



WORKING BY THE DAY.

SWORDS.

BY JOHN LEWEES.

ONE of the most clearly marked differences between man and the brute beasts lies in the fact that with his own unaided strength man is seldom able to take the life of his fellow-beings. Consequently, when we wish to put ourselves upon a level with the tiger and the wolf, and to qualify ourselves for the shedding of blood and the taking of life, we are obliged to find some other weapons than those nature has given us. Here and there may be a man who can kill another man by the exertion of his unassisted strength, but it is very seldom indeed that human life is taken by human beings without the use of an artificial weapon.

The first weapon used by man was probably a club; and it is also likely that in time this was made of very hard wood, and somewhat sharpened on one or more sides, so as to inflict a more deadly wound. Wooden weapons of this kind are now in use by some savage races. Then it was found that more effective weapons of the sort could be made of a harder substance, and short, unwieldy swords were hewn out of stone, very much as our Indians

made their arrow-heads of flint. But a sword of this kind, although a terrible weapon in the hands of a strong man, was brittle and apt to break; and so, in time, when the use and value of metals came to be understood, swords were made of these substances. The early Romans, and some other nations, had strong, heavy swords made of bronze. But when iron and steel came into use, it was quickly perceived that they were the metals of which offensive weapons should be made.

Thus it may be seen that the sword was one of the first weapons made by man; and, in time, it became the most important arm and auxiliary of warfare.

By a careful study of the form and use of the sword, from its first invention until the present time, we may get a good idea of the manner in which, in various ages, military operations were carried on. At first, men fought at close quarters, like the beasts they imitated. They struggled hand to hand, and with their short swords they banged and whacked at each other with all the fury and strength they

possessed. But as the arts of warfare began to be improved, and as civilization and enlightenment progressed, men seemed anxious to get farther and farther away from one another when they fought, and so the sword gradually became longer and longer, until, in the Middle Ages, a man's sword was sometimes as long as himself.

But there is a limit to this sort of thing, and when the use of projectiles which would kill at a great distance became general, it was found that a soldier was seldom near enough to his enemy to reach him with his sword; and so this weapon gradually fell into disfavor, until, at the present day, it is seldom used in actual warfare except by cavalymen, and these frequently depend as much on the fire-arms they carry as upon their sabers. It is said that cavalry charges, in which the swords of the riders are depended upon to rout the enemy, do not frequently occur in the warfare of the present day; and those naval battles of which we all have read, where the opposing ships are run side by side, and the sailors of one, cutlass in hand, spring upon the deck of the other, and engage in a hand to hand fight, are now seldom heard of. Our iron-clad ships fire at one another from a great distance, or one of them comes smashing into another with its terrible steel ram; and a sword would be a very useless thing to a modern sailor. Our armies lie a mile or two apart, and pop at each other with long-range rifles and heavy cannon, and to the great body of the opposing forces swords would be only an incumbrance. Even bayonets, which may be considered a sort of sword, though they more nearly resemble the lance, are not so much used as formerly in actual warfare.

The officers, even in the infantry service, now wear swords, but these are merely insignia of rank, and are seldom used to fight with; and, indeed, I have heard that it is not considered proper for an officer to have his sword sharp, because, when using it in marshaling and leading his men, he might accidentally hurt some of his command.

Swords have been made in so many different forms, on account of the various methods in which they have been used and the widely differing tastes of the people making and using them, that a description of all the different kinds of swords with which we are acquainted would cover a great deal of printed space. Some of the more distinctive forms of the weapon, however, are shown in the illustrations to this article.

First we see the short, bronze sword, used by the early Romans before they knew how much harder and better a weapon could be made of steel or even iron. There was also a longer, bronze sword with a formidable sharp point, but a very awkward

handle. After the Romans made much better swords, they still preferred the short, thick form, although a longer weapon was sometimes used. The most usual form of the ancient Roman sword is seen in the picture of the sword of Hadrian. These blunt, heavy weapons were employed in hand to hand conflicts, and their blows were warded off by stout shields or bucklers, which the warriors wore upon their left arms. The sword of the fourteenth century, which is shown in the next illustration, though in some respects more clumsy than the Roman sword, is longer, which shows that fighting men had already begun to get farther away from one another.

