FIRE-ARMS

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Rifle : Enfield - Snider.

The Enfield was a muzzle-loading rifle used by the British army in the 1850's and 60's, and was much used by other nations. The Enfield model 1862 measured 55" from butt to muzzle, calibre about .60, barrel 37"; fired by a hammer descending upon a cap set on a nipple.

It was used in the American Civil War by both sides, though the North used the Springfield also.

Jacob Snider, formerly a wine merchant of Philadelphia, in the late 1850's invented a simple means of converting the Enfield rifle to breech-loading. It is said that the U.S. government refused to buy his patent. In 1859 Snider went to England & sold his patent to the British govt. (Snider died in 1866, just after the Civil War) The British began converting their Enfields to breechloaders soon after 1859, and the lessons of the American Civil War and the Prusso-Austrian war proved their judgement right. By ~~1~~ 1865 considerable numbers of Enfields had been converted. These were known as the Snider-Enfield or simply the Snider rifle. Many of these were used by Canadian militia at the time of the Fenian Raids, which began in 1866.

At the close of the Civil War in 1865, the U.S. decided to convert large numbers of their muzzle-load

rifles to breech-loaders. This was done on a principle invented by one Smoak, of the Springfield armoury, these rifles being known as the Springfield model 1865.

FIRST RIFLE ADOPTED BY BRITISH ARMY

(from "A British Rifleman" - Simmons. Dalhousie Library)

"The first rifle regularly adopted was invented by Ezekiel Baker a London gunmaker in the last years of the 18th. century. Tried at Woolwich in Feb. 1800 & selected as the arm of the Rifle Corps, then being raised. On this occasion 11 shots out of 12 were placed in a 6-foot circular target at 300 yards. The Baker rifle weighed 9½ lbs, barrel had 7 grooves & was 30" long, rifling ¼ turn in the length of the barrel, bullet spherical 20 to the pound, charge of powder 84 grains, flint-lock. The ball was placed in the center of a greased leather patch & rammed home, considerable force being necessary. A supply of greased patches was carried in a small box with a spring brass lid in the side of the butt of the rifle. At first wooden mallets were issued to riflemen for ramming home but about 1803 these were discontinued. The maximum rate of steady-aimed fire was 1 shot per minute. This weapon was first used at Ferrol in 1800 & at Copenhagen 1801, where the Riflemen were distributed as sharpshooters among the British ships of the line."

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REMARKS ON MUZZLE-LOAD MUSKETS & THEIR AMMUNITION

(Letter from Capt. J. G. W. Dillin, Media Pa., author of "The Kentucky Rifle", etc, to J. R. Gordon, Sep 8, 1941.)

