

of smoke, thus giving timely intimation to all the whalers. If the whale should be pursued by one boat's crew only, it might be taken; but if pursued by several, it would probably be run ashore and become food for the blacks." (*Eastern Australia*, by Maj. T. L. Mitchell, F. G. S., vol. ii, p. 241.)

Jardine, writing of the natives of Cape York, says that a communication between the islanders and the natives of the mainland is frequent; and the rapid manner in which news is carried from tribe to tribe, to great distances, is astonishing. I was informed of the approach of Her Majesty's Steamer Salamander, on her last visit, two days before her arrival here. Intelligence is conveyed by means of fires made to throw up smoke in different forms, and by messengers who perform long and rapid journeys." (Quoted by *Smyth, loc. cit.*, vol. 1, p. 153, from *Overland Expedition*, p. 85.)

Messengers in all parts of Australia appear to have used this mode of signaling. In Victoria, when traveling through the forests, they were accustomed to raise smoke by filling the hollow of a tree with green boughs and setting fire to the trunk at its base; and in this way, as they always selected an elevated position for the fire when they could, their movements were made known.

When engaged in hunting, when traveling on secret expeditions, when approaching an encampment, when threatened with danger, or when foes menaced their friends, the natives made signals by raising a smoke, and their fires were lighted in such a way as to give forth signals that would be understood by people of their own tribe and by friendly tribes. They exhibited great ability in managing their system of telegraphy; and in former times it was not seldom used to the injury of the white settlers, who at first had no idea that the thin column of smoke rising through the foliage of the adjacent bush, and perhaps raised by some feeble old woman, was an intimation to the warriors to advance and attack the Europeans. (*The Aborigines of Victoria*, vol. i, by R. Brough Smyth, F. L. S., F. G. S., Assoc. Inst. C. E., etc., pp. 152, 153.)

#### FIRE ARROWS.

"Travelers on the prairie have often seen the Indians throwing up signal lights at night, and have wondered how it was done. \* \* \* They take off the head of the arrow and dip the shaft in gunpowder, mixed with glue. \* \* \* The gunpowder adheres to the wood, and coats it three or four inches from its end to the depth of one-fourth of an inch. Chewed bark mixed with dry gunpowder is then fastened to the stick, and the arrow is ready for use. When it is to be fired, a warrior places it on his bowstring and draws his bow ready to let it fly; the point of the arrow is then lowered, another warrior lights the dry bark, and it is shot high in the air. When it has gone up a little distance, it bursts out into a flame, and burns brightly until it falls to