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LECTURE.

Wednesday, May 27th, 1863.

CAPTAIN EDMUND PACKE, late R.H.G., in the Chair.

ON THE HISTORY OF THE BAYONET.

BY CAPTAIN SIR SIBBALD DAVID SCOTT, Bart., F.S.A.

IN bringing under notice the subject of the bayonet, I wish to confine myself as strictly as possible to the *history* of that weapon, its rise and progress, without indulging in any speculations as to its future. Nor shall I venture to offer any suggestions for its improvement, either as to construction or management. The subject under such treatment must necessarily be devoid of any practical advantage; I must trust, therefore, to the interest attached to the history of a weapon which has played so conspicuous a part in the armies of all civilised nations, in order to compensate for this deficiency.

The bayonet, as a military weapon, was an invention, or, more strictly speaking, an adaptation of the 17th century; for after all it is nothing more than a dagger; the dagger, again, is little more than a knife, and that was so useful and portable a weapon, that under the various designations of knife, dagger, misericorde, or poniard, it was seldom absent from the person.

The word "dagger" is mentioned as early as the 12th century. In a Latin statute of William I. of Scotland, cap.23, we find it enjoined that "Every man shall have a knife (*cultellum*) which is called dagger." In a treatise entitled "The Military Art of Training," published in 1622, the dagger is strongly recommended as "the necessariest weapon that belongs to a souldier," for six special reasons:—"1st, for ornament; 2ndly, for use in the *mêlée*, that when he cannot use his sword, he may doe good with his dagger; 3rdly, if it should come to a private combat, and a sword should break; 4thly, for despatch of the vanquished; 5thly, for tying a horse in an open field, where there is neither bush nor hedge; and 6thly, for the punishment of offenders,

for a captain or inferior officer that only draws a dagger, may appease a sedition."

The question now to be disposed of is, when was this knife or dagger first applied to the fire-arm, so as not only to give it a defensive character, but to invest it with a second offensive power—probably more effective than the first.

In the 16th century the musket first appears. It owed its introduction to the inconsiderable effects produced by pieces of small calibre. It was a long, heavy, cumbrous weapon, carrying balls of greater weight than any other fire-arm then introduced. It was invented abroad—in Spain or Italy. The English of mediæval times were not an inventive people; I am not aware of a single implement in the art military that can be claimed as a British invention. Brantome says that the Duke of Alva was the first who introduced muskets in the armies of the North, when he assumed the government of the Spanish provinces of the Low Countries in 1567, and organised those bands of musketeers, who became so terrible to the Dutch.* With us the adoption of them, according to British precedent, was some time after their introduction in the leading foreign armies. We hear of them in 1577, when Queen Elizabeth was at length constrained to despatch an auxiliary force to the Dutchmen fighting obstinately for their liberty.†

We shall see what an encumbered man the poor musketeer was. First of all, the barrel of his piece was to be four feet in length, and the bore capable of receiving bullets, whereof twelve weighed a pound.‡ In consequence of its length and weight, it could not be fired without a support, and hence originated the rest, or *fourchette*, which was a staff the height of a man's shoulder, with a fork or semicircle of iron at the top to receive the musket, and a ferule of iron at bottom to steady it in the ground. On a march, when the musket was shouldered, the rest was either carried in the right hand, or hung from the wrist by a loop and trailed. Then he carried his coarse powder for loading in a flask, his fine powder in a touch-box, together with moulds, worms, screws, rammers, and priming-iron, while in his hand was his burning-match and his rest; and after he had fired, he, perhaps, had to draw his sword to defend himself. Musketeers were, however, relieved from wearing defensive armour (as they were not intended for close fighting) with the exception of an iron helmet, the weight of which alone would frighten a modern, even if he had nothing else to carry. In fact, it required a strong man for the place, and therefore Markham, a military writer of the 16th century, observes, that "the squarest and broadest will be fit to carry musquets;" and another contemporary author, Sir J. Smith, writes that "it doth behove musquetteers to be strong and puissant of body, without sickness, achs, or other impediments." Round about his waist was wound his provision of match, which was a thin coil of rope, made of

* Hommes illustres et Grands Capitaines Français.

† Brief Discourse of the Spanish Discipline in War, by Sir Roger Williams. 4to. 1590. Also Oldys's Life of Sir Walter Raleigh. I. 25.

‡ Art Militaire, by Sir Thomas Kellie. 1621.

cotton or hemp, spun slack, and boiled in a strong solution of saltpetre, or in the lees of wine. One can readily imagine the inconvenience of having to carry about a coil of rope with both ends ignited. Its propinquity to the powder was not encouraging, and we read that sometimes fire-arm men carried their store of powder loose in their pockets.* This danger of the lighted match did not, however, always exist, for the rain and the damp often extinguished it, and the musketeer, or arquebusier, found himself powerless, so that it must often have become a question which should go off first, the man or his piece.

The bullets were kept in a bag, and the musketeer was ordered, when in action, to keep four or five of them in his mouth, so as to be ready for loading. This was considered his proper status, so that it was one of the stipulated conditions that troops who had capitulated should march out with the honours of war, namely, "with lighted match, bullet in mouth, drums beating," &c.

Not only was the musketeer a heavily weighted man, but his energies were further taxed by an amount of training to which the modern manual and platoon would be a mere joke.

In the "Souldier's Accidence," † it is stated, "the postures which belong to the musket are 40 in number, and are to be done 5 standing, 3 marching, 18 charging, and 14 discharging." "And after all," sensibly observes Sir Thomas Kellie, "all this multitude of postures, in service, are reduced to three: make readie, present, and give fire."