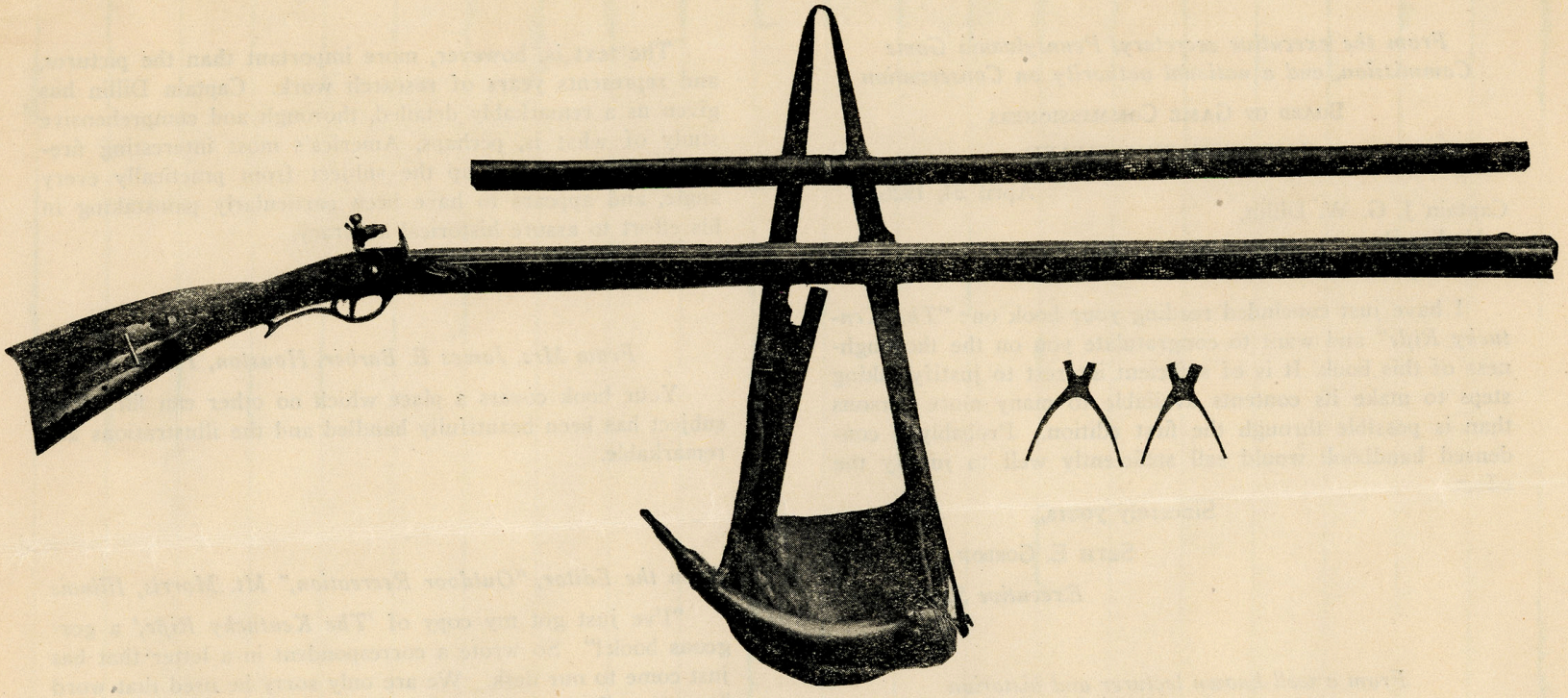
"The military muskets" (of the American Revolution & after) "were of various calibres, mostly about 12 gauge. These were loaded with about 2½ drachms medium black powder, a ball, sometimes naked, sometimes in a crude paper cartridge. I never heard of buckshot being added at that early date; but during our Civil War 1861-65 our regulation cartridges for the smooth-bore were invariably 3 medium buckshot on top of the ball in a tough paper container. I have several. (Note:- re earlier use of buckshot - see p. 15)

The powder horn of early days held about 3/4 lb. Some early muskets were rifled & were about 70 calibre, and shot fairly accurately up to 300 yards.

The old Queen Anne, English musket, was large in bore, an inch perhaps."

1 drachm = 1/16 ounce avoirdupois

(From Journal of Jeffery Amherst Aug 4, 1760) — "The cartridges ... so large that some almost knocked the men down. I found the best cartridges for carbines were of 60 to the pound, & for muskets 44 to the pound."



THE OLD PENNSYLVANIA FLINT LOCK
LATER CALLED

KENTUCKY RIFLE

Fortesque (History of the British Army) speaking of skill with the musket, in connection with the American Revolution, says "the musket could be loaded & fired five times a minute. Experts like Ferguson (the Loyalist colonel who served in Carolina) could do even better."

From "James Wolfe, Man & Soldier" – W. T. Waugh.

"..... Brown Bess was a smooth bore muzzle loading flint-lock. In the hands of a skilled man it could fire 3 shots a minute, & before the close of Wolfe's career, owing to the introduction of the iron ramrod, it could discharge 5 shots. Its extreme range was about 300 yards but it was hard to use it effectively at more than 100 yards, for its leaden bullet, over an ounce in weight, was appreciably smaller than its bore, and its flight was only approximately calculable. Rifled small arms were known, & many officers carried rifled pistols of admirable workmanship; but since the rifling was done by hand it was impossible to supply such weapons to large bodies of men."

