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Saxon Foot Field Ordnance 1810-15

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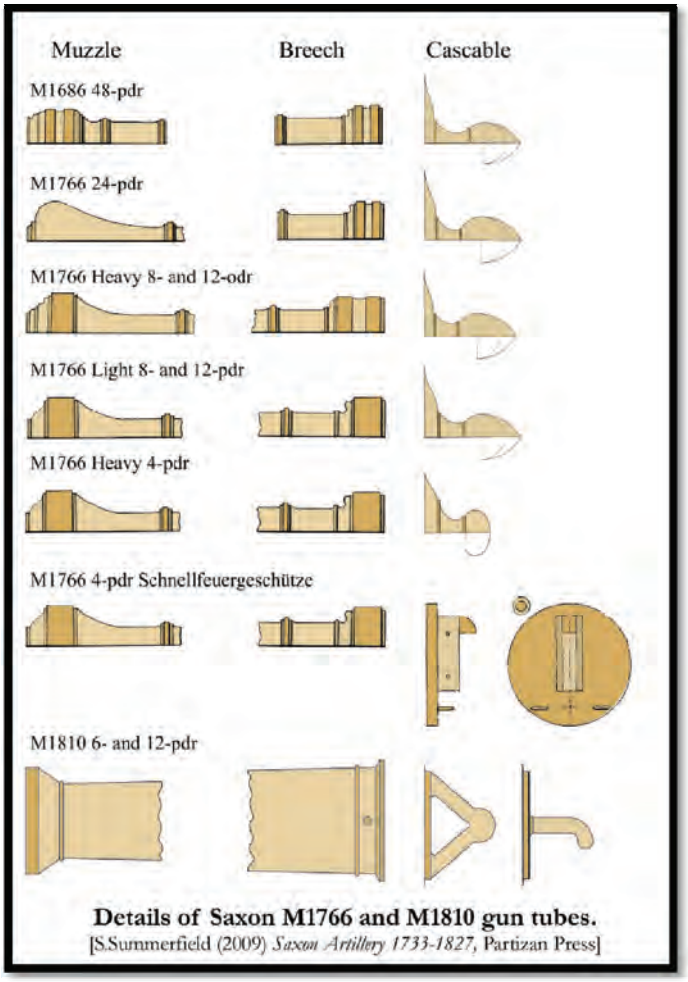
The Saxon Army of 1809 was still using the tactics and the M1766 equipment of the 18th Century. In 1810, the Saxon Artillery Commission concluded that a simplification in the Saxon Ordnance was required. The number of different pieces was reduced from eight to three field pieces. The M1810 ordnance and rolling stock was only complete on the eve of the 1812 campaign.

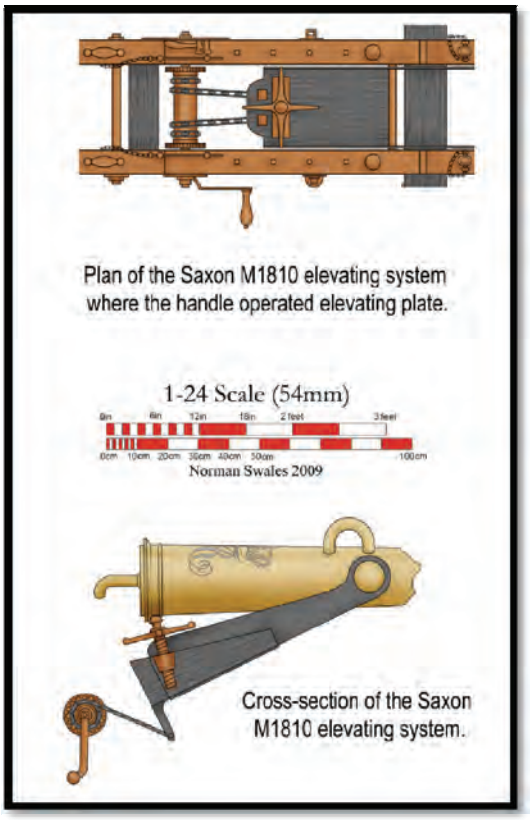


Details of Saxon M1766 and M1810 gun tubes.
[S.Summerfield (2009) *Saxon Artillery 1733-1827*, Partizan Press]

The new 18 calibre **M1810 6-pdr, 12-pdr** and **M1810 8-pdr howitzer** of 7-calibres bore a striking similarity to the French AnXI gun tubes. The M1810 gun tubes were among the lightest of their class used during the Napoleonic Wars, simpler and quicker to produce with the newly installed horizontal boring machine in Dresden.