Although it is not to be supposed that the musketeer went through the forty postures in the field, still, with every exertion on his part, the process of loading was necessarily very slow before the invention of the cartridge. Sismondi says that it took a quarter of an hour to charge a musket.‡

It was calculated that "every archer might shoot six arrows within the time of loading one musket," so that taking moreover into consideration the weakness of the powder in those days, it was no wonder that the use of the bow and arrow was so long preferred, and that the adoption of fire-arms was so tardy.

Ever since the invention of the musket, all sorts of contrivances had been proposed to defend the musketeer whilst loading. One plan was to arm the rest with a blade projecting outwards to ward off the attack of cavalry;§ this does not appear to have answered. Another, and which was adopted and used for a long time, was what was called "Sweynes feathers." The origin of the term is somewhat obscure; the defence consisted in a couple of stakes five or six feet long, to be carried by the musketeers, and to be stuck into the ground in front of them, after the manner of chevaux-de-frise. General Monck, afterwards Duke of Albemarle, in his observations upon military and political affairs, printed in 1671, recommends the arming of musketeers and dragoons with muskets having swine-feathers, with the heads of rests fastened to them.

* England's Trainings, by Edward Davies. Pub. 1619.

† By Markham. (In Library of Royal United Service Institution.)

‡ Hist. des Rep. Ital., ix, 341.

§ Turner's Pallas Armata, p. 167.

These stakes were carried by musketeers and dragoons in our armies until the 17th century, in fact, until superseded by the bayonet. Another scheme was, that the musketeer should carry a pike in addition to his musket. Pikes were then 16 feet long; this was afterwards substituted for the half-pike. There is a specimen of a musket and pike combined in the armoury of this Institution. It was probably an experiment only, and not adopted in the service.

In the reign of Elizabeth, the English infantry was divided into fire-arm men, archers, billmen, and pikemen. We may mark how gunpowder was, not *silently*, but gradually making its way. The quota of archers grows smaller and smaller, and billmen disappear altogether after this reign. In a levy of 600 men, in 1587, "shott and pikes" are only ordered to be provided. Prince Maurice of Orange thought so highly of the pike, that he divided his men half into pikemen, and half into musketeers. Lord Orrery, in his "Art of War," A.D. 1677, says, "our foot are generally *two-thirds* shot and *one-third* pikes;" and this brings us to the period when the musketeer and pikeman were to be merged into one and the same person, and the firelock, after having been discharged, was to do duty for the pike.

In the memoirs of De Puységur, we find what, I believe, is the first recorded notice of the *military* bayonet. I say *military* bayonet advisedly, for reasons which will appear directly. In chap. 8, on "L'ordre que doit tenir une Armée pour passer une Rivière," the author writes, "When I was in command at Bergues, at Ypres, Dixmude, and Laquenoc, all the parties that I sent out, crossed the canals in this fashion. It is true that the soldiers did not carry swords, but they had bayonettes with handles one foot long, and the blades of the bayonettes were as long as the handles, the ends of which (*i.e.*, the handles) were adapted for putting in the barrels of the fusils, to defend themselves, when attacked, after having fired."* This relates to the year 1647.

Now, although this may be, as far as we know, the first written account of the bayonet being used as a defence in war, Puységur does not mention the circumstance as though there was a complete novelty about it. He states simply, "Les soldats avoient des bayonettes." The fact is, that the bayonet was not a new invention at that time. In Cotgrave's Dictionary, first published in 1611, we find, "Bayonette, a kind of small flat pocket-dagger, furnished with knives, or a great knife to hang at the girdle, like a dagger." In the 4th volume of "*Le Passé et l'Avenir de l'Artillerie*," (produced by Colonel Favé, on the plan of the Emperor,) there is a transcript of a proclamation of Louis XIV., in 1660, wherein the King desired to rectify certain abuses in the carrying of arms, the preamble contains the following statement:—"La fréquence des accidents qui arrivent journellement par l'usage des baïonettes et couteaux en forme de poignards qui se mettent au bout des *fusils de chasse*, ou se portent dans la poche, et par le port et l'usage des pistolets de poche, nous oblige d'y pourvoir," &c. (p. 16.)

* Mémoires de Jacques de Chastenet, Chevalier, Seigneur de Puységur. Paris. 1717.

Thus, we learn that before the year 1660 (and it may have been very long before), down to our own times,* the plug-dagger has been in use for hunting purposes. Some of the earliest plug-daggers, moreover, are of a rich character, and others are ornamented with hunting subjects; some of them have a saw on one edge, very useful for forest arms, but out of place for a war bayonet.† Puységur's soldiers may have been the first who applied it to the more serious office of military defence.‡

Now as to its name. Bayonne was at an early period renowned for its iron works and cutlery. This, at first sight, would appear the natural source of its nomenclature, and this has been generally conceded. Ménage in his Dictionary, published in 1694, has, "Bayonette, sorte de poignard, ainsi appelée de la ville de Baionne;" and Voltaire has immortalised the circumstance, be it correct or not, in the "Henriade:"—

"Cette arme, que jadis, pour dépeupler la terre,
Dans Bayonne inventa le demon de la guerre."

