VII.

DESCRIPTION OF TWO WOODEN TUMBLER LOCKS FROM FOUCHOW, CHINA, NOW PRESENTED TO THE MUSEUM. BY J. ROMILLY ALLEN, F.S.A. SCOT.

The two locks about to be described were sent over to this country from Fouchow by my brother, Mr R. B. Allen, and contrivances of a similar kind are in common use in China at the present time. They belong to the class of multiple tumbler locks, described in a paper on the subject in a previous volume of the *Proceedings* of the Society,[1] and are interesting to Scotch archæologists on account of their close resemblance to the wooden locks which were used up to quite recently in the islands of Shetland, Skye, and Lewis. Curiously enough, the keys are identical with those found in connection with Saxon remains in England, specimens of which may be seen in the Guildhall Museum in London and in the

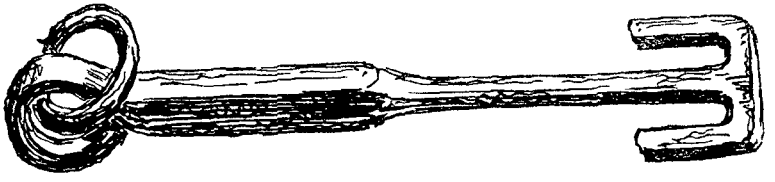

Fig. 1. Saxon Key in the Guildhall Museum, London (7 inches in length).

Mayer Museum in Liverpool. There is in General Pitt Rivers's Anthropological Collection a Norse lock of different construction to the Chinese one, but with a similar key, so that the Anglo-Saxon lock may have resembled either one or the other.[2] The Norse lock (fig. 2) has a wooden bolt which is prevented from moving by a flat spring fixed against the door, which catches in a notch inside of the bolt next the door. The key passes into a horizontal slit right through the door,

[1] *Proc. Soc. Ant. Scot.*, vol. xiv. p. 149.

[2] Sketched from the original by kind permission of General Pitt Rivers. For further information, see General Pitt Rivers *On the Development and Distribution of Primitive Locks and Keys*, p. 23, and F. Liger, *La ferronerie ancienne et moderne*, vol. ii. p. 229,

spring and bolt, and by turning it round and pulling it back the spring is depressed, and the bolt can be moved with the key.

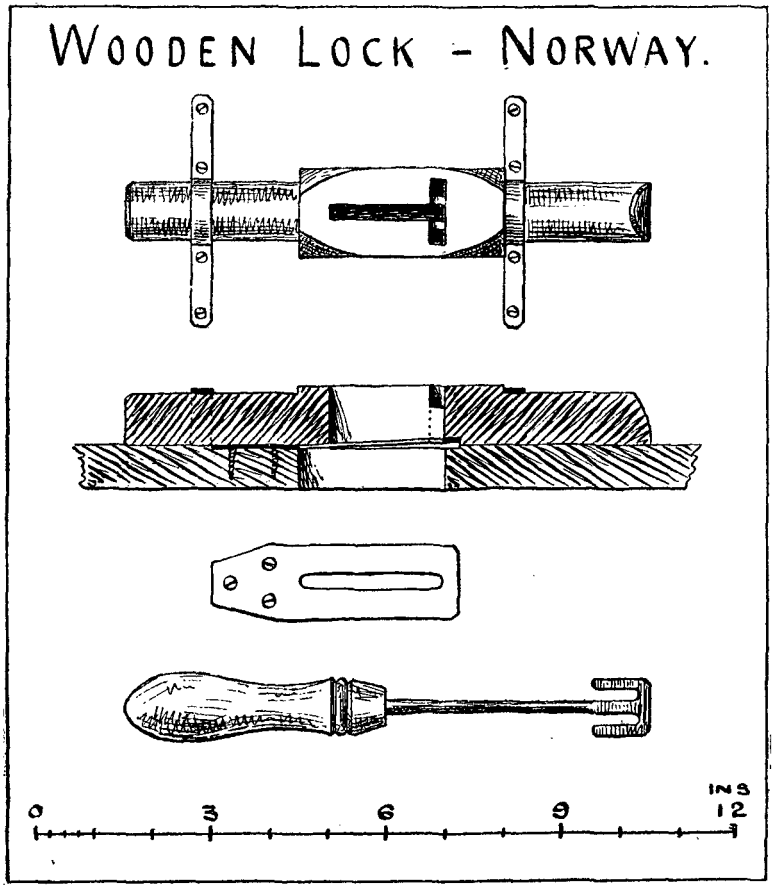

Fig. 2.

