The following paper was read at a recent meeting of the Paracale Section of the Philippine Geological Section by Mr. Barr, general superintendent of San Mauricio

# ANCIENT HISTORY

Knowledge of the oresence of gold in the Philippines undoubtedly started with the first visits of the Javanese and Chinese to the Islands.

The Javanese were probably the first visitors and, being a warlike people, landed and took possession. During their stay they undoubtedly did, or forced the natives to do, considerable placer mining. There are archaeological traces of their occupation in many parts of the Islands.

The Chinese came as traders and I doubt the probability of their ever having done any mining either lode or placer. It is a trait of the Chinese that they seldom if ever locate in any place that has not an established, recognized government. As all government in the dim ages of the Philippines was without doubt only a government of might, I think the Chinese did their trading off shore.

To substantiate the statements of the early production of gold on the islands there are Chinese writings as far back as the third century which state that gold was the chief product of Luzon. It is also an established-fact that long before Magellan's time the Filipinos used gold as a medium of exchange with the Chinese. A large portion of this gold came from the Paracale-Mambulao district.

### EARLY MODERN HISTORY

The first discovery of gold by Occidentals in the Paracale-Mambulao District was by Don Juan Salcedo in 1572.

Since Salcedo's time the region has experienced several periods of intense activity, one of the greatest being in 1609 when a total production of  $\mathbb{P}400$ ,-000 was reported. As the Spanish Crown exacted a royalty of 20 per cent, the production was, without doubt, many times the figure reported as such a royalty was certain to be evaded.

Most of the placer gold came, I think, from the Paracale section as the streams in Mambulao show but little evidence of placering and there is but very little "coarse" gold in the district. There is, however, great evidence of extensive lode mining as rub rocks can be found in all parts of the mining area.

Most of the early modern lode mining was done in the latter part of the eighteenth and early part of the nineteenth centuries and was confined largely to two veins, the Veta Real (now San Mauricio) and the Turayog vein (now Santa Ana).

The San Mauricio workings were then known as Doña Panay and the name still is used for this location. The old workings are located about a kilometer north of the town of Mambulao on Calogcog Creek. They have a lateral extent on the surface of about 600 feet and reach a maximum depth of approximately 200 feet below the surface. This was probably the richest mine worked during the Spanish regime and was abandoned due to inability to handle the water encountered at depth. The normal flow of water is now about 300 gallons per minute.

The "Ancianos" were capable miners and left but little behind them in the places they worked. We have run into their workings in our stopes and while we have mined considerable ore from this section of the mine we can assure you that they got the heart of it. The ore mined by them carried about 50 per cent of its values in free gold which was easily extracted as grinding was quite simple. The profits must have been enormous as "scabs" and very small pillars of ore left behind were fabulously rich. Excessive water eventually shut them down and in 1845 Don Isidro Sainz de Baranda promoted the famous "Ancla de Oro" Company which was organized to drive a sea level drainage adit that would give them access to the vein at about 60 feet below ground water level. Señor de Baranda's appeal for funds would compare quite favorably with the modern promoter's ballyhoo, but the mining facilities at hand in the Islands in those days were not sufficient to complete a 3000 foot adit through very bad ground. It was driven about (Please turn to page 14)

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## SAN MAURICIO (Continued from page 10)

50 meters at which point several men were supposedly killed by caving ground and the work was stopped. The portal of this adit is built of heavy masonry of the true Spanish type and stands to this day.

The Turayog workings (now Santa Ana) are located about 4 kilometers north of Mambulao on the headwaters of the Bulalacao River. They are quite extensive and indicate that a substantial tonnage must have been taken out at some early date. According to legend the mine was worked by Spanish priests in the middle of the nineteenth century. There are no indications that the workings ever attained any great depth.

The lure of the gold of the region attracted the Moro and Malay pirates in considerable numbers. These roving bandits would descend periodically on the place and relieve the community of all gold on hand. The Spanish crown finally built a small fort on a hill with a commanding view of the bay. It was garrisoned with Spanish soldiers and equipped with cannons. This, according to tradition, stopped the pirates. This fort is still standing.