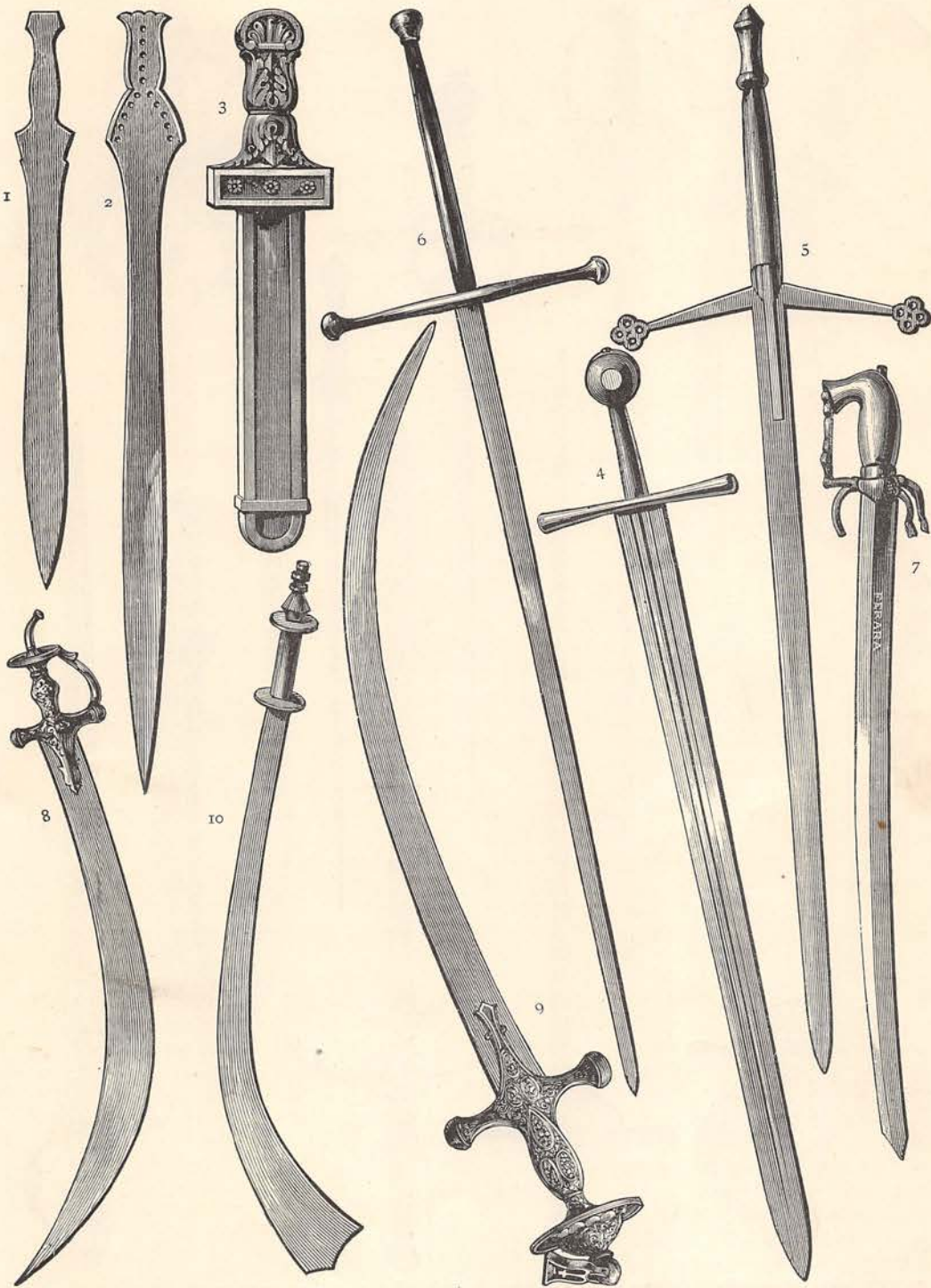
The claymore, once famous in Scottish history, was a very long sword, with a hilt so large that it could be grasped by both the hands of the warrior who wielded it, and when this tremendous weapon was swung around by any of the brave

"Scots, wha hae wi' Wallace bled,
Scots, wham Bruce has aften led,"