But now comes a difficulty. Cotgrave's Dictionary, in 1611, gives us, "Bayonnier, an arbalestier, a crosse-bowman, also a crosse-bow-maker." And in the "Glossaire de la Langue Romane," of Roquefort, the word is again explained as a cross-bowman. It is difficult to perceive the affinity between a cross-bowman and the city of Bayonne, and it does not seem likely that a cross-bowman should be distinguished by the knife, and not the cross-bow. The word Bayonne is said to be a compound of two Basque words, *baia* and *ona*, good bay or port. It may be said that the cross-bowman was armed with a knife made at Bayonne; then those dictionaries should have stated the fact. They appear to have been puzzled about it. "Ce mot," says Michelet, "*semble* venir de Gascogne."§

A lower ridge or projecting buttress of the Montagne d'Arrhune, in the Pyrenees, is called "La Bayonnette." As a reason for this name it is stated that a local tradition exists, that at this spot was first extemporised the defence of the bayonet by some Basques, who being assailed by Spaniards, and having exhausted their ammunition, seized the idea of thrusting their long knives into the muzzles of their fire-arms, and by this means defeated their antagonists.‖ But were this circumstance authenticated, it would not bring us any nearer to the etymology of the word.

* Mr. Akerman states in a note to his paper on bayonets in the Archæologia (vol. xxxviii), that Mr. Bernhard Smith informed him that when he was at Rome in 1835, it was the fashion to have plug-shaped handles for the knives used in boar-hunting, so as to fit into the muzzle of the rifle.

† Specimens of some of these were kindly submitted for inspection at the Lecture, by Captain Arthur Tupper and by Mr. R. T. Pritchett, F.S.A.

‡ Maréchal Puységur recommends, in l'Art de la Guerre (1, 220), "that all soldiers, instead of swords, should carry *couteaux de chasse*."

§ Dict. de la langue Françoise, 1759.

‖ Vide *Esquisses et Croquis Militaires*, par Becherelle, 1852.—The ridge of *La Bayonnette* was stormed and carried by the Allies in 1813, before they gained the Arrhune.

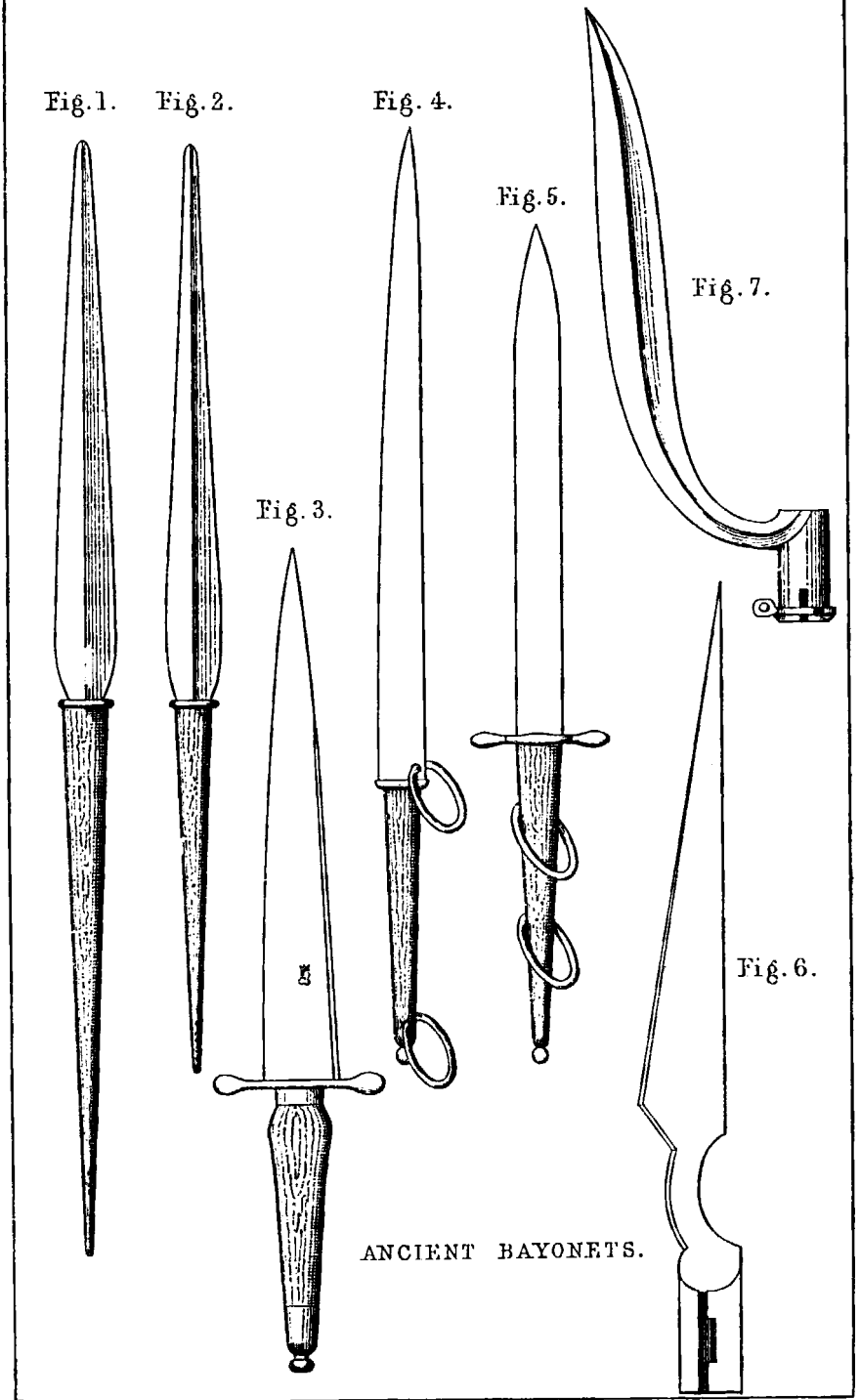
Notwithstanding the obvious advantage of the bayonet as a military weapon, it appears for a time to have been utterly neglected. Sir James Turner, writing in 1670, thus recommends its adoption:—"When musketeers have spent their powder, and come to blows, the butt-end of their musket may do an enemy more hurt than those despicable swords which most musketeers wear at their sides. In such medleys, knives whose blades are one foot long, made both for cutting and thrusting (the haft being made to fit the bore of the musket) will do more execution than either sword or butt of musket."

