

## DESIGNING YOUR OWN FIREARMS FOR THE ESSENCE SYSTEM

By Colin D. Speirs ©2001

The 19<sup>th</sup> Century saw a great variety of firearms in service, with some types being used in less technological advanced areas long after modern Europe and their colonies had abandoned those types. In some cases old weapons were converted to newer types or were exported to areas where they would be gratefully bought.

The firearms given earlier are only a small selection of those available. The basic rules given below aim to allow you to place your own favoured weapons in the VIV system. The rules are not extensive, they really only deal with firearms available in the 19<sup>th</sup> Century and they fudge details slightly.

If you want a full and comprehensive firearm design system then take a look at "Guns, Guns, Guns" from BTRC (<http://www.btrc.net>)

The barrels given are **smoothbore**, hold **one round** and fire a **small** bullet with a **light** charge. To make your gun you choose the barrel you want, then add the improvements until your firearm is achieved.

BARREL	ROF	RP	BR	BD	P	DOS
MATCHLOCK PISTOL	SC/7	P	6	4	5	1500
MATCHLOCK MUSKET	SC/8	S	10	5	8	1500
FLINTLOCK PISTOL	SC/6	P	7	4	4	1700
FLINTLOCK MUSKET	SC/7	S	12	5	8	1700
EARLY PERCUSSION PISTOL	SC/6	P	9	4	2	1820
EARLY PERCUSSION LONGARM	SC/7	S	16	6	7	1820
LATER PERCUSSION PISTOL	SC/6	P	11	5	1	1850
LATER PERCUSSION LONGARM	SC/6	S	20	8	4	1850

**ROF** Rate of Fire. How many shots can be fired per round. The firer can fire a number of shots equal to their SC divided by a set number.

**BR, BD and P** mean the same as they do for muscle-powered ranged weapons.

**RP** Reload position. **P** means that you can stand up or be prone  
**S** means that you must be standing to reload or take six times as long to reload.

**DOS** is the approximately earliest time you could expect to see that weapon in European armies.

These are just the base statistics for these weapons in the simplest form. For extra cost the base weapon can be bought in an improved form

Black powder can be treated as another name for Gun powder

**LOCK** The lock is the bit that makes the gun fire

### MATCHLOCK

A black powder weapon that is fired by a burning match (cord that burns at a slow rate) being pressed against either a touch hole in the barrel, or against a priming charge in a small pan. Early versions had the firer hold the match against the touch hole but by this time it was set off by a "serpentine" level once the trigger was pressed.

### FLINTLOCK

A more advanced black powder weapon that uses the spark from a flint hitting steel to set off a small priming charge that in turn sets off the main charge, firing the bullet. Flintlock includes snaphaunce and miquelet type locks.

### EARLY PERCUSSION

A catchall for the first percussion weapons and some of the odder weapons that tried to improve on the flintlock, including Ferguson rifles, Forsyth scent-bottle locks, fulminate caps etc. This still includes some advanced flintlock types as well as caplocks.

### LATER PERCUSSION

Self contained bullets as we know them today.

### EXAMPLES OF "BUILDING A GUN"

#### No 1

Colonel Paul Evans, 3<sup>rd</sup> Welsh Dressers, is hunting elephants with the millionaire businessman Mr. S. Ottaway and Col. Evan's valet, Head. Col Evans wishes a custom made Elephant gun. His elephant gun is a long barrelled, rifled gun firing a heavy round and using a Magnum charge. He has specified a breechloading, later percussion action and that the weapon should have two barrels.

ITEM	BR	BD	ROF	P
LATE PERCUSSION LONGARM	20	8	SC/6	4
BREECHLOADING			-2	0.5
LONG BARREL	+2			1
RIFLED	+2			1
HEAVY BULLET	-3	+3		1
MAGNUM CHARGE	+4	+4		2
SMOKELESS POWDER	+2			2
EXTRA BARREL			-1	4
<b>TOTAL</b>	<b>27</b>	<b>15</b>	<b>SC/3</b>	<b>15.5</b>
MASTER CRAFTSMAN	+3			x4
<b>TOTAL</b>	<b>30</b>	<b>15</b>	<b>SC/3</b>	<b>62</b>

### TWIN BARRELLED ELEPHANT GUN

ROF SC/4, BR = 30, BD = 15, P = £52

#### IF BOTH BARRELS ARE FIRED AT ONCE THEN

-2 from SC and BD = 30

It takes 1 blow to reload each barrel

#### No2

M. Bernard Kauffmann, a German Professor exploring the Congo, wishes a particular pistol of Belgian manufacture. It is an 9 shot revolver with the chambers around an extra barrel with a single shotgun load. This is not exactly modelled by this system but it is possible to approximate.