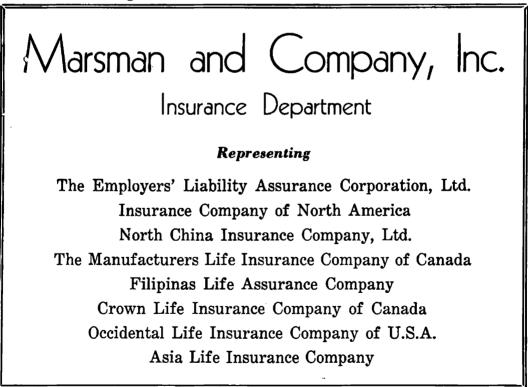
# MODERN HISTORY

In 1893, a British organization, started operations in Camarines Norte. A large amount of machinery was installed and everything was well under way when the insurrection of 1896 broke out. The British engineers in charge sensibly left the country and the accomplishments of 3 years work went to ruin.

No further work was done in the district until in 1907 when an American company was formed to work the San Mauricio property. Considerable development work was done and a 100-ton stamp mill was built and put into operation. Extraction of values depended on plate amalgamation and table concentration and as only about 40 per cent of the values could be recovered the plant was shut down after 6 months of desultory efforts. The causes given for the shut down were, insufficient fuel for the boiler, insufficient water for the mill and too much water in the mine. A total of ₱34,000 were produced.

In 1918 a company was formed to finish the "Ancla de Oro" drainage adit. After considerable expense the work

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#### SAN MAURICIO (Continued from page 14)

was completed and the mine was unwatered above sea level. Sampling results at the time were not sufficiently encouraging to continue work and the venture was dropped.

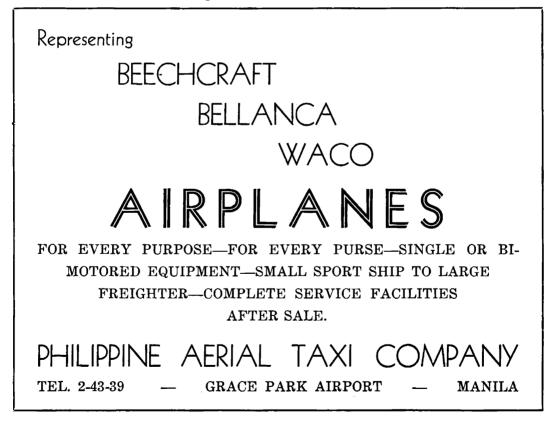
In 1933 the present San Mauricio Mining Company was formed and in February 1934 work was started on opening up the Ancla de Oro drainage adit. General geological reconnaissance work was carried on and several prospecting parties were put in the field. The San Mauricio, Imbong-Imbong, Santa Monica, Kansas, Brooklyn, Tacoma and Santa Ana veins were located as a result of this survey and development work was started on them. Enough work was done on each vein to determine its size and mineralization. The preliminary work was then stopped and all development centered at Veta Real or San Mauricio.

The old 100 level adit was opened up and a drive was started to connect to the old shaft which was reached in December 1934. The shaft was repaired and we found the 200 level open in all parts. All workings were sampled and results were found to check the 1918 sampling. Intensive development was started and sufficient ore was developed by August 1935 to warrant the erection of a treatment plant. Construction work started on October 1, 1935 and the mill was put into operation on March 10, 1936. It has been in continuous operation since that date and during the first year of operation the property produced approximately  $\mathbb{P}2,260,000$ .

#### **GEOLOGY**

The history of a mine is also closely associated with its geological background and a mine like people must have background to amount to much.

The San Mauricio Mine, as you all know, is located at the western end of the semi-elliptical body of granite gneiss which, seemingly contains most of the ore bearing veins of Camarines Norte. This body of granite gneiss, originally a granite, was intruded into a peridotite, or pyroenite, which constituted the original ground mass of the district. (To be Continued)



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