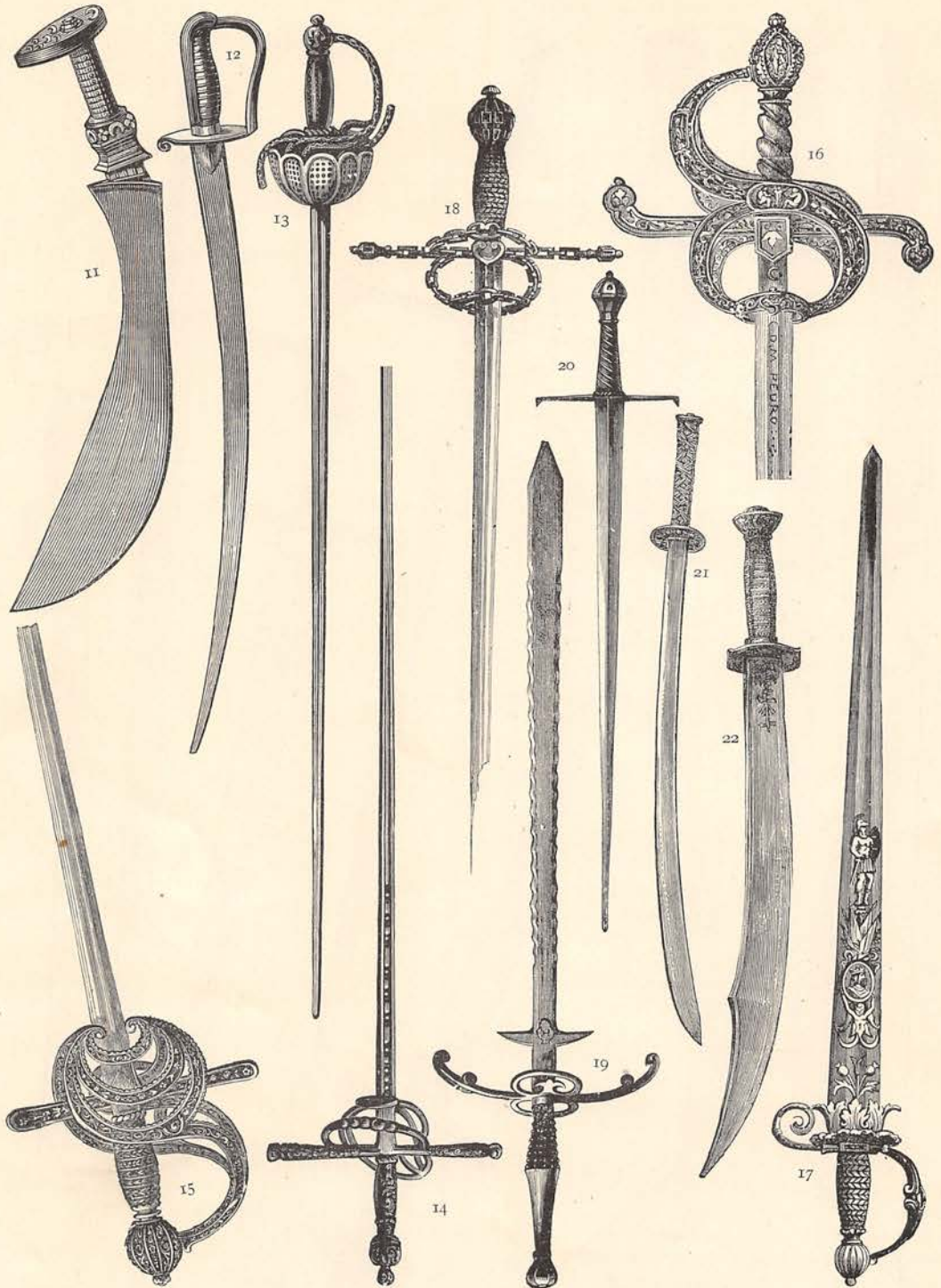
there was every reason for the opposing soldiers to want to get as far away as possible. Long, two-handed swords were in use in various parts of Europe during the Middle Ages, but it is from Scotland that we have heard the most about them.

Andrea Ferrara, who was born about the middle of the sixteenth century, was a celebrated Italian armorer, and he made swords which were well known throughout Europe for the fineness of their temper and the beauty of their ornamentation. The hilt of the Ferrara sword shown in Figure 7 is of a rather curious form, although not very elaborate. But some of the swords made about this period for the rich knights and nobles who delighted in elegant armor and handsome as well as useful arms, were very elaborately ornamented, the hilts often being of complicated and artistic forms.