British Army Musket

(From "Old Peninsula blockhouses & road at Halifax" – H. Peirs.)

"Known later as the Old Army Musket, was issued in 1750 & retained until 1800 when it was superseded by the Brown Bess. It was a flintlock smoothbore weighing (with its bayonet) 11¼ lbs with a long (42") barrel, 11 bore (·753 calibre) firing a heavy charge (124 grains) of powder & a patched lead ball of 490 grains (1·12 ounce)

It had no rear sight & while its official range was 200 yards, yet when fired horizontally at a height of 5 feet, the ball dropped to the ground at 120 yards. 100 yards may be taken as its effective range & in action the soldier usually reserved fire until he could "see the whites of their eyes".

SHOT

Knox. (Journal. July 12, 1757) speaking of Capt. Rogers' rangers:-
"a bullock's horn full of powder hangs under the right arm, & a leathern or sealskin bag buckled around the waist & hanging down before, contains bullets & a smaller size of shot of the size of full grown peas, 6 or 7 of which with a ball, they usually load."
Knox. Journal. (Oct. 1757) - "the enemy (i.e. French & Indians) always load with 6 or 7 smaller balls, called buckshot, besides the usual musket ball."

RAMROD : Fortescue "Hist. of the British Army Vol. 2, P. 51" - The steel ramrod introduced into the British army in 1726 was invented by Prince Leopold of Anhalt-Dessau, a veteran of the Prussian army in Marlborough's campaigns.

CANNON

From "James Wolfe, Man & Soldier" by W. T. Waugh.

— "Artillery (in Wolfe's time) was more highly developed than small-arms; at sea or in sieges it was very formidable, but field-guns were still cumbrous, & though the heaviest in common use, a 12-pounder, would carry a mile, its average rate of fire was less than 2 rounds a minute. Artillery seldom decided the issue of an action."

(From "Old Peninsula blockhouses & road at Halifax" - H. Piers"

— "The carronade was not adopted in the service till June 1779"

"4-pounder cannon had about 3·15 inch calibre
5-pounder " " " 3·40 " "
6- " " " " 3·66 " "

"An iron 6-pounder in 1736 was 6½ feet long.
"A brass 6-pdr. in 1750-1764 was 4½ feet long.
"In 1750 there was in the service a short brass 3-pdr. only 3½ feet long."

Swivel Guns

(From "Old Peninsula blockhouses & road at Halifax" - H. Piers)

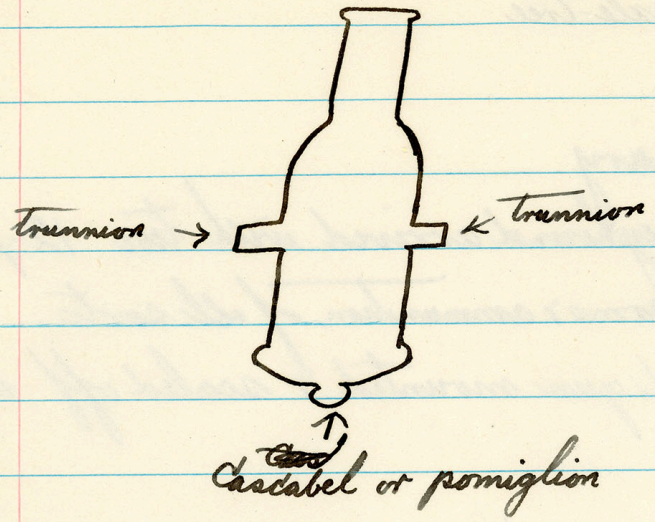
— "The blockhouse at Lahave in May 1759 had 2 swivel guns. The Lunenburg blockhouse, built 1753, still contained when it burned about 1875, an iron swivel gun in a fixed position. It was about 4 feet long with a calibre about 2" & was therefore a 1-pounder. It was of the ordinary form, with trunnions, had no cascabel-loop, & was housed in a V-shaped wrought-iron crotch. The mounting was a pedestal bolted to the floor, consisting of four stout wooden "knees" arranged in cruciform & capped by an iron plate about 15" square with a central hole into which was inserted the shaft of the crotch. The gun could be traversed from side to side as well as depressed or elevated. The objection to a fixed pedestal for a swivel-gun is that it must be placed back far enough to allow the muzzle to swing aside for loading inside the blockhouse. A movable carriage would enable the gun to be run up to the loophole for sighting & firing."

