APPENDIX TO SECOND REPORT

collected. It is generally speaking planted on the slopes of hllls, and requires some little shade and plenty of moisture.

The trees are planted from six to eight feet apart, the earth being well heaped up on the roots. At the end of the third year, previously to bearing fruit, the hemp tree is cut down and the fibre extracted.

A full sized tree gives, I am told, from one to one and a-half pounds of hemp. Too rich a soil is not good for this plant, and tends to the growth of the leaf and the diminution of the fibre.

This "musa" is found in nearly all of these islands, and I have seen it growing wild in many places in the interior: it is also to be found in Java and Borneo.

PROCESS OF MANUFACTURE.

Numerous inventions have been made for the purpose of working up this fibre, but none of them appear as yet to have met with any success: indeed the hemp still continues to be produced by manual labour.

Immediately the tree is cut down it is stripped of its linings; these are then cut into pieces three or four inches wide: on this they are drawn underneath an instrument resembling a saw fixed in a block of wood. The fleshy part of the cortex is thus scraped off and the fibre alone remains; this is

then placed in the sun to dry.

Two persons, one engaged in cutting down the trees and stripping them, and the other in extracting the fibre, can work up some 25 pounds of clean hemp in the course of one day.

In some places the hemp is cultivated on the *Metayer* system, the workmen receiving one half the quantity produced; in others, and indeed generally speaking, it is brought to market by peasant

Supposing the two persons are able to produce 25 bs of clean hemp per diem, we have, if they labour 24 days in the month, (and the natives seldom work more than this), 600 bs or about $4\frac{1}{2}$ piculs* as the produce of their labour during that time. The land in most places being but of a nominal value, the actual cost of production would be little more than the value of the labour. Now, taking this at \$5 a head per month, the cost of production would seem to be about \$2 22 cents. the picul.

Money wages are never paid in the hemp districts; the labourer generally receives half of the

hemp produced by him.

The cost of maintaining a Native may, including taxes, be calculated at about \$5 a month as above mentioned.

PRICES OF HEMP.

When at Manila the market price of hemp is \$8 the picul, at the port of shipment in the hemp district it is about $\$6\frac{1}{2}$; and if some distance in the interior, \$4 or \$5. In the year 1861, the price of hemp in Manila was as low as \$2 73 cents per picul; the Natives at that time could not have obtained more than \$1 87 cents.

Hemp now sells at Manila at \$9 per picul, and during the last year its average price was \$10. The Natives here labour to obtain the mere necessaries of life, with which they are content; having obtained these, they manifest no regard for the future, and express no desire to accumulate.

high prices do not, as in other countries, call forth an additional supply.

Should any machinery be able to be invented capable of supplying the place of manual labour in the extraction of this filament, the exportation of the same from these Islands would soon receive a considerable increase, for it must be borne in mind that the limited quantity of hemp produced is due solely to a scarcity of the labour necessary for the process of its manufacture, and not to any scarcity of the plant.

It is worthy of observation that the centre of this musa yields a very fine fibre, which is used for the manufacture of a texture, much valued by the Natives, and called "Sinamay." The fibre takes also a blue and red dye, the latter is obtained from the use of the leaves of a plant called "Payonguit"

and the former by the application of the root of the Morinda mixed with a little lime.

I have, &c., J. S. RICKETTS. The Right Hon. the Earl of Granville, K.G., Her Majesty's Secretary of State for Foreign Affairs, &c., &c., &c.

* A picul is equal to 133½ lbs. avoirdupois.