In Eastern countries, also, the ornamentation of swords was carried to a great extent. The East Indian saber, or Tulwar, shown in the illustration, has a neat and pretty hilt, while the East Indian scimitar is more highly and artistically ornamented. The Malabar sword is a simple weapon, but very broad at the end, and apparently intended to be used more as a hatchet than as a sword. The East Indian cutlass, or Polygars knife, is a weapon of somewhat similar shape, although not so blunt at the end. A cut from one of these heavy blades, wielded by a quick and powerful arm, must be a terrible thing. The modern cutlass, shown in Figure 12, page 704, was used very much in the same manner as these East Indian weapons—that is, its stroke was always a cut and never a thrust; but a blow with its comparatively slight blade must have



1 and 2. Bronze Roman sword. 3. Sword of Hadrian. 4. Sword of the fourteenth century, at the British Museum. 5. Claymore. 6. Mediæval two-handed sword. 7. Andrea Ferrara sword. 8. Indian saber, or Tulwar. 9. East Indian scimitar. 10. Malabar sword.



11. East Indian cutlass, called a Polygars knife. 12. Cutlass. 13 and 14. Rapiers of the sixteenth century. 15 and 16. Swords of the sixteenth century. 17. Italian Malchus. 18. German sword. 19. German two-handed sword. 20. Michel Angelo's sword. 21 and 22. Japanese swords.

been much less effective than one delivered with any of the ponderous, curved weapons of the East.

From the first invention of the sword down to the period when the fifteenth century was drawing to a close, this weapon had always been used as an arm of offense. The person wielding it thrust it or hewed it into the body of his antagonist whenever he had a chance, and the only defense against it was stout armor or an interposed shield. It is not to be supposed that an ancient warrior, or one belonging to the earlier Middle Ages, never thrust aside or parried with his own blade a stroke of his enemy's sword; but this method of defense was not depended upon in those days; the breast-plate, the helmet, or the buckler was expected to shield the soldier while he was endeavoring to get his own sword into some unprotected portion of the body of his antagonist. But about the time of Ferdinand and Isabella of Spain, the science of fencing was invented. This new system of fighting gave an entirely new use to the sword: it now became a weapon of defense as well as of offense. Long, slender rapiers, sharpened only at the point, were the swords used in fencing. Armed with one of these, a gallant knight, or high-toned courtier, who chose the new method of single combat, disdained the use of armor; the strokes of his opponent were warded off by his own light weapon, and whichever of the two contestants was enabled to disarm the other, or to deliver a thrust which could not be parried, could drive the sharp point of his rapier into the body of his opponent if he felt so inclined. The rapier, which was adapted to combat between two persons, and not for general warfare, soon became the weapon of the duelist; and, as duels used to be as common as lawsuits are now, it was thought necessary that a gentleman should know how to fence, and thus protect the life and honor of himself, his family, and his friends.

Swords of elaborate and wonderfully executed hilts, like those of the sixteenth century, shown in the cuts on page 704, excited the admiration of lovers of art, as well as of warriors.

People who understood such things regarded these beautiful weapons with as much interest as we look upon any work of art of our day; and, indeed, some of these sword-hilts were so admirably executed that those which are preserved in museums command as much admiration now as they ever did. The blades of swords were also sometimes beautifully ornamented, as may be seen in the cut of the Italian "Malchus" (Figure 17). The German sword next shown (Figure 18) exhibits a very artistic peculiarity of hilt.

Some of the German swords, used by the mercenary soldiers in the French religious wars, were enormous two-handed weapons, with sharp points, jagged edges, and great spikes near the base of

the blade (Figure 19). These were used only by soldiers who were uncommonly strong and skillful; for any awkwardness on the part of a man swinging such a tremendous blade was apt to inflict as much injury on his companions as on the enemy. Some of the long swords of the Middle Ages were used more for show and ceremony than for actual service. The sword of Edward the Third, which is preserved in Westminster Abbey, is seven feet long, and weighs eighteen pounds. This, it is said, was carried before the King in processions, and was probably never used in any other way.