Chinese Lock, No. 1.—This lock (fig. 3) consists, in addition to the key, of four parts, three of which are movable and one fixed. The

fixed part is the case or body of the lock, and it contains the movable parts, that is to say, two tumblers and a sliding bolt. The case is formed

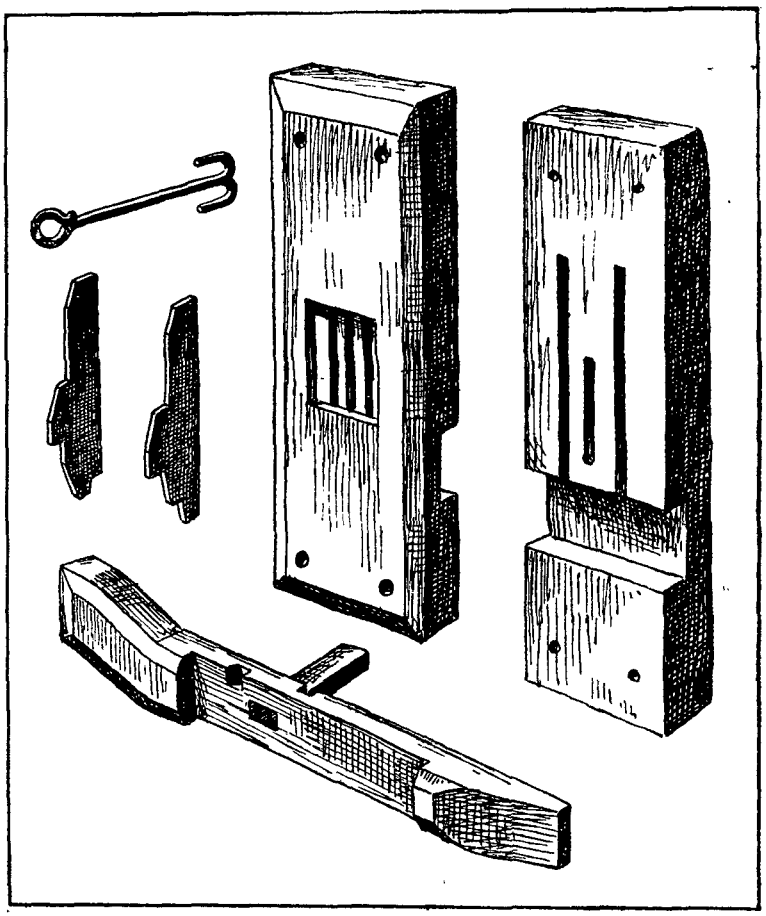

Fig. 3. Wooden Lock from China.

out of a piece of wood measuring 1 foot 1 inch long by 4½ inches wide by 1½ inches thick, and is fixed against the inside of the door by four

nails. It has cut in it a horizontal groove, on the side next the door, to receive the bolt, and two vertical grooves on the same side for the tumblers to slide in. Between the two tumbler grooves is a vertical slit cut right through the lock case opposite a corresponding slit in the door, which serves for a keyhole. In the front of the case is cut a square recess, communicating with the tumbler grooves and the keyhole, the object of which is to enable the tumblers to be lifted by the tips of the fingers, from the inside, as hereafter described.

