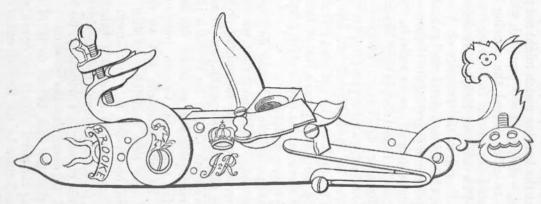
NOTICE OF THE COMBINED USE OF THE MATCH-LOCK AND THE FLINT-LOCK, IN THE PROGRESSIVE IMPROVEMENTS IN FIRE-ARMS.

Before the invention of the percussion-lock for exploding fire-arms, the modes in use were liable to frequent failures. The match-lock, the wheel-lock, and the flint-lock, each in its turn, was found to disappoint the soldier and the sportsman in their utmost need. The match-cord was extinguished by the wet, the rapid wheel revolved in vain against the over-worn "fire-stone," the blunted flint struck uselessly against the opposing steel. To obviate these failures, the gunmakers adopted various contrivances. The match-lock was combined with the wheel-lock; so that, should the wheel fail to strike off sparks from the stone, the match-cord might be at hand to supply its place. Other wheel-locks had two fire-stones provided, one fixed on each side of the wheel. The fusil also was furnished with two flints, the supplementary one having its scintillating edge turned towards the butt till the time for its employment arrived, when it was brought round to face the steel, while the failing flint was turned back. In our own time, we have seen the union of the flint and percussion actions, arranged for cannon-locks, for musquets and for fowling-pieces.

But the particular combination to which I am desirous to call attention, is that of the match-lock and flint-lock, known to those versed in such matters as the fusil-mousquet or mousquet-fusil; the invention, we are told, of Marshal Vauban. I had lately the pleasure at a meeting of the Institute in London to exhibit an example of this lock, recently found among the old stores in the Tower. As will be seen by the woodcut here given, the contrivance combines the flint-lock and the match-lock, and the object of this combination was that the match-cord might be employed, should the flint become dull and fail to give sparks. But, as the steel with its pan-cover would stand in the way of the serpentine holding the match, which of necessity was on the farther side of the steel, it was necessary to imagine some



Gun Lock found among the old stores of the Tower of London, showing the combined use of the match-lock and the fiintlock as early as the time of James II. 1885—1688.

device by which this difficulty might be overcome. plan was very ingenious and very simple; the pan-cover was perforated, so that the match-cord, when lowered, might pass at once through the opening to the powder below. And, in order that the burning match might not prematurely ignite the priming, a sliding lid was provided, which, so long as the flint was in office, closed the opening of the pancover, and prevented the powder from being reached by the burning cord. This kind of lock, as already noticed, is described by the French as the invention of Vauban. work by St. Remy, "Mémoires d'Artillerie," published in 1702, we have a description and engravings of the arm—the "fusilmousquet ou mousquet-fusil," as he calls it, "invente par Monsieur de Vauban." Daniel also, in the "Milice Francoise," writes: "Feu Monsieur de Vauban imagina encore une espece de fusil-mousquet, ou mousquet-fusil, qui a un chien et une batterie comme les fusils, laquelle batterie se découvre pour recevoir le feu de la meche qui peut être compassée et mise au chien ou serpentin, place à l'autre extremite de la platine pour s'en servir en cas que le chien portant la pierre vint a manquer" (vol. i. p. 466).

But the Catalogue of the "Musee de l'Artillerie" at Paris is more precise. Under no. 1821, we find: "Fusilmousquet de Vauban, qui, au mécanisme ordinaire de la platine à batterie, réunit le serpentin pour la mèche. A la bataille de Steinkerque (1692) les Français jeterent spontanément leurs mousquets pour se servir des fusils pris aux ennemis. Ce fut alors que Vauban imagina son fusilmousquet, dans laquelle la meche sert au défaut de la batterie." We have here something explicit. In 1692, precisely, Vauban originated the mechanism in question. His claim to the invention has hitherto, I believe, remained undisputed; but, from this moment, the priority must be conceded to our own country. Fortunately, no tedious argument is required to determine the question. The simple fact is enough, that the lock before us is of the reign of James II., bearing the royal initials and crown, and affirming the place of manufacture by the English name of Brooke on the lock-plate. The French claim therefore must yield to the English, the inspiration at Steenkerke to the ingenuity

of a London gunsmith—Vauban to Brooke.