In a treatise on "English Military Discipline," published by Robert Harford, in 1680, we obtain a description of the bayonet, and also the date of its introduction here. He writes, "The bayonet is much of the same length as the poniard (12 or 13 inches); it hath neither guard nor handle, but onely a haft of wood, 8 or 9 inches long. The blade is sharp-pointed and two-edged, a foot in length, and a large inch in breadth. The bayonet is very useful to dragoons, fusiliers, and souldiers that are often commanded out on parties; because that, when they have fired their discharges, and want powder and shot, they put the haft of it into the mouth of the barrel of their pieces, and defend themselves therewith, as well as with a partisan." He goes on to observe, that pikemen are useless for advanced posts, where, in order to give the alarm, it is necessary to make a noise. "These reasons," he adds, "and many others, have led to the giving this year (*i.e.*, 1680) to some musqueteers, bayonets to fix in the muzzles of their pieces when attacked by cavalry, thus having the effect of pikes, the use of which will, ere long, no doubt, be abandoned." We have, up to this point, heard of two descriptions of bayonets, Puységur's, whose blade and handle were of equal dimensions, each a foot long (Plate xxxiii. Fig. 1), and Harford's, whose blade was 12 or 13 inches, and handle 8 or 9 inches long (Fig. 2). In Mallet's "Travaux de Mars," pub. in 1685 (a copy of which is in the library of this Institution) there is an engraving of the bayonet then in use, similar to this last one.

In the following year, the form of the bayonet appears to have been somewhat changed, and in this country, at least, an uniform or regulation pattern to have been adopted. There is one preserved in the Tower armoury, which bears this inscription on its blade "God . Save . King . James . 2 . 1686." A specimen of what was the common plug-bayonet (Fig. 3) is in our Museum, and many are to be seen in the Tower armoury, although 2,025 were consumed in the fire at that fortress in 1841.* Many decorate the walls of the Guard Chamber at St. James's Palace, and at Hampton Court.

This new species of arm was found very effective, and ultimately put pikes *hors de combat*. It took some years to effect this, so naturally do men seem averse to lay aside an old weapon—in England, perhaps, remarkably so—pikes were not discarded from the British service in 1706.

* This information is derived through Mr. John Hewitt, for whose valuable assistance I feel greatly indebted.



ANCIENT BAYONETS.

J.R.Jobbins

In 1671, a corps was raised in France, armed with fusils and bayonets, the latter weapon being carried for the first time in a sheath alongside of the sword.* This was the regiment of Fusiliers, afterwards called LE REGIMENT ROYAL D'ARTILLERIE, and the special duty which was assigned to it, was the protection of the guns of the artillery. In England, the example of France was followed, as was our wont, but, in this instance, pretty quickly. In the next year, a warrant was issued by Charles the Second, the original of which is preserved in the records at the War Office:—

"Charles R. April 2, 1672.

"Our will and pleasure is, that a Regiment of Dragoons which we have established, and ordered to be raised in Twelve Troopes of four score in each besides officers, who are to be under the command of Our most deare and most entirely beloved Cousin Prince Rupert, shall be armed out of Our stores remaining within Our office of the Ordinance. * * * The souldiers of the several Troopes foresaid, are to have and carry each of them one match-locke musquet, with a collar of bandaliers, and also to have and carry one *bayonett* or *greate* knife," &c.

"By His Majesty's Command,

(Signed) "ARLINGTON,"

"To Sir Thomas Chichely, Master-General of the Ordnance."

The introduction of a lighter fire-arm, the fusil, would render the bayonet far more effective. The old unwieldy musket, even when armed with the bayonet, was very unequal to cope with the comparatively light spear or pike. Our first regiment of Fusiliers (the 7th), was not raised till 1685, and its original special duty was also—like the French one—the protection of the guns, and it was provided with bayonets.†

Great as was the advantage of being able to arm the musket or fusil against a surprise, the loss of its fire, while plugged in the muzzle by the bayonet, was, of course, a serious one, and this led to a contrivance whereby the soldier could discharge his piece and retain his bayonet fixed.

The Maréchal de Puységur (son of the Puységur mentioned before), in the "Art de la Guerre" (tome i, p. 220), says that he "had seen a regiment, before the peace of Nimeguen, in 1678, which was armed with swords without guards, but in lieu thereof a brass ring, and another at the pommel (Fig. 4). Through these the barrel of the fusil was passed. This admitted of the same effect as the socket-bayonet of the present time."

* Daniel, Hist. de la Milice Françoise, Tom. ii, p. 422. (Liby. Royl. Un. Scr. Ins.)

† "Our Royal Regiment of Fusiliers to have snap-hance musquets, strapt, with bright barrels of 3 feet 8 inches long with good swords, cartouch-boxes and BIONETTS." King James II's orders for arming the Royal Fusiliers.—Cannon's "Records."

The immediate cause of the loss of the battle of Killiecrankie was the impossibility of fixing the bayonets in time to meet the impetuous onset of the Highlanders. In Mackay's Memoirs, for the year 1689, he says, "All our officers and soldiers were strangers to the Highlanders' way of fighting and embattailing, which mainly occasioned the consternation many of them were in, which, to remedy for the ensuing year, having taken notice on this occasion that the Highlanders are of such a quick motion, that if a battalion keep up his fire till they be near, to make sure of them, they are upon it before our men can come to their second defence, which is the bayonet in the musle of the musket. I say, the General (Hugh Mackay) having observed this method of the enemy, he invented the way to fasten the bayonet so to the musle without, by two rings, that the soldiers may safely keep their fire till they pour it into their breasts, and then have no other motion to make but to push as with a pick."*

The merit of this contrivance cannot, however, be claimed for General Mackay, as we have just seen. The peace of Nimeguen was in 1678, and the battle of Killiecrankie was fought eleven years after—namely, in 1689.