This was achieved by:-

- Dispensed with astragals and were a slightly tapered tube following the designs of the AnXI guns introduced by the French from 1803.
- The dolphins were greatly simplified.
- A unique handle like back-weight instead of typical cascable with button,
- The windage was reduced by at least half so increasing their accuracy and retaining the range despite reducing the gunpowder charge to a third of the weight of gunpowder.
- The cipher was incised on the breach rather than the ornate ornamentation that was prevalent in the 18th century.



The **M1810 elevating system** was unusual as it combined the vertical elevating screw used by the British with the elevating cradle used by the previous M1766 system. Rough adjustment was carried out using the handle on the right hand side of the carriage and the vertical elevating screw for fine adjustment.

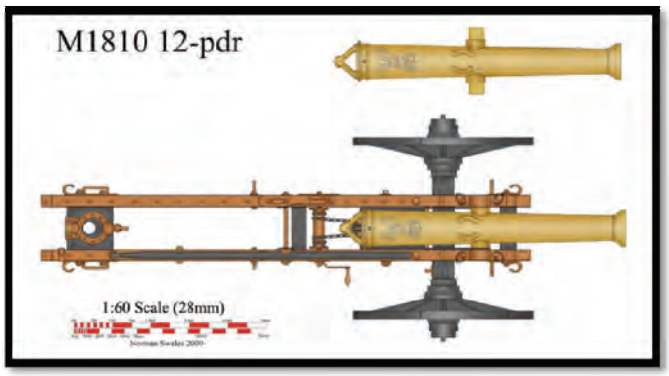
The new **M1810 carriages** were lighter than previous designs. The initial order was for 15x 12-pdr, 45 6-pdr and 30x 8-pdr howitzer carriages for the foot artillery with a further 15x 6-pdr and 5x 8-pdr howitzer carriages for the horse artillery. The M1810 6-pdr was first issued to the horse artillery and operated with the M1766 *Granadstück* until they were replaced by the M1810 8-pdr Howitzer in early 1812.

Wheel sizes were restricted to only two instead of the previous eight wheels so reduced the logistic problems of other armies.

- Large 137cm wheel with 12 spokes for the 6-, 12-pdr, 8-pdr Howitzer and the rear wheels of vehicles.
- Small 113cm wheels for the M1810 limber and the front wheel of vehicles weighing.

Colour of Ordnance

Saxon ordnance was stained with a mixture of asphalt [by-product from burning mineral oils], litharge [lead (II) oxide], boiled linseed oil and turpentine. This gave a creosote (virtually black) appearance to the woodwork. The metal fittings were yellow. The wagons had a light blue body [lead (II) oxide with a small amount of Prussian blue], light brown roof [red ochre, yellow ochre, lead oxide and lampblack] and black wheels.



M1810 Vehicles

The **M1810 Ammunition Wagon** was heavily influenced by the French AnXI system. It had 113cm front and 137cm wheels rear wheels. The latter were the same as the field guns. The **M1813 Caisson** had the same chassis as the M1810 but instead of a seat, there was an ammunition box.

Table 28: Dimensions of the M1810 Ordnance. [Summerfield (2009)]

	M1810 6-pdr	M1810 12-pdr	M1810 8-pdr howitzer
GUN			
Calibre	94mm	117.2mm	155mm
Windage	2.8mm (32:1)	2.8mm (1:40)	3.2mm (48:1)
Tube Length	163cm (18 cal)	206cm (18 cal)	106cm (7 cal)
Tube Weight	417kg	658kg	297kg
Weight Ratio	149:1	118:1	38:1
AMMUNITION			
Ball diameter	90.8mm	114.4mm	152.2mm
Shot/shell weight	2.80kg	5.61kg	8.41kg
Charge weight	0.91g	1.82g	0.70kg
Charge ratio	3:1	3:1	12:1
CARRIAGE			
Carriage weight	528kg	607kg	498kg
Cheek Length	301cm	363cm	286cm
Wheels	137cm	137cm	137cm
RANGE			
Point Blank	425 paces	575 paces	150 paces
Effective	1625 paces	1675 paces	1500 paces
Extreme	1800 paces	2400 paces	1900 paces

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