The bolt is 1 foot 3 inches long and 2 inches wide by 1 inch thick. It has mortised into it at right angles a square pin which projects through a horizontal slot in the door, so that the bolt can be moved from the outside. In the top of the bolt are cut two notches at each side, into which the ends of the tumblers fall. One end of the bolt is canted upwards, so as to give the hand a firmer grip when drawing it. The two ends of the bolt are thicker than the middle part, which regulates the amount of play allowed to it. The tumblers are thin strips of hard wood $5\frac{1}{2}$ inches long by $1\frac{1}{2}$ inch broad by $\frac{1}{4}$ inch thick. Their ends are shaped so as to fit into the holes in the top of the bolt, and there are notches cut about halfway up, so that the tumblers may be lifted with the tips of the fingers. The key is formed out of $\frac{1}{4}$ inch iron with a T-shaped end and a ring handle. The lock is opened in two different ways; from the outside with the key and from the inside with the fingers. It is opened from the outside in the following manner:—The key is held in the right hand with the shank horizontal and the T-shaped end in a vertical plane. It is then pushed forwards through the vertical slit in the door and lock-case, which acts as a keyhole. When the T-shaped end has got right through to the other side it is brought into the horizontal plane by turning the key through a quarter of a circle. The key is then drawn back a little towards the door, until the T-shaped ends catch under the notches in the tumblers, which can now be lifted by raising the key. At the same time the bolt is drawn with the left hand by pulling the pin which projects through the slot in the door.

From the inside the lock is opened by placing the tips of the first and

second fingers of the right hand under the notches in the tumblers, which are then lifted, whilst the bolt is pulled with the left hand.

Chinese Lock, No. 2.—The only difference between this lock (fig. 4)

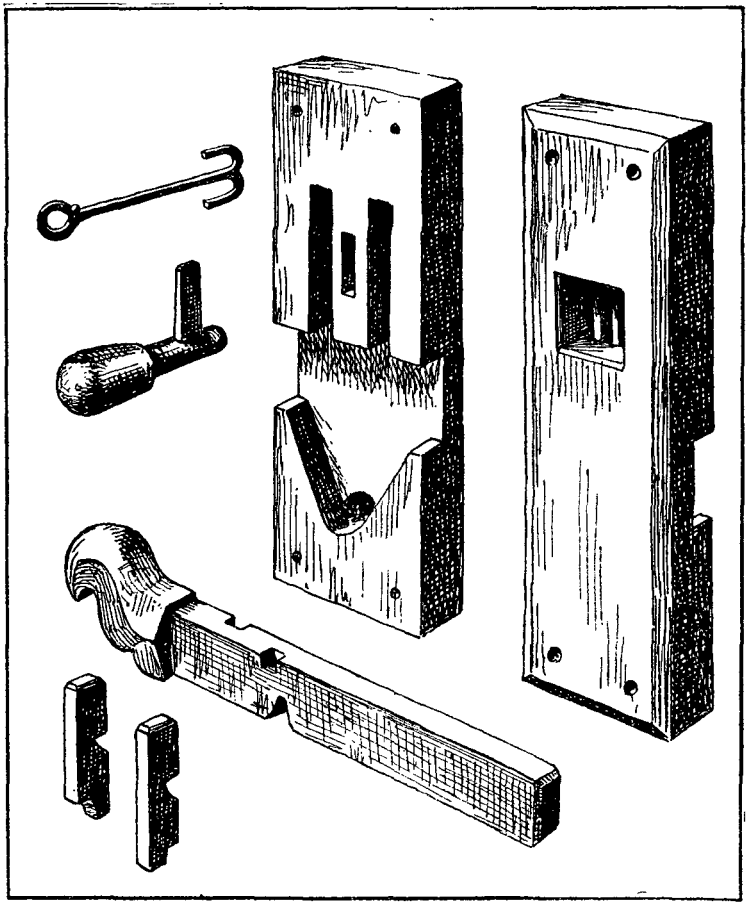

Fig. 4. Wooden Lock from China.

and the preceding is in the size and the method of moving the bolt

from the outside. This is effected by a wooden handle, which turns round and acts exactly like an ordinary English door knob.

The dimensions are as follows :—

Lock-case, 1 foot 3 inches long by 4½ inches wide by 2 inches thick; bolt, 1 foot 5 inches long by 2½ inches wide by 1 inch thick; tumblers, 4 inches long by 1 inch wide by ½ inch thick.