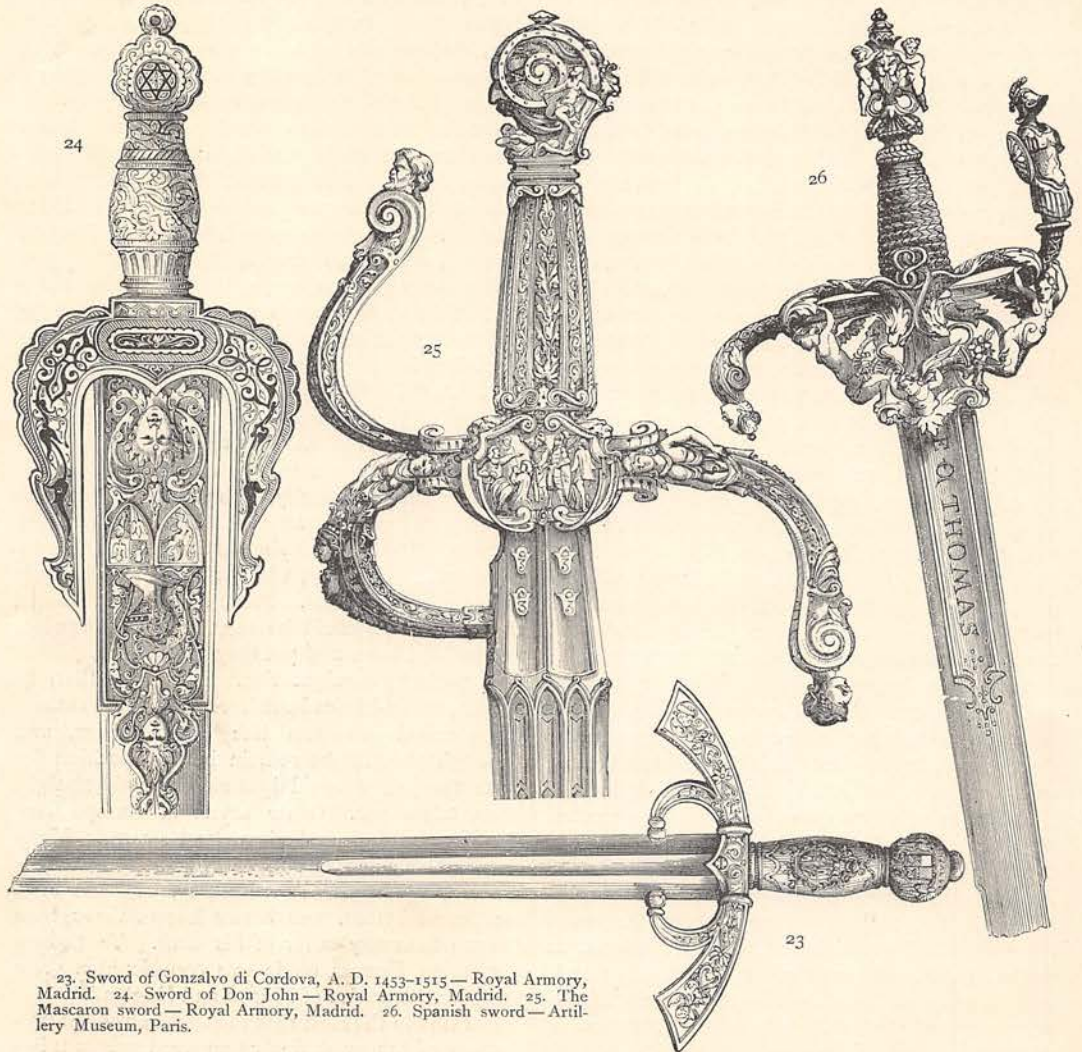
But the art shown in sword-making was by no means confined to beautiful forms and elaborate ornamentation. The greatest skill was exercised in the manufacture and tempering of the blade, which, in the days when swords were not only worn but used, was more important than any other part of this weapon. In Europe, the sword manufacturers of Spain first began to have a reputation for producing work of superior quality, and the armorers of Toledo stood foremost among their countrymen. A "Toledo blade" was considered to be a weapon of great value, and, even now, when we wish to speak of something remarkably fine-tempered and sharp, we compare it to one of these swords. The peculiarity of the Toledo blade was not only its extreme hardness, which enabled it to receive and retain the sharpest and most delicate edge, but its elasticity, which allowed it to be bent without being broken. Some of the most famous of these swords could be bent so that the points touched the hilts, and yet they would spring back to a perfectly straight line. It is said that, in Toledo, sword-blades have been seen in the cutlers' shops coiled in boxes like watch-springs, and although they might remain in this position for some time, they would become perfectly straight when taken out. Other places in Europe were also famous for producing good swords. Many excellent weapons were made in Italy, and Andrea Ferrara, the Italian sword-maker, who has been mentioned before, was better known throughout Europe than any other of his craft. To possess a genuine Ferrara blade was considered a great thing by the nobles of France and England.