The experience gained of the characteristic impetuosity of the Highlanders in attacking with their claymores was not thrown away; and, in 1746, the Duke of Cumberland gained much credit by the success which attended the instructions which he issued at Culloden, that his soldiers should direct their bayonets each to his right-hand man of the enemy. The effect was that, when the swordsmen lifted up their right arms, they laid bare their breasts to the bayonets. In notice of this device, a cotemporary writes:—"The sword and target which the Highlanders were used to wield and brandish, with savage cries, have proved but feeble arms against the bayonet in the hands of stout and resolute men. The instruction given to the soldiers will doubtless be entered in the books of discipline as proper against sword and target."†

The improvement of the ringed bayonet was not generally or quickly adopted; for in an English manual, of 1690, the fusil of the grenadier has the plug-bayonet, as before. Grose mentions an anecdote, which he states was communicated to him by Lieutenant-Colonel Christopher Maxwell, of the 30th Regiment of Foot, who had it from his grandfather, formerly Lieutenant-Colonel of the 25th Regiment of Foot. It is to this effect:—"In one of the campaigns of King William III., in Flanders, in an engagement, the name of which he had forgotten, there were three French regiments, whose bayonets were made to fix after the present fashion—a contrivance then unknown in the British army. One of them advanced against the 25th with fixed bayonets. Lieutenant-Colonel Maxwell, who commanded it, ordered his men to screw their bayonets into their muzzles, to receive them, thinking they meant to decide the affair point to point; but, to his great surprise,

* "Memoirs of the Scottish War," p. 52. 4to. Edinb., 1833. See also Macaulay's Hist. of England, iii, 371.

† "Gent. Mag." for May, 1746, vol. xvi, p. 244.

when they came within a proper distance, the French threw in a heavy fire, which for a moment staggered his people, who by no means expected such a greeting, not conceiving it possible they could fire with fixed bayonets. They nevertheless recovered themselves, and drove the enemy out of the line."*

The story may or may not be true, but, on such questionable authority, no reliance can be placed on it. I have in vain endeavoured to test its accuracy. The history of the 25th is a very interesting one. It is not published in Cannon's Records, but I have had access to a MS. account of it; and it appears that it was raised in two hours, in 1688-9, and was shortly afterwards sent to Flanders, where it took part in the engagements of the war. No mention, however, is made of any affair like that above, nor could I find the name of Lieutenant-Colonel Maxwell as being in command of the regiment. The Army Lists do not commence earlier than 1741. The name of Christopher Maxwell appears in the Army List of 1782, having succeeded to the lieutenant-colonelcy of the 30th in that year. He entered that regiment as ensign in 1755.

The ringed bayonets continued in vogue for a considerable time. We learn from Grose that two Horse Grenadiers rode before the coach of Queen Anne, with their bayonets fixed by means of rings.† (Fig. 5.) Even later than that, a glossary appended to the Mémoires of the Marquis de Feuquière, in 1735, explains "*Bagonet*, a short broad dagger, made with iron handles, and rings that go over the muzzle of the firelock."

The next and final improvement was the socket bayonet, and this time the French do not seem to have been the first to adopt it. Marshal Puységur says, "During the war of 1688, it had been proposed to the late king (Louis XIV.) to discontinue pikes and muskets; he even tested the effects of socket bayonets (*bayonettes à douille*) very similar to those in present use, on the muskets of his own regiment; but as the bayonets had not been fitted to the barrels, which were of different sizes, they were not very firm, so that in the trial which took place in the presence of his Majesty several of them fell off in firing, and in others the bullet in passing out broke the end, so that they were rejected. But a short while after, other countries, with whom we had been at war, laid aside their pikes, and took to fusils and socket-bayonets, to which we were obliged to return."‡

This passage is curious, not alone as describing the first days of the socket-bayonet, but also as showing that even in the king's regiment the arms were not of uniform pattern. The socket-bayonet was in general use in the French army in 1703-4.§ (Fig. 6.) Fig. 7 represents a curious Indian bayonet with locking ring, date 1810.‖

We have doubtless often heard the bayonet called bagonet, which we have considered a vulgarism only to be ridiculed; it appears, however, to have been so designated by authority about the period of its introduction here. Mr. Akerman states that in a small MS. volume

* Mil. Ant. ed. 1812, vol. i, p. 155. (Liby. Roy. Un. Ser. Ins.)

† Vol. i 156.

‡ Art. de la Guerre, i, 148.

§ Ibid, i, 118.

‖ In the possession of Capt. Tupper.

in his possession, written in the latter half of the 17th century, entitled "Exercise of Dragoons, composed for his Ma^te Roy^l Regiment, by y^e R^ht Hon^ble Louis, Earle of Feversham, Colonell." Among the instructions contained in it are:

"handle yo^r baggonets.
"draw out yo^r baggonets.
"mount your baggonetts altogether.
"fasten them into y^e mussells of your musket."