PIVOT GUNS OR WALL PIECES

(From "Old Peninsular blockhouses & road at Halifax – H. Piers).

— "wall-pieces or pivot-guns were giant muskets about 6 feet long, firing a 4-ounce ball (·94 inch calibre) and usually mounted in a rowlock-type pivot. They were used in Nova Scotia at this period (1750) and often served as a stockade gun.

CANNON



Priming iron – a wire or long needle for piercing the cartridge in a gun through the touch-hole: also used as a rammer when charging the touch-hole with powder.

Quoin – wooden wedges used to elevate the breech of a gun.

CANNON.

Haskell's Journal, "March to Quebec" — "a brass 24-lb. cannon, we fired her once & broke the axle-tree"

Perkins Diary

Aug 17/93. Schooner Greyhound arrived with two 12-pdrs for the Fort, together with arms & ammunition of all sorts.

Aug 27/93. "Got the second gun mounted & scaled off with 4 lb. powder"

Sep 10/93 Two more 12-pdrs arrive.

Aug 27/96 "I send a barrel of powder to the Fort & order 15 cartridges filled; 10 are filled with 4 lb. each, the others 5 lbs. I also have a number of wads made.

Early Rifles

(From "Travels in North America" by Patrick Campbell, 1791 & 1792. Publications of the Champlain Society.)
Page 210. (At Lake Cayuga, N.Y.)

..." a gunsmith, one Harris, who kept a tavern, & who assured me he could make a riffled barrelled gun of iron to his liking, that would hit an egg at 130 paces, could so small an object be seen at so great a distance, and showed me the apparatus by which the riffles were made in the barrel. This man kept me up very late reading Paine's Rights of Man, of which he seemed very fond."

An Early Breech Load Repeating Gun.

(From "Travels in North America", 1791 & 1792, by Patrick Campbell. Publications of the Champlain Society.)

Page 170:- "Captain Brant (Joseph Brant, the famous Mohawk chief) showed me a brace of double-barrelled pistols, a curious gun, & a silver hilted dagger, he had got in presents from gentlemen in England, when he was in that country on an embassy from his own & other Indian nations. Each of the pistols had but one lock, the hammer of which was so broad as to cover the two pans & two touch holes, so that both shots could go off at once; and when he had a mind to fire but one barrel there was a slip of iron which by a slight touch covered one of the pans, so that only the pan which was not covered would go off.

The gun, being once sufficiently charged, would fire 15 shots in the space of half a minute. The construction of this curious piece was as follows: There was a powder chamber or magazine adjoining the lock, which would hold 15 charges; another cavity for as many balls, & a third for the priming, & by giving one twist round to a sort of handle on the left side, opposite the lock, the gun would be loaded from these magazines, primed & cocked; so that 15 charges could be fired one after another in the space of half a minute; at the

same time he might fire ~~two or more~~ but one or two shots as he chose. He said that something of the work within was wrong, so that he could not get it to fire more than 8 shots without stopping. He tried it at a mark & said it shot very well."

CANISTER OR CASE-SHOT

(From "Old Peninsula blockhouses & road at Halifax" - H. Piers)

— "consisted of many small balls, 41 for guns of small calibre, enclosed in a tin case."

GRAPE SHOT.

(From "Old Peninsula blockhouses & road at Halifax" – H. Piers.)

— " 9 grape shot arranged in 3 tiers of 3 shot each were the regulation charge for a gun. (They had) a canvas container."