But it is to the East that the world owes the production of the most finely tempered swords it has ever seen; and the steel of Damascus has been celebrated for many hundred years as superior to any other metal that has ever been made into sword-blades. Even the cutlers of Toledo doubtless owed their skill and knowledge to the Moors, who brought from Damascus the art of making blades that were as hard as diamonds, as sharp as razors, and as elastic as whalebone.

Wonderful stories are related of these Damascus

swords. We have been told that with one of them a full-grown sheep could be cut in half at a single blow, a heavy iron chain could be severed without turning the delicate edge of the sword, and a gauze veil floating in the air could be cut through by one gentle sweep of the glittering blade. These wonderful scimitars are not manufactured now, but their

manufacture will be attempted. We should consider, however, that although the present age is preëminent as an inventive and manufacturing period, there are some things which have been produced by the ancients and the artificers of the Middle Ages which we of the present day have not been able to equal. It is possible, therefore,



23. Sword of Gonzalvo di Cordova, A. D. 1453-1515—Royal Armory, Madrid. 24. Sword of Don John—Royal Armory, Madrid. 25. The Mascaron sword—Royal Armory, Madrid. 26. Spanish sword—Artillery Museum, Paris.

SOME FAMOUS SWORD-HILTS.

fame has exceeded that of any other weapon of their kind, and it is quite certain that their extraordinary excellence has not been exaggerated. It is probable that the workers in steel of the present day might be able to discover the peculiar methods by which the Damascus steel was made, but as there would be little use or demand for the blades after they had been produced, it is not likely that

that our steel-workers might never be able to make a Damascus blade, even if they wanted to.

Some of the swords of Japan are said to possess wonderful qualities of hardness and sharpness. The story is told that if one of these celebrated blades is held upright in a running stream the leaves floating gently down with the current will cut themselves in two when they reach the keen

edge of the sword. Samples of Japanese swords are shown in Figures 21 and 22, on page 704.

But these Japanese swords, some of which were held in such high esteem that they were worshiped, and temples were built in their honor, were only hard and sharp; they had no elasticity, they could not bend and they might break, and in this respect they were far inferior to the splendid scimitars of the Moors and Saracens.

To show still further the extent to which the art of ornamentation was carried in the manufacture of swords, we give pictures of the hilts of some of these weapons which are preserved in museums. Figures 23, 24, and 25 show the sword of Gonzalvo di Cordova, the sword of Don John, and the "Mascaron" sword, all preserved in the Royal Armory of Madrid; and Figure 26 represents a Spanish sword, of very beautiful workmanship, which is to be seen in the Artillery Museum of Paris.

Having said so much about the art of ornamenting and making the sword, we must add that the literature of the weapon has been as widely extended as its use. When the story-tellers and troubadours of the Middle Ages told or sang about a noble knight, his trusty sword was mentioned almost as often as himself. In those days, many of the swords were named, and in reading about them you might almost suppose that they were actually personified, and that they thought out in their own minds, and carried into execution, the brilliant deeds that are recorded of them. We all have heard of King Arthur's famous sword "Excalibur," and of the sword of Edward the Confessor, which was called "Curtana," the cutter, although we are told it was not very sharp. But even before the days of chivalry, the favorite swords of warriors bore titles and names. The sword of Julius Caesar was called "Crocea Mors"—"yellow death"; and the four blades used by Mohammed were called "the Trenchant," "the Beater," "the Keen," "the Deadly." The sword of Charlemagne, called "Joyeuse," is famous in story.

Not only were names given to swords, but inscriptions intended to indicate their quality, or the deeds they were expected to perform, were engraved upon their blades. Some of these were of a very vaunting and boastful spirit. The best inscription upon a sword of which I ever heard was one upon an old Ferrara blade, which read thus: "My value varies with the hand that holds me." On a great many of the blades made at Toledo was the inscription: "Do not draw me without reason, do not sheathe me without honor." Among the vaunting inscriptions was this: "When this viper stings there is no cure in any doctors' shops." A Sicilian sword bore the announcement: "I come," meaning, probably, that

everybody else had better go away; while a Hungarian sword declared: "He that thinks not as I do thinks falsely." These are but a few of the legends by which a man's sword, in the days when cavaliers and warriors used to do as much talking as fighting, was made to imitate its master.

