

30 lbs. Occasionally a writer uses miquelet as synonymous with arquebus, and it is then necessary to study the word in its context to be sure of the meaning.

The term musket has always referred to a heavy military arm. It is generally believed that the term was first used by the Spanish (*mosquete*) to denote a military firearm they developed shortly before 1550, and which was introduced into the Spanish service by the Duke of Alba. These first muskets weighed about 30 lbs. and had a bore of 8 or 10 ga. A forked rest was required to support the muzzle.

A caliver was always a military shoulder arm light enough to be fired without a rest.

#### Flint arms

The ignition system which superseded the wheel lock and finally did supplant the matchlock as a military arm was a simple mechanism which produced its spark by striking flint against steel in the same way an average householder of the period lit his fires. In this gun lock, the flint was held in a case on the end of a pivoted arm known as the cock. The steel, which was also called the battery (frizzen), was placed on another pivoted arm opposite the cock. The pan was directly below the steel. When the trigger was pulled, a stout mainspring swung the cock in a short arc so that the flint struck the steel a glancing blow and produced a shower of sparks which dropped into the pan.

Collectors today recognize at least two distinct types of flint arms: the snaphaunce, English lock, dog lock, Scandinavian snaplock, miquelet lock, and true flintlock. These indicate both different evolutionary stages in the development of the lock and different regional variations of it.

First came the snaphaunce which appeared in Scandinavia and the Low Countries about the middle 1500's. It had a separate battery and pan cover, and got its name from the Dutch word describing the action of the cock, *snaphaan* or snapping cock. English writers quickly adopted this term also and used it for the next 150 years to indicate any kind of a firearm with a snapping cock, thus causing considerable confusion among arms historians in later years.

The snaphaunce was followed quickly by the miquelet which appeared in southern Europe, particularly Spain and Italy, toward the end of the century. An exceptionally strong and simple lock, it remained virtually unchanged from the time of its invention until the beginning of the 19th century. Its main characteristics were a mainspring on the outside of the lockplate and a short

straight battery made in one piece with the pan cover.

As the miquelet developed in southern Europe, the Scandinavian snaplock emerged in the north. It had a surprising number of similarities to the miquelet, including the external mainspring, and in some instances the combined battery and pan cover also. The principal differences lay in the shapes of the parts and in minor technical details.

The English lock and so-called dog lock came a little later, shortly after 1600. Both were of English origin and were closely patterned after the Dutch snaphaunce. The big difference was combining the battery and pan cover in one piece. The internal mechanism was the same as that of the snaphaunce, and so there was no safety or half-cock position since there had been no need of one on the snaphaunce where the battery could simply be left up out of position. On the dog locks this lack was remedied by a pivoted hook or dog on the outside of the lockplate which engaged the tail of the cock and held it in a safety position. Both of these forms of lock were in use at the same time and remained popular until about 1650 when the French or true flintlock superseded them. The dog catch, however, persisted on many guns until after 1700

even though it no longer performed a necessary function.

The true flintlock was probably invented by Marin Le Bourgeois, a gun-maker for Louis XIII of France, about 1610-1615. It combined features of the snaphaunce and miquelet, and produced a reliable, safe, and simple arm. The battery and pan cover were combined in one piece so that the striking of the flint automatically opened the pan, and the internal mechanism was altered so that the sear acted vertically instead of horizontally as it had in the other locks. This permitted a stronger arrangement for holding the gun at full cock, and it also permitted a safe and secure half-cock or safety position. From France the new lock spread quickly throughout most of western Europe. It never succeeded in replacing the miquelet and only partially supplanted the Scandinavian locks. But for the next 200 years it was virtually the standard lock for all the better guns. By 1700 it was almost universal outside of Spain and Italy.

The chief advantages of the flintlock over the wheel lock lay in its simplicity of construction (and therefore its cheapness), and in the fact that it was no longer necessary to carry a separate spanner to operate it. It was self-contained. *(To be continued)* ■



**T**HE Strategic Army Corps 101st Airborne Division at Ft. Campbell, Ky., now is being equipped with the new M14 rifle, a modern, versatile shoulder weapon. The entire Division will be equipped with the weapon by the end of this year and deliveries to other units will begin shortly.

The M14 has an automatic cyclic rate of fire of 750 rounds per minute when equipped with a fire selector. The M14 is capable of either automatic or semi-automatic fire. Individual riflemen normally use semi-automatic fire.

A 20-round magazine is used with the M14, compared to the 8-round magazine of the M1 Garand rifle. This enables riflemen to remain on target 2½ times longer with the M14 than with the M1 before having to re-load. Another advantage of the M14 is a

new flash suppressor.

The M14 was designed by the Army to replace 4 weapons—the M1 rifle, the M2 carbine, the Browning Automatic Rifle, and the M3A1 submachine gun. It fires the standard NATO 7.62 mm. cartridge and weighs 10 lbs. with a fully-loaded 20-round magazine.

The U. S. Army Ordnance Springfield Armory, Springfield, Mass., designed the new rifle and engineered it for production. Contracts have been awarded to the Winchester-Western Div. of Olin-Mathieson Chemical Corp., New Haven, Conn., for 35,000 rifles and to Harrington & Richardson, Inc., Worcester, Mass., for a similar number. Springfield Armory, according to present plans, will produce 15,000 of the new M14 rifles.—From Dept. of Defense Release, Jan. 30, 1960. ■