

ship, and fired a shot; upon which they let fly all their halyards and sheets. A boat was sent on board with an officer, who discovered that she was manned by Malays, and that no one on board could speak English; however, he managed to understand that they were from Palambam, Sumatra, and bound to Singapore. Soon afterwards, we saw the Dutch establishment of Mintow; it is situated on a knoll, at the northern end of Banca, and had the Dutch flag flying over it. The greater part of Banca is low land; the northern end particularly so. There are, however, a few detached hills, of considerable altitude, which serve as sailing-marks during the passage through the straits. The southern end of the island rises, and appears to be of a different formation from the other parts, as its soil is thickly wooded. In the forest were seen numerous clearings, where people had been and were then burning charcoal, to obtain fuel for smelting the tin ores. The principal mining district lies towards the southern end of the island, in the swampy flat land at the foot of the isolated hills before mentioned. The ore is usually found at the depth of from six to twenty feet from the surface, in layers that run horizontally for two or three miles; these vary in thickness from six to twenty inches, and consist of heavy granulated particles, of a dark metallic lustre, mixed with white sand. The strata above the vein consists of vegetable mould, red and white clay, intermixed with pebbles of white quartz, and white sand, like that which is found with the metal. A stratum of steatite is said to be found underlying these ores of tin.

The process of working these mines is exceedingly rude; both Malays and Chinese are employed in them, but the latter are preferred on account of their greater perseverance and industry. I was told at Singapore that the amount of tin derived from Banca by the Dutch, was not half so great as that obtained while it was under British management, or that it is still capable of yielding. The ore is washed after its removal from the veins, which separates the earth, and leaves only the metal and stones; the last are separated by hand, and the metal is then smelted: to effect this, huge piles of alternate layers of ore and charcoal are formed; the fused metal escapes into a hole dug in the ground, from which it is dipped and poured into moulds, forming, when cool, the tin of commerce. Tin ore is found at Banca in great quantities, but its quality is inferior to that obtained from other places; and it rarely yields more than sixty per cent. of pure metal. The process of smelting is but seldom performed, generally not oftener than once or twice a year. Rude bellows of various forms are used in kindling the smelting fires; some of these are composed of large wooden cylinders with moving pistons, which give a