But the sword was not always used for the mere purpose of taking human life. From its first invention to the present day, it has, of course, like every other weapon, offensive or defensive, been mainly used in war or private quarrel, but, unlike all other weapons, it has a dignity and a quality, not so great now as formerly, but still recognized, which is entirely distinct from its character as an instrument for shedding blood. It was so long the constant companion of rank and valor that it acquired a dignity of its own. Thus the sword many ceremonies as a representative of its owner. In England, at there are various swords of borne in Lord Mayors' pro- other occasions. Among "Pearl sword," the the "Sunday "Common



THE SWORD-BEARER OF EXETER.

accompanying picture is seen the ceremonial weapon borne by the sword-bearer of the city of Exeter.

But not only did the sword represent and indicate rank and high position, whether civil or military, but it was used, and is still used in parts of Europe, as an instrument for conferring rank. When an English commoner is to be made a knight, and he kneels before his sovereign as plain

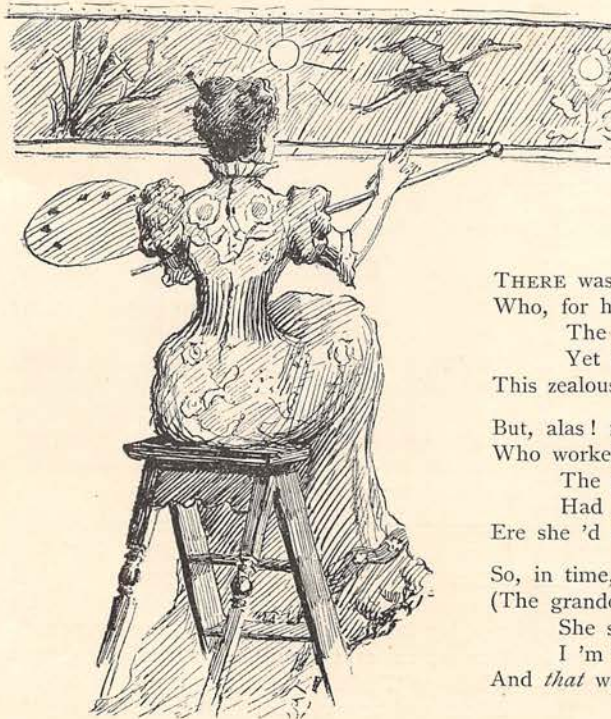
Mr. Thomas Brown, the regal personage touches him on the shoulder with the tip of a sword, and he rises—*Sir* Thomas Brown. Nothing but the sword-blade is considered adequate to confer knighthood. A man might be touched by his monarch with a battle-ax of solid gold, or a most costly rifle, but he would never consider himself a genuine knight or baronet. It is the sword alone which is aristocratic enough to confer aristocracy.

Not alone, however, for such noble purposes has the sword been used. In many countries, both barbarous and civilized, it has been the weapon of the executioner, and we read of great blades made for this purpose, containing within them a narrow channel in which ran a column of quicksilver. This heavy and fluid metal, suddenly flowing from hilt to point as the sword was swung, gave an additional impetus to the blow, and made the work of the headsman easier and more certain. The sword was used, too, in the bull-fights of Spain, to dispatch the wounded and maddened animals.

But, as we have said, such uses as these are merely incidental, and do not detract from the rank and character of the sword, which, although it is not relied upon now, as formerly, in war and combat, is yet emblematic of all that it once was. Thus, when a general surrenders his army he hands his sword to the commander of the conquering forces, thereby indicating that he gives up his power to lead his men into further combat.

It is not at all likely that cannon, pistol, gun, or any weapon that may be invented will ever attain the peculiar regard and high estimation in which the sword has been held so long. A weapon which was the personal companion of its owner, and derived its greatest value from its holder's skill and courage, was considered almost a part of the soldier or cavalier, and with it he often carved his way to fortune or to fame.

But in our times, fame and fortune are seldom won, even in military life, by mere hewing and stabbing. The palmy days of the sword are over.



The Æsthetic Young Lady

THERE was a fair maid named Louise,
Who, for handy-work, painted a frieze;
The room was quite big,
Yet she cared not a fig!
This zealous, æsthetic Louise.

But, alas! for the Lady Louise,—
Who worked at her task by degrees,—
The style of that day
Had long passed away
Ere she 'd come to the end of her frieze!

So, in time, to the group at her knees
(The grandchildren whom she would please)
She said: "T will improve it,
I 'm sure, to remove it,"—
And *that* was the end of her frieze!