

## III.

NOTICE OF A MATCHLOCK, WITH REVOLVING BREECH, TAKEN AT THE CAPTURE OF DELHI. [THE MATCHLOCK WAS EXHIBITED.] BY JOHN ALEXANDER SMITH, M.D., SEC. S.A. SCOT.

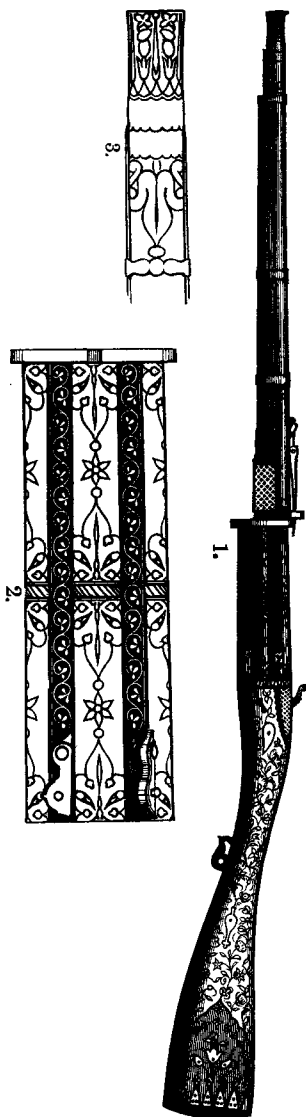
The matchlock now exhibited is the property of Henry Bruce, of Ederline, Esq., a Fellow of this Society. It has a single barrel with a small bore, which measures  $22\frac{1}{4}$  inches in length (the calibre, or bore, being  $\frac{3}{8}$ ths of an inch), and a four-chambered revolving cylinder, or breech, 7 inches long, each of the priming pans has a movable iron lid or cover, and both the breech and barrel are richly ornamented with engraving. The breech is simply turned round by the hand, and there is a strong pin or spring, which projects backwards from the barrel, passes through the hinder sight, and catches in a notch cut over the centre of each chamber of the movable breech. When the spring is in this position, the chamber and barrel are then in complete apposition for safe firing; and the arm is said to shoot well. The wooden stock of the matchlock is ornamented with gilding and painting, and is also partly inlaid with ivory.

(The annexed carefully drawn woodcuts, figs. 1, 2, and 3, which have been contributed by Mr Bruce, give a sketch of the arm, and details of the revolving cylinder.)

The weapon was taken in the streets of Delhi, in front of the Palace, by Captain Chalmers of the 24th Punjaub Infantry (a relative of Mr Bruce's), about the 19th of September 1857, when the King's Palace was captured. The fuzee of the matchlock was burning. Three of the chambers had been recently fired, and one remained still loaded. It formed part of the equipment of a mounted Indian, who, from the handsome character of his arms, and his saddle being richly jewelled with turquoise, was believed to have been one of the native princes. A Persian dagger or "kuttar," inlaid with gold, and a beautifully finished battle axe, were other weapons worn by the same individual, and are in the possession of Mr Bruce; he also wore a richly ornamented sword.

Specimens of native firearms, with revolving barrels, have been observed in India; and I exhibit one of this kind, a matchlock revolver with four barrels, made separately and fixed all together, with interven-

1. Indian Matchlock Revolver, with four-chambered cylinder or breech. 2. Revolving Cylinder to larger scale, showing style of ornamentation. 3. Ornament engraved on Muzzle of Matchlock (of the same scale as No. 2).



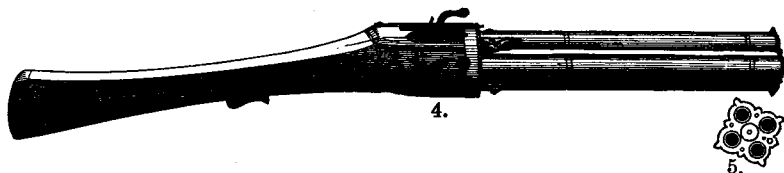
ing bars of metal between each barrel, on one of which is a ring for the ramrod. The barrels are ornamented with different engraved patterns, each barrel measures  $13\frac{3}{4}$  inches in length, and the check in this instance, is formed by an iron pin projecting from the stock, which falls into notches with an open side, cut over the revolving barrels. It was brought from India many years ago by Colonel Alex. Dewar, and is now deposited in our Museum.

A sketch of this weapon is also given, for comparison with the other matchlock. (See the woodcuts, figs. 4 and 5.)