ITEM	BR	BD	ROF	P
EARLY PERCUSSION PISTOL	9	4	SC/6	2
BREECHLOADING			-2	0.5
RIFLED	+1			1
MEDIUM CHARGE	+1	+1		0.5
SINGLE ACTION REVOLVER (9 SHOTS TOTAL)			-1	4.5
<b>SUB-TOTAL</b>	<b>11</b>	<b>5</b>	<b>SC/3</b>	<b>7.5</b>
EXTRA BARREL				2
MEDIUM "BULLET"	-1	+1		0.5
MEDIUM CHARGE	+1	+1		0.5
SHOTGUN +2 TO SC	-2	-2		1.5
<b>SUB-TOTAL</b>	<b>7</b>	<b>4</b>	<b>SC/6</b>	<b>4.5</b>
<b>TOTAL</b>				<b>12</b>

### LE MAT REVOLVER

ROF SC/3, BR = 11, BD = 5, P = £17

4 BLOWS TO FULLY RELOAD

SINBLE SHOT SHOTGUN (+2 TO SC)

ROF SC/6, BR = 7, BD = 4

IMPROVEMENTS

IMPROVEMENT	DOS	A	EFFECT	COST
Breech loading	1500	P, L	ROF - 1. Unaffected by ROF(M) ROF penalties Can be loaded prone	+0.5
Short barrel	1500	P, L	ROF(M) + 1, BR -2, + 1 to <b>HIDE</b> SC if trying to conceal the weapon	+ 0
Long Barrel	1500	P, L	ROF(M) + 1, BR +1	+ 1
Pistol Stock	1600	P	+1 to the maximum aim bonus for a pistol	+ 0.5
Rifling	1500	P, L	ROF(M) + 1, BR + 1	+ 1
Medium Bullet	1500	P, L	BD + 2, BR - 1	+ 0.5
Heavy Bullet	1500	P, L	BD + 3, BR - 3	+ 1
Smokeless powder	1885	P, L	+2 to BR, -4 if someone is trying to detect a concealed firer during daytime.	+ 2
Shotgun	1600		If firing Pellets then BD - 2, Br - 2 SC + 2	+ 1.5
Flared muzzle	1650	P,L	BR - 1, ROF(M) - 1	+ 0.5
Cheap weapon	1650	P, L	-2 to BR, -1 to BD	X
Master craftsman	1650	P, L	+3 to BR	X 4
Medium Charge	1500	P, L	BD + 1. BR + 1	+ 0.5
Heavy Charge	1600	P, L	BD + 3, BR + 2 - 1 to SC unless a blow is taken to aim.	+ 1
Magnum Charge	1860	P,L	BD +4, BR +4 -3 to SC unless a blow is taken to aim.	+2
Paper Cartridge	1830	P,L	ROFM(-1)	+0.5
Revolvers	Pistols with a small bullet can have up to nine chambers. Others can have a maximum of six. Longarms can have up to eight chambers			
Manual Revolver	1700	P, L	ROF - 1. Next shot is at -3 to SC unless 1 blow is taken to aim. To fully reload takes 2 blows per chamber	+ 0.25 per shot
Single Action Revolver	1800	P, L	ROF - 1. To fully reload takes 1 blow per chamber	+ 0.5 per shot
Double Action Revolver	1850	P, L	ROF - 2 and -1 to SC <b>or</b> ROF -1. To fully reload takes 1 blow per chamber	+ 0.75 per shot
Lever, bolt and semi-automatic actions can only be used in later percussion weapons				
Lever Action	1855	L	ROF - 2 and -1 to SC <b>or</b> ROF -1.	+ 2
Bolt Action	1870	L	ROF - 1	+ 3
Semi-Automatic	1895	P,L	ROF - 2.	+ 5
Magazine	1855		ROF - 1 Magazines hold 5 rounds and can be bought as a single magazine, as a double sized magazine or as a triple. To fully reload takes 1 blow per 2 rounds.	+ 3 / 5 shots
Air Weapon		P, L	Air weapons are treated as normal but with only small or medium bulleted and charges available.	+ 4
Extra barrel	1500	P, L	Small bulleted weapons can have up to 14 barrels, (after seven barrels the barrels are divided into two. Each group fires from the same lock) Medium bulleted weapons have a maximum of 8 barrels and heavy bulleted weapons a maximum of six.  ROF -1, it takes 1 blow to load per 2 rounds for pistols and 1 round to load per round for longarms.  An extra barrel usually fire each barrel singly, or all at once. For each barrel over 1 fired, subtract 1 from the SC for light and medium charged weapons, 2 from heavy charged weapons and 3 from Magnum charged weapons unless a stand is used.	Add base barrel cost for each extra barrel
Stand	1700	L	Tripod or Artillery carriage. Nullifies subtractions from SC due to weight of bullet, charge or multiple barrels.	50

**A** Affects **pistols (P)** and or **longarms (L)**

**ROF(M) ±\* N** Add, subtract or multiply the number (N) to the number after the slash (/) for the rate of fire of Muzzle loading weapons.

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**DOS** The date of service is the common date where something was in use. However sometimes an invention was in use prior to that date. For every 25 years (or part thereof) before the DOS increase the cost of that component by the double price again.

E.g a six shot Single Action Revolver in 1674 would add six times the normal cost of per shot per shot times two

Normally a six shot single-action adds 3l to the price.

Doubled at first makes it 6l

And times six for six parts of 25 years before its time makes 36l to the price.