They are further instructed to "march through a towne with musketts advanced, and through a quarter w^th baggonetts in y^e mussells of y^e musketts."*

In February, 1686, the Coldstream Guards were supplied with bayonets for the first time. In the contingent disbursements made by the Regimental Quartermaster for that year is the following item:

"For taking out and carrying of the *Bagonets* for the regiment, &c."†

Even so late as 1735, the word was so printed. "*Bagonet* is a short broad dagger," &c., in the glossary before quoted.‡ The fact of the *baggonet* having been originally a simple *dagger*, may have had something to do with the corruption, and the practice of drill-instructors, as is well known, in all times has been to give that intonation to a word of command which is best heard at a distance.

There have been many modifications in the sockets of bayonets; specimens of many of them may be seen in the armoury of the Institution. At first the socket was only held to the barrel by a groove, which ran over the sight of the firelock (Plate xxxiv., Fig. 1); the consequence was, that upon bringing the muskets with the bayonets fixed from the "shoulder" to the "charge," it frequently happened that the bayonets were thrown off. Moreover, they were liable to be pulled off by the enemy. A remarkable instance of this occurred so lately as at the battle of Meeanee. I have it on the testimony of an officer of H.M.'s 22nd Regiment, who was present in the action. The Belooch swordsmen engaged the 22nd in fair hand-to-hand combat. So desperate were these men, that they tore off the bayonets from the firelocks. In consequence of this, at Hyderabad afterwards, the 22nd men, fore-warned by experience, lashed their bayonets on to the barrels with cord, or anything they could find.

The following anecdote of the above campaign on the same authority is worth repeating. A Belooch, sword in hand, rushed at one of the 22nd men standing on the bank of the Fulailee; the latter, with a thrust, received him on the point of his bayonet, which the Belooch seized with his hand, and with the bayonet in his possession rolled dead into the bed of the river. Upon seeing which, the soldier—an Irishman—cried out, "Give me back me baggonit, ye tief of the world!"

The first improvement in the socket, was the introduction of a short spring, screwed on the top of the socket, the screw of the spring serving for a sight when the bayonet was fixed; the spring holding

* Archæologia, xxxviii, p. 429.
† Mackinnon, app. 110 and 112.
‡ "Memoirs of the Marquis de Feuquière."

on the sight of the barrel as a catch, which was therefore hidden by the socket. An example of this may be seen in the Government pattern. Land Regulars, Geo. IV., in Royl. Un. Ser. Mus. (Plate xxxiv, Fig. 2.)

The second was introduced in 1839. The motions were shorter, but in all cases they were guided by the sight. The spring was introduced underneath, and kept the bayonet from moving forward. The action of the spring is to press the bayonet on the barrel from the ramrod. Examples: Long sea-service and Light Companies. Tower, 1839 (Fig. 3).

The third may be seen in the line pattern, 1842. The spring is under the barrel, its action pressing to the lock-side of the barrel; as the sight is released from the first motion it pushes the socket into the second. The band of the bayonet is filed away, so that the first sight is always visible at the lower ranges. (Fig. 4).

In the pattern of 1853, the first motion is longer than the previous ones. No spring is used, but a locking-ring, which is turned to the lock-side, passes behind the front sight, and so fixes the bayonet. (Fig. 6.) Fig. 5 represents sappers sword bayonet, 1845, E. I. Service. Fig. 7 sword bayonet of Royal Engineers. Fig. 8, sword bayonet used with short Enfield.

The histories of modern campaigns abound with accounts of "splendid bayonet charges," but it has been seriously doubted whether *armies* have ever actually come into positive collision with that weapon. Bodies of infantry have, without doubt, been protected from being broken by cavalry by forming squares and fixing bayonets, and instances of individual attack and defence with the bayonet are numerous. Marshal Saxe, after describing the tactics of his day, and informing us in what manner battles were opened, suddenly inquires, "And what happens then? Why both sides begin to fire, which is a misery to behold. At length they advance upon each other, and generally at 50 or 60 paces, more or less, one or the other breaks and runs. Do you call that attacking?" *

In reply it may be said, that if that be the effect of the bayonet, it is the highest compliment that could be paid to it. Surely that weapon cannot be ineffective, the very sight of which scares an enemy! The late Colonel Mitchell, however, an accomplished writer on military subjects, altogether repudiated the idea of the bayonet as an effective weapon. In a series of papers on Tactics, which he contributed to the United Service Journal in 1831, he says, "The bayonet may in full truth be termed *the grand mystifier of modern tactics.* Let any one hold up at arm's length a musket and a bayonet, feel its weight and handiness, and look at its form; the entire of the *rickety zig-zag instrument* measuring from butt to point 6 feet 2 inches, projecting at the position of the charge about 3 feet 6 inches from the soldier's person, and weighing 12 lbs." "The British army," says he, in another place,† "during the Peninsular war encountered the best troops of continental Europe, those who at least had all but conquered

* "Mémoire de Comte de Saxe, p. 43. (Liby. Roy. Un. Ser. Inst.)

† "Thoughts on Tactics," by Lt.-Col. Mitchell, p. 166.

Europe. The French infantry were always ready *pour faire le coup de fusil*, but who ever saw them await a bayonet charge?"

Mr. Guthrie, the eminent army surgeon, who accompanied the army from Rorica to Waterloo,, is an excellent authority on the subject. "A great delusion," says he, "is cherished in Great Britain on the subject of the bayonet—a sort of monomania, very gratifying to the national vanity, but not quite in accordance with matter of fact. Opposing regiments, when formed in line, and charging with fixed bayonets, never meet, and struggle hand to hand and foot to foot, and this for the very best possible reason, that one side turns round and runs away as soon as the other side comes close enough to do mischief. Small parties of men may have personal conflicts after an affair has been decided; or in the subsequent scuffle, if they cannot get out of the way fast enough. The battle of Maida is usually referred to as a remarkable instance of a bayonet fight; nevertheless, the sufferers, whether killed or wounded, French or English, suffered from bullets, not bayonets. Wounds from bayonets were not less rare in the Peninsular war. It may be, that all those who were bayoneted were killed, yet their bodies were seldom found."

