

cleared of jungle before the plow could be employed. They could not hire labor to do this heavy preliminary work even had they had the money. There was none to be had. It was up to the former doughboy to do this work. This he did, and while he was doing so it was necessary for him to drop the ax or plow from time to time to fight off either Moros, Bagobos or other wild or semi-civilized tribes which resented the encroaching of the white man. All of these Americans have shown perseverance in holding on to and developing the plantations against all odds which were and are, I am sorry to say, still against them. With perseverance they worked to build and develop plantations of hemp and coconuts, the equal of which is not to be found elsewhere.

It is safe to estimate that the Davao plantations could, providing conditions were as favorable as they are likely soon to become, nearly double the amount of hemp shipped from the Philippines. Due to lack of labor, the planters in Davao lost approximately 85 per cent of their hemp during 1922. The planters are prepared to house and feed 20,000 men, if they could obtain them. Although there is a scarcity of labor, yet the plantations as a whole are in fair condition so far as the cleanliness is concerned. Labor is needed for harvesting the fiber.

It is a treat for any agriculturist to visit one of the many plantations in Davao. There is a great comparison to make in favor of the Davao hemp plantations over those existing in other islands. The varieties of Manila hemp planted in the gulf region are superior to most of the hemp grown in other sections of the archipelago. The plants generally grow twice the size both in height and in width and consequently produce better fiber, while a larger yield is obtained. This advantage is obtained not only because of the superior varieties, but is also due to the scientific management of the plantations. They are plowed and harrowed, and irrigated when it is deemed necessary. In other words, the plantations are handled similarly to farms in the States. This is not so in other districts.

Coconuts are also to be found in large quantities. Approximately the area in coconuts equals half of the amount of land planted in abaca. The plantations of coconuts are the best the writer has seen and he has traveled in 15 islands. In a number of cases the planters have been forced to plant coconuts in place of hemp because of the scarcity of labor with which to strip hemp. Thousands and thousands of hemp plants have been destroyed due to the lack of labor. The scarcity of labor may prove to be a godsend in disguise not only for the planters in Davao but for the people of the Philippines as a whole because a practical hemp stripping machine has at last been perfected.

Since the early eighties there have been a number of men working to perfect a machine to strip abaca. Most of the machines have proved a failure. The first practical machine was built and used on a plantation owned by B. F. Crumb of Davao. The motive power was a three-horse-power gasoline engine. In 1920 a Japanese employed with the Ohta Development Company built a machine similar to Mr. Crumb's. He added, however, a fly-wheel, using a carabao-cart wheel for the purpose, and adopting the principle of the hand apparatus employed in most of the fiber producing districts in the Philippines. Instead of using an engine for motive power, a water-wheel was erected near a river and



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a battery of 12 machines connected with it. Two operators work at each machine.

Since 1922 a machine manufactured by the Universal Hemp Machine Company has been introduced. It is built on the same principle as the Crumb machine and is all of cast iron except the base. The base is built of heavy timber. It is operated by a three-horse-power petroleum engine. Five gallons of petroleum will run the machine for five days. This machine with two operators will produce one picul of hemp per man each day of nine hours. When this is compared with one man operating a hand apparatus, the advantage over the old hand stripping method will be seen. It will produce eight times the amount one hand stripper can produce.

It is safe to predict, with the operation of stripping machines, that Davao plantations will increase their production and will lead all other provinces in the Philippines in output of hemp. The writer is of the opinion that these machines will, when operated in other hemp provinces, double the production of Manila hemp in the Phil-

ippines. At least it will be possible to produce two million bales per annum.

The government has done very little for planters in Davao, but now, under Governor General Leonard Wood, Davao is being opened as an ocean port both for outward and inward cargo and Governor Wood proposes to improve the dock and harbor. This is needed, along with improvement of the wireless telegraph service. Companies have gone to Davao and established buying offices at the barrio of Santa Ana, where the dock is; and even yet they are handicapped in communicating with Manila and the United States, London and Europe because no telegraph or relay station has been established at Santa Ana by the bureau of posts.

The direct steamer service recently inaugurated by Fernandez Hermanos between Manila and Davao with Zamboanga the only intermediate stop will be a decided advantage in building up the business of Davao if rapid well appointed steamers are put on the run and the steward and cabin service improved. The steamship company, Fernandez Hermanos, although it enjoys privileges from the government, deserves praise nevertheless for establishing the direct Davao-Manila schedule via Zamboanga. But faster boats are required, and better ones too. Time will force these improvements, they are warranted now and it will be a nuisance to wait for them much longer. The ocean-port bill puts Davao in touch with the world. The amount of its commerce shows that it deserves to progress accordingly.

CURRENT MONEY CIRCULATION

Money in circulation in the Philippines at the close of business at the treasury office December 31 totalled P132,841,572.78, comparing with P132,409,848.62 at the end of November, P123,979,980.69 a year ago and P146,576,956.11 December 31, 1919. Distribution of the current money circulation on the date reported was as follows: Pesos and half pesos, P10,811,996; subsidiary coins, P8,008,914.20; minor coins, P2,212,766.38; total coins, P21,033,676.38; treasury certificates, P71,996,912; notes of the Bank of the Philippine Islands, P8,961,305; notes of the Philippine National Bank, P30,849,679.20.



Government Does Little in Davao: Here is Its Excuse for a Bridge Across the Davao River. Where it Charges High Tolls. The Road is 12 Miles Long.