SWORDS OF MANY LANDS, WITH SPECIAL REFERENCE TO JAPANESE TYPES. BY RANDOLPH I. GEARE

The earliest swords recorded were those of the Assyrians, the Greeks and the Gauls. They were double-edged, straight or leaf-shaped, and were made of bronze. Later came the Roman sword, made of hardened copper. These were stout, straight and double-edged with point forming an obtuse angle. During the Middle Ages swords were made longer, and cross-pieces (guillons) were added for the protection of the hand. Mounted soldiers often carried a narrow-bladed sword, called “estoc,” attached to the saddle, and they also wore the heavy sword as well. Knights wore at their right side a misericorde, or “dagger of mercy,” which they used for despatching their fallen foes.

In the sixteenth century swords were made much lighter, in consequence of the discarding of armor upon the invention of gunpowder. The rapier was then introduced, as a military sword, the point of which, rather than the edge, was used in attacking.

About that time was introduced the custom of wearing a dagger. Later, when the art of fencing was more widely known, all secondary protections were discarded, and the rapier became a weapon of both offense and defense. The best rapiers were made in Toledo, which was noted for its excellent blades.

About the beginning of the eighteenth century the rapier was to a great extent replaced by the “colichemarde,” a duelling sword, the blade of which was wide for about half its length and narrow for the remainder. After a comparatively brief existence this weapon gave way to the small sword, with circular guard, and a narrow, straight blade.

The sabre, the best known form of broad-sword, is single-edged. Its blade is thick at the back, becoming thinner towards the edge. A light form of sabre, known as the scimitar, is the favorite weapon of the East, while the cutlass, which is really a short, heavy broad-sword, is used in most of the navies of the world. To this group belongs the machete, commonly used in Cuba, while the claymore of Scotland is a heavy, straight broad-sword with an elaborate basket hilt.

The Japanese sword is said to have been evolved out of an Indo-Persian type of weapon, and the famous Katana, or one-edged sword, was first forged in the seventh century by dividing the old two-edged Chinese sword.
SWORDS OF MANY LANDS

The oldest Japanese blades were of bronze, and apparently followed a classical Grecian model described as "leaf-shape with central ridge." Following the bronze era came the iron age, during which only single-edged swords were produced, without any curve, and sometimes provided with a ring cast on the end of the handle. This was in use as the soldier's sword up to the sixth century. Later with the introduction of Buddhism, came the double-edged sword (Ken or tsurugi), which, however, was never in universal use. In the seventh century an improved form of the iron single-edged blade was adopted.

The long sword of the Japanese is two and a half to three feet in length, with a heavily backed blade, a sharp cutting edge, a long handle, and a small round guard. The short sword is about half as long. In olden times both were worn together by the samurai, a privileged fighting class corresponding to the knights of the Middle Ages, and the combination was called "dai-sho." The short sword was used for committing hara-kiri, and the right to use it for this purpose was granted to the samurai, to save them from the disgrace of being publicly executed. The scabbards, made of lacquered wood and highly ornamented, were thrust into the girdle where they were fastened by cords of plaited silk. This number was sometimes increased to four or five on going into battle, and in addition a dagger was often concealed in the bosom. But only military men could wear two or more swords. Any one could, if traveling, carry a short sword, but this type of weapon was not used in warfare.

The Japanese military sword, the curve of which is about the same as in the present regulation United States sword, conforms to a great extent with the sword of the German infantry officer, although it is shorter. The Japanese naval sword is an extremely short weapon, and might easily be mistaken for a long knife.

That the sword has exercised a powerful influence on the Japanese nation cannot be doubted. An eminent writer says that the distinction of wearing it, the rights which it conferred, the deeds wrought with it, the fame attaching to special skill in its use, the extraordinary value set upon a fine blade, the honors bestowed on an expert swordsmith, the household traditions that have grown up about celebrated weapons, the profound study required before one could be a competent judge of a sword's qualities, all these considerations combined
U. S. INFANTRY AND STAFF-OFFICER'S SWORD
MODERN SCOTTISH CLAYMORE
A MALAY KRIS AND ITS SHEATH
U. S. NAVY SERVICE SWORD
KOREAN COURT SWORD
SWORDS OF ANCIENT PERSIA, TRANSMITTED TO INDIA
MINDANAO KRIS
CHINESE EXECUTIONER'S SWORD
SWORD OF A MALAYAN HEADSMAN
JAPANESE SAMURAI SWORD
MODIFIED FORM OF SAMURAI SWORD
KOREAN OFFICIAL SWORD
to give it an importance far beyond the limits of ordinary conception.

In producing a blade the three processes of forging, tempering and sharpening were regarded of almost equal importance by the Japanese. The artisan had to be a man of highly moral life. He approached his work with prayer to the gods and the use of certain charms to keep away evil influences. He sometimes used steel alone, sometimes steel and iron combined. But in either case, his prime object was to obtain a fabric consisting of an infinite number of the finest threads of metal woven into a perfectly homogeneous tissue. This he accomplished by first welding together several strips of steel so as to form a rectangular mass about six inches long, two inches wide, and half an inch thick. Heating this, and cutting it partially across the middle, he folded it back on itself, and then forged it out to its original size. This process he repeated from twelve to eighteen times, after which he welded several of the masses together, then subjecting the compound some half dozen times to the same treatment that each of the original component parts had received. The resulting bar was then beaten out into the proper shape. If a “backing” of iron was desired, it was effected either by enveloping the steel between two flanges of iron, or the iron between two flanges of steel.

Next came the tempering of the blade, and for this process a composition of clay was applied to the whole blade, and then removed along the edge by means of a bamboo stick. After this operation the upper margin of the part tempered naturally showed a more or less irregular line, which has sometimes caused the erroneous idea that the edge of a Japanese sword was welded to the body of the blade. The edge was next heated by passing it several times through a bright charcoal fire. As soon as a certain temperature had been developed, the blade—still with only the edge exposed—was plunged into water.

The final process included polishing and sharpening, which required several weeks of labor. In sharpening the weapon, the object was not merely to produce an edge that would cut, but to polish the blade in two planes—the edge-plane and the body-plane (inclined at an angle to each other), and also in a minor plane—that of the point—inclined to a different angle from the other two.