The list of killed and wounded by bayonets may be small, but no one will question the moral effect produced by a bayonet charge, and I firmly believe that instances are rare of British infantry "not waiting" for it.

At Fuentes de Onoro, in May, 1811, the 88th cleared the streets, and bayoneted down the French Grenadiers. At Barossa the French advanced in their usual gallant manner of impetuous attack, which few nations have been able to withstand. The gallant Graham, although left alone in the plain, with his feeble, starving band,* and scarcely having time to form, instantly defied the French divisions. The English line quietly waited for the attack, and then riddled the head of the column with a deadly fire, then charged with the bayonet, and one hour and a-half settled the affair. General Graham (afterwards Lord Lyndoch) thought it necessary to apologise for the rashness of attacking with his handful two entire French divisions. The Duke, however, replied, "I congratulate you and the brave troops under your command, on the signal victory which you gained on the 5th instant."† Lord Hill at Almaraz (from whence one of his titles was derived), with the 1st battalion 50th, and one wing of the 71st, attacked Fort Napoleon, defended by 9 guns, and between 400 and 500 French troops. The works were escaladed in three places, and the garrison was driven at the point of the bayonet through the several intrenchments, and many leapt down into the river from sheer panic.‡

We may presume that this was what the Duke of Wellington called "bludgeon work."§ Again, "Two British regiments (27th and 48th) fell upon the enemy three separate times with the bayonet, and

* "The British having been twenty-four hours under arms, without food, were too exhausted to pursue." Napier, Pen. War, iii, 445.

† Despatches, vii, 395.

‡ Ibid, ix, pp. 169, 185.

§ Napier, Pen. War, vi, 140.

lost more than half their own numbers."* This was at the first battle of Sauroren. Soult took credit for having nearly destroyed the 20th regiment at the heights of Pampeluna, when only three companies were engaged. "Leurs pertes," he reports, "ont également été considérables, soit à l'attaque du Lindorez par le génl. Reille où le 20me régiment a été presque détruie à la suite d'une charge à la bayonette exécutée par un bataillon du 6me leger, soit à l'attaque d'Altobiscar."† M. General Cole reports, "The enemy were perceived moving in very considerable force along the ridge leading to the Puerto de Mendichurri. M. General Ross attacked him with the Brunswick company and *three companies* of the 20th, all he had time to form; these actually closed with the enemy, and bayoneted several in the ranks. They were, however, forced to yield to superior numbers."‡ In Cannon's records the affair is thus reported: "The left wing (20th) and a regiment of Brunswickers ascended to the summit, the light company and Brunswickers taking post in front in skirmishing order. The skirmishers were driven in by a very superior force of the enemy" (p. 43). The casualties in the 20th amounted to 3 officers killed and 6 wounded (a large proportion of officers), 2 sergeants, 2 corporals, and 10 men killed, 105 wounded, and 12 missing.

Having unfortunately no practical experience of my own on this subject, I referred to those whose services entitled them to be considered authorities, and I beg here to acknowledge the kindness of the communications which I received. General Sir De Lacy Evans rites, "I certainly have not known any instances of armies crossing bayonets. I believe that one of the parties invariably *turns tail*. But the bayonet is one of the most important of all our weapons; it combines the ancient pike or lance with the modern musket or rifle. It increases the confidence of the soldier, and intimidates his opponent, and of all the soldiers of Europe, the British soldier is the last to resort to the turn-tail practice, and never, unless under the impression of being extremely out-numbered."

The Chaplain-General favoured me with the following:—"Mr. Guthrie is perfectly right. Except in night affairs, in the assault of towns, and when troops come suddenly and unexpectedly together, I do not believe that the bayonets of infantry ever cross. In my own experience, I know of only three such close encounters.

One occurred during the succession of actions, which are called by the common title of the battles of the Pyrenees; when Captain George Tovey, at the head of the Grenadier company of the 20th regiment, actually charged the head of a French column, and drove it back. He came upon the enemy at once, by rounding the corner of a rock, and his men did stab the leading files. The column melted away from the rear, though it probably numbered 3 or 4,000 men.

The second was in the assault of San Sebastian, when the French stood on the top of the breach, till several of them fell on the bayonets of our men.

* Napier, Pen. War, vi, 139.

† Soult to the Minister of War. Napier, App. vol. vi.

‡ General Cole to Lord Wellington.

The third was before New Orleans, on the night of the 23rd December, 1814; when a body of men belonging to the 85th and the Rifle Brigade, charged the flanks of an American battalion, and drove it off the ground. I had then a bayonet in my own throat, of which I still carry the mark; I cut down the man, whose firelock I had seized with my left hand. The number of combatants on our side in this affair did not exceed 40; the enemy, taken by surprise, might be 400."

A gallant old soldier, one of the Vice-Presidents of this Institution, writes—"I have seen many battle-fields, here and there, and observed that one or two files had come into contact with the bayonet; but that even two battalions have ever come into collision, I do not believe."*

Jomini testifies to the same effect:—"Ce n'est guère que dans les villages, dans les défilés, que jai vu de mêlées réelles d'infanterie en colonnes, dont les têtes se choquaient, à la bayonnette; en position de bataille je n'ai jamais rien vu de semblable."†

Our great battles on land have been infantry battles. Crécy, Poitiers, and Agincourt were won by the superiority of our infantry. Why was our infantry superior? Because, in those days at least, the foot-soldier was better treated, socially speaking, in England than elsewhere; he was better paid, and consequently better fed. The service being remunerative, brought forward a superior class of men—that class which is the pride of our country—the yeomen. Archery was their pastime, and butts were set up in every parish, as we may hope to see them again. It was the free constitution under which they lived, that made them what they were, and what we are. No slaves would have resisted as those men did.

