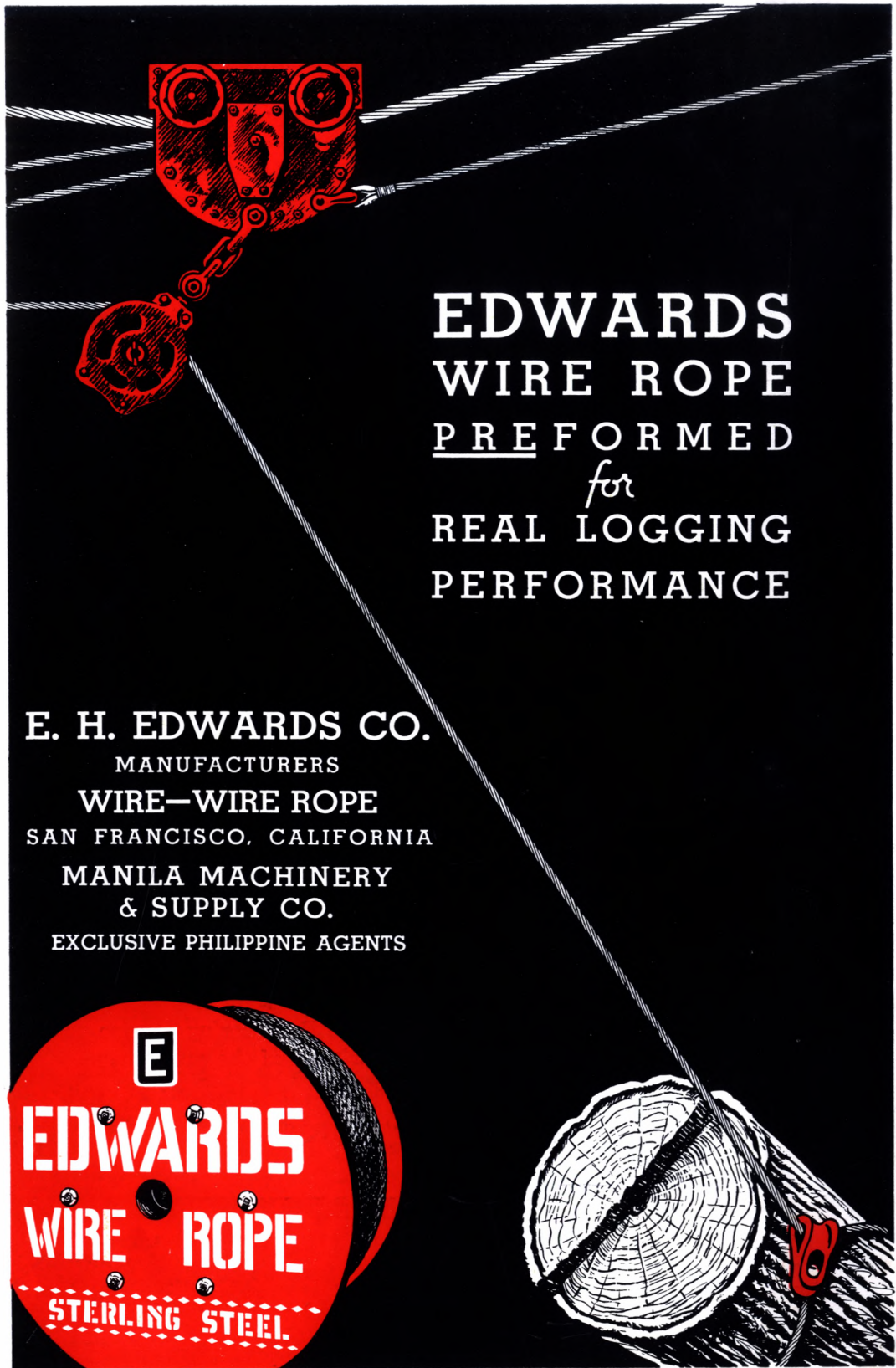
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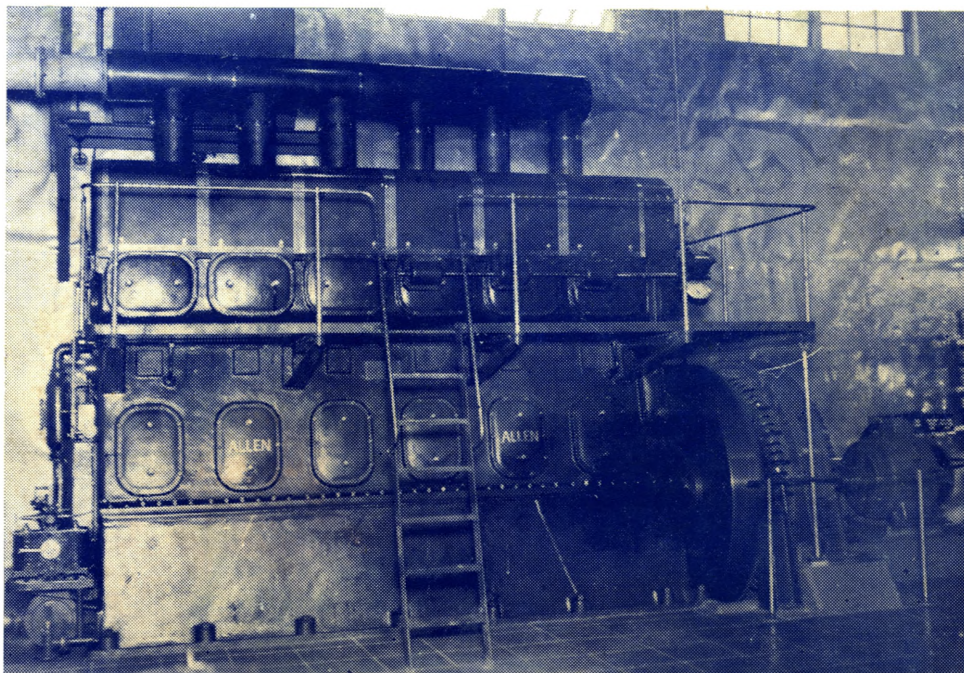
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*Courtesy of Marsman & Company, Inc.
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A partial view of Itogon Mining Company's power plant which consists of 3 Allen Diesels totaling 1500 h. p. and 2 Atlas Polar Diesels totalling 620 h. p. These engines are correctly and exclusively lubricated with Gargoyle D.T.E. Oil Extra Heavy.

CORRECT LUBRICATION aids materially in insuring smooth, uninterrupted operation and maximum efficiency of mechanical equipment . . . it helps in lowering operating costs and assuring adequate returns on investments.

Gargoyle Products and Standard-Vacuum Engineering Service are furnishing Correct Lubrication at nearly all of the producing gold mines in the Philippines.

