

32 tons to the square inch, with an elongation of 10 per cent. in lengths of 10 in., and to bear ten twists in lengths of 6 in.

(h.) Type B (light intermediate) : The served core to be covered with ten galvanised low carbon basic iron wires (No. 6 B.W.G.) equal to .200 in. when galvanised, or within $2\frac{1}{2}$ cent. thereof. Average breaking-strain to be not less than 28 tons to the square inch nor more than 35 tons to the square inch, with an elongation of not less than 12 per cent., and to stand not less than fifteen twists in lengths of 6 in.

(i.) Type D¹ (heavy deep sea) : The served core to be covered with seventeen galvanised-steel wires, each wire being well covered with a bituminous compound. The galvanised-steel wires to be No. 13 S.W.G., equal to .095 in. when galvanised, or within $2\frac{1}{2}$ per cent. thereof, and to bear a breaking-strain of not less than 85 tons to the square inch, with an elongation of not less than 4 per cent. The wire to be capable of being bent round its own diameter three times and unbent three times without breaking. The wire to be in bundles of not less than 2 cwt., and to have no more than one weld in each bundle.

(j.) Type D (light deep sea) : The served core to be covered with sixteen galvanised-steel wires, each wire being well covered with a preservative compound and taped to a diameter of .100 in. The galvanised-steel wires to be No. 14 B.W.G., equal to .083 in. when galvanised, or within $2\frac{1}{2}$ per cent. thereof, and to bear a breaking-strain of not less than 84 tons per square inch, with an elongation of not less than 4 per cent. The wire to be capable of being bent round its own diameter three times and unbent three times without breaking. The wire to be in bundles of not less than 2 cwt., and to have no more than one weld in each bundle.

(k.) The wire to be free from splinters and irregularities. No brittle wire to be put in the cable, nor weld made within 12 ft. of any other weld. All joints in the sheathing-wires to be welded either electrically or by efficient workmen; no brazed or soldered joints to be made.

(l.) The galvanised wire to withstand four immersions of one minute each in a solution of sulphate of copper (1 sulphate to 5 water by weight) without showing a trace of copper coating.

(m.) Before being used for the sheathing of the cables, the galvanised wire for the types AA, E, B, and D¹ is to be heated in a kiln or oven just sufficiently to drive off all moisture, and whilst warm is to be dipped into a hot compound, not containing anything deleterious to the core, and so prepared as to adhere to the wire and form, when set, a perfectly fixed preservative coating that will not come off in passing through the closing-machine.

OUTER SERVING.

(n.) Types AA, E, B, and D¹, manufactured as above, to be covered with two servings of jute yarn steeped in "freed" coal tar, and laid on spirally in opposite directions, alternating with three coatings of Clark's compound, applied hot.

(o.) Type D, manufactured as above, to be covered with two Hessian canvas tapes soaked in an approved preservative compound and laid on spirally in opposite directions, alternating with three coatings of Clark's compound.

PART III.

Section C : *Fiji (Suva)—Norfolk Island (Sydney Bay).*

SPECIFICATION for the Manufacture of the Lengths and Types of Cable to be furnished by the Contractors under the Contract.

Description.	Type.	Sheathing.	Length in Nautical Miles to be manufactured.	
			Core Brass-sheathed.	Core not Brass-sheathed.
Rock cable ...	G	Type E, ten No. 2 reclosed with six No. 00 (.380), galvanised and compounded	0.75	...
Heavy shore end ...	AA	Type B ¹ , twelve No. 8 reclosed with fourteen No. 1 (.300), galvanised, compounded, and yarn-served	1.50	...
Heavy intermediate ...	E	Ten No. 2 (.280), galvanised, compounded, and yarn-served	4.50	...
Light intermediate ...	B ¹	Twelve No. 8 (.165), galvanised, compounded, and yarn-served	43.25	...
Deep sea ...	D ¹	Sixteen No. 13 (.095), galvanised, compounded, and yarn-served	...	969.00
			50.00	969.00

Contract length of cable, 1,019 nautical miles. Core : 130 lb. copper, 130 lb. gutta-percha.