The matchlock, with the revolving cylinder, was the only instance of a breech revolver which had come under the notice of Captain Chalmers; and Indian authorities, to whom he had shown it, considered it a great rarity, and believed, from the style of its workmanship and ornamentation, that it was above 100 years old, how much more, however, they were at a loss to determine.

The plan of increasing the power of a firearm by multiplying the number of the barrels, or the chambers of the breech, is of rather an ancient date in Europe, and various examples are preserved, which are believed to

have been manufactured about the earlier part of the seventeenth century. A curious variety of a firearm, with a repeating cylinder or breech, is described in a valuable communication, entitled "Observations upon the History of Hand Firearms, and their Appurtenances," by Samuel Rush Meyrick, LL.D. and F.S.A., which is published in the 22d vol. of the *Archæologia* of the Society of Antiquaries of London, 1829. Dr Meyrick describes a rather complicated self-loading gun, intended to give expedition in firing, the invention of which originated in Italy about the close, he says, of the English Protectorate.—"The butt was made to answer the purpose of a flask, and a small touch-box was attached to the pan. At the breech was a cylinder with a hole to receive the bullet. To the axle of this cylinder was affixed a lever, on turning which, the bullet was



4 Indian Matchlock Revolver with four barrels. 5. Muzzle of Revolver.

conveyed to its proper place, sufficient portions of charge and priming were cut off, and the piece cocked at the same time. This therefore rendered the firelock, just described, as expeditious as the long-bow; but the contrivance was attended with great danger, and occasioned the subsequent inventions of a movable breech containing several charges, or a small barrel to be brought to the breech when requisite to load, &c.; but none of these earlier arms were ever adopted for infantry regiments. Some of my son's specimen's are for snaphaunces, others for firelocks."

A self-loading gun as it is designated, a snaphaunce, with an eight-chambered revolving cylinder or breech, of the time of Charles I., is figured in plate cxix. vol. ii. of Skelton's "Illustrations of Ancient Armour at Goodrich Court." A much older example, however, of a gun with a revolving breech, is that of a matchlock of European manufac-

ture,—“a matchlock revolver of the 16th century, with eight chambers calibre, 0·48 in. ; barrel, 22·5 in.” The stock is richly inlaid with ivory and mother-of-pearl. This curious specimen is deposited by the committee of the Royal Artillery Institution in the Museum of Artillery in the Rotunda at Woolwich, and I have quoted the description from General Lefroy's Official Catalogue. It is interesting to find an ancient European firearm, apparently so closely resembling in character the one now exhibited, of Indian manufacture.

Repeating firearms or revolvers were first made, it is believed, with several barrels revolving round a central axis, but the bulk and weight of the weapon soon caused the plan of a revolving many-chambered breech, with only one elongated barrel, to be tried instead. In both cases the rotation was effected simply by the hand, there being, however, an arrangement, as in the instances described, for stopping the motion at the proper place, so as to have the priming pan of the barrel under the stroke of the hammer of the lock, and the chamber of the breech in correct apposition to that of the barrel. The weapon, however, if it had more than two barrels, required to be very carefully and correctly finished, was apt to get out of order, and at last fell into general disuse.

The course of improvement in this direction was in a great measure confined to double-barrelled firearms, some having the barrels at first arranged one above the other, with one lock above, and another below, as shown in a pistol of the time of Charles I., figured by Skelton, whichever barrel was held uppermost being ready to be fired. Others had the barrels one above another, but also movable, so that they could be turned round and fired with one lock, as in a pistol of the time of William III., also figured by Skelton ; and still another in the same collection, has a revolving breech with double chambers and a single barrel. It belongs to the close of the reign of William III.

I also exhibit a curious firearm in the Museum of the Society, which has a long and a short barrel placed one above the other, and movable on a pivot, so that both can be fired by one lock. The last great improvement in this class was the ordinary double-barrelled gun, with the barrels fixed side by side, and a separate lock for each.

The pressure of circumstances in our own times, has caused attention to be again paid to the rather neglected class of repeating weapons, and

improvements have been made, by which the rotation was effected by an arrangement with the action of the triggers, and patents have been taken out for greatly improved mechanism adapted to revolvers, for revolving barrels, and also for revolving cylinders or chambered breeches; until the valuable mechanical adaptations of Colonel Colt, of America, and others in our own country, have worked out the system as a complete success, at least for small arms, and added a most important weapon to the equipment of the soldier and sailor; as well as helped to give increased facilities for sport to the more peaceful citizen.