The bayonet, although not invented here, is recognised as a British weapon for the same reason that the long bow was considered the English one, *par excellence*, because it required a strong arm to render it effective. In a bull-dog struggle for life or death, blood, bone, and bottom must tell. A purely physical superiority generates from consciousness of its power, a moral confidence. Long may we have reason to enjoy that confidence, so long as we use our power in a righteous cause, for defence, not aggression; without vain boasting, and in firm reliance on that Providence, which has hitherto so wonderfully protected us.

"Ergo qui desiderat pacem, præparet bellum. Qui victoriam cupit, milites imbuat diligenter. Qui secundos optat eventus, dimicet arte, non casu. Nemo provocare, nemo audet offendere,"—"Vegetius de Re Mil." lib. iii, prolog.

"The English Infantry," wrote General Foy, a bitter detractor from the merit of the sons of Albion, "is not afraid of charging the enemy with the bayonet."‡

* Major Loraine White, late 81st Regiment.

† Précis de l'Art de la Guerre, p. 570. (Library Roy. United Service Inst.)

‡ "History of the Peninsular War," i, 197. (Library Roy. United Service Inst.)

An important cause of the success of the bayonet in the hands of British troops may be found in the fact of their attacking in extended order instead of the column formation. On this point Sir W. Napier expresses himself—"The rapidity with which the French soldiers rallied and recovered their order after a severe check was admirable, but their habitual method of attacking in column cannot be praised. Against the Austrians, Russians, and Prussians it may sometimes be successful, but against the British it must always fail, because the English infantry is sufficiently firm, intelligent, and well disciplined to wait calmly in line for the adverse masses, and sufficiently bold to close upon them with the bayonet."*

That the bayonet continues still in active operation, we may learn from General Forey's dispatch on the capture of Puebla:—"For the first time," writes he, "the Mexicans felt the points of our bayonets. They gave way before the impetuosity of our attack."

The necessity of increasing the efficiency of the soldier by introducing a system of athletic exercises has been forced upon the attention of military administrations. In some of the leading armies of the Continent, the promotion of gymnastics is encouraged by the strongest inducements. The practice of the bayonet in attack and defence presents a ready means of developing the qualities of the soldier. The American General, M'Clellan, has published a manual (a modified translation from the French of M. Gomard), whose system, after an examination of those of Selmnitz, Pinette, Müller, &c., appeared to him eminently superior. Gomard lays it down as a principle, that the most formidable antagonist an infantry soldier can encounter is an infantry soldier; that the bayonet is more formidable than either the lance or the sabre. "This assertion," says General M'Clellan, "may seem surprising, but trial will convince any one of its truth, and of the consequent fact that an infantry soldier, who can parry the attacks of a well-drilled infantry soldier, has nothing to fear from a cavalry soldier, because simple variations of the parries against infantry are perfectly effective against the sabre and lance; *e.g.*, the parries in high tierce and high quarte. . . . . It will be proper to remark," he continues, "that any system of fencing with the bayonet can, in service, have its full and direct application only when the men are isolated or in very open order. In the habitual formation, as infantry of the line, the small interval allowed each file, and the method of action of masses, will prevent the possibility or necessity of the employment of much individual address; but even then, in the shock of a charge, or when awaiting the attack of cavalry, the men will surely be more steady and composed, from the consciousness of the fact that they can make good use of their bayonets, and easily protect their persons against everything but balls."

One is glad to learn that public attention is drawn to this matter at home, and that the exercise is now adopted throughout the infantry of the British army. A spring practice bayonet, to enable "loose play," or fencing, to be carried on with the bayonet in the same manner that the

* "History Peninsular War," i. 265.

foil or single-stick is used to represent the rapier or sabre, has been in constant use in the 3rd battalion Grenadier Guards for nearly two years, without the slightest accident. Similar ones are also employed at Messrs. Angelo's, and some of the other schools of arms in London. The bayonet slides freely down a grove at the side of the barrel, so as to recede when it touches the adversary in a thrust. It is fitted with a small india-rubber spring, which returns it to its place immediately the pressure is removed. It is the same weight and length as the regulation Enfield rifle.* It can scarcely be necessary for me to mention here that the bayonet and rifle are now made entirely by machinery at the Royal Small Arms Factory, Enfield. Specimens illustrative of the formation of the bayonet in all its stages (and there are 49), from the rough piece of metal to the polished weapon, are to be seen in the Museum of this Institution.

I stated at the outset that it was not my intention to speculate upon the future of the bayonet. Of course it requires no great amount of prescience to pronounce that in the increased power of projectiles, and the rifling of all *bouches-à-feu*, the attack will be made at much longer range, and the destruction of life will be much more rapid, so that whether the bayonet will be called into play to decide the fate of wavering battalions, is difficult to anticipate. If, however, in the course of events, this kingdom shall again be plunged into war, we may hope confidently that the stout heart and strong arm may still be ours, and that they to whom the safety and honour of our common country shall be entrusted, will be found to be, as they hitherto have been, no degenerate scions of those brave men who fought and conquered, and gained imperishable glory, on the ancient battle-fields of Crecy, Poitiers and Agincourt.

* I am indebted to Mr. Latham, the inventor of the spring practice bayonet for this information, and for producing a specimen at the lecture. He tells me that he has supplied eight of them to the War Department, and that they have been very favourably reported upon.