

Schneider-Ducrest 65 mm Mle 1906 mountain gun

Canon de montagne de 65 mm M^{le} 1906

The French 65 mm mountain gun model 1906, official French designation *Canon de montagne Mle 1906*, succeeded to the older designed 80 mm de Bange mountain gun model 1878, officially known as *Canon de 80 mm de montagne Mle 1878*.



Fig.1 : Canon de 80 mm de montagne Mle 1878

Like its counterparts, this type of guns was more often used as a light gun as well in North-Africa as in the other French colonies. The naval museum in Haifa (Israel) exhibit is showing an excellent state of conservation albeit missing the rear section of the trail.

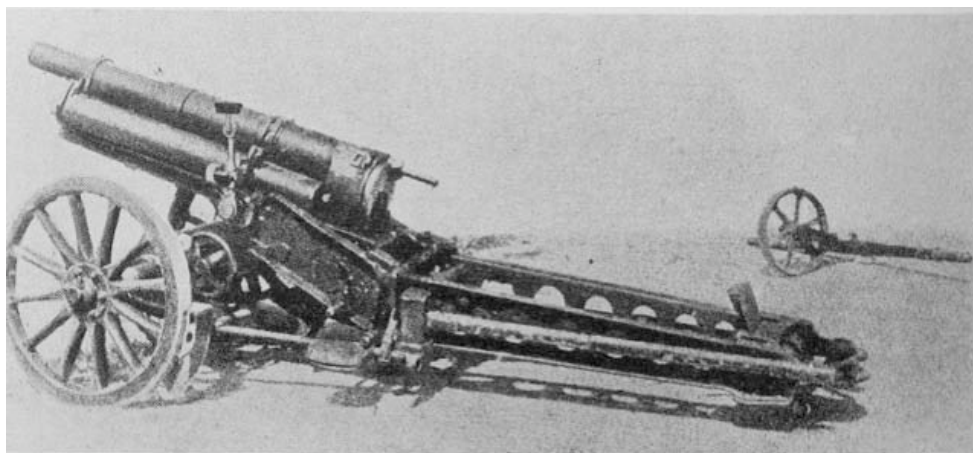


Fig. 2 : Canon de montagne de 65 mm M^{le} 1906 [KOSAR (Franz) - Leichte Feldgeschütze.]

Only 120 guns were made before world war I and in spite of it's very unusual recoil system, was put back in production and remained in service well into the 1920's. Some guns were given to the polish army and even used by the Germans in WW II [Gebirgskanone 221(f)].

The oddness and, also, the uniqueness of the design (see below) was due to the original specifications : the carriage had to absorb as much of the recoil as possible but should be kept as light in weight as possible and capable of being dismantled and mule-packed.

The missing trail was build with hinged sides resembling an A-piece, the crosspiece being a spring, so that when the gun fired, the trail could expand and absorb some of the recoil forces. The trail was spilt in three sections, hinged to each other and to the axletree in front. The two front sections were hinged together by the gun cradle trunnions. If necessary, as seen in your exhibition gun, the rear section of the trail could be removed and the gun could still be fired.

This gun was manufactured by the well known French Schneider Company and it's designer, Colonel Ducrest, was the key to this complicated system.

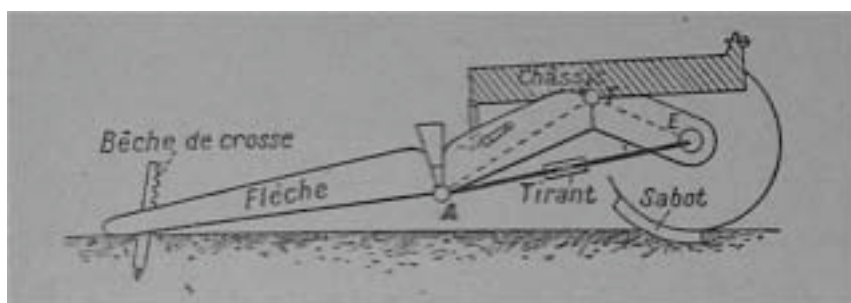


Fig. 3 : The 65 mm Mle 1906 Schneider-Ducrest mountain gun

The second characteristic and really unique design is the use of an *differential recoil system* in which the recoil had first to stop the moving barrel and then reverse it, another move to soak up as much of the recoil forces before they got to the trunnions. There is a rather curious and unique hydro spring –recoil system attaching the gun to the cradle : the gun is wound back manually to it's fully recoiled position and there held by a catch connected to the firing lever. After loading and laying , pulling the firing lever releases the gun and the recuperator immediately pulls it forward into the battery position. A fraction of a second before it reaches the forward point, the gun is fired. The differential velocities (the recuperator's forward one and the shell's one) results in having a smaller recoil and resistance in which case the recoil generated by the firing has first to stop the forward moving weight and then drive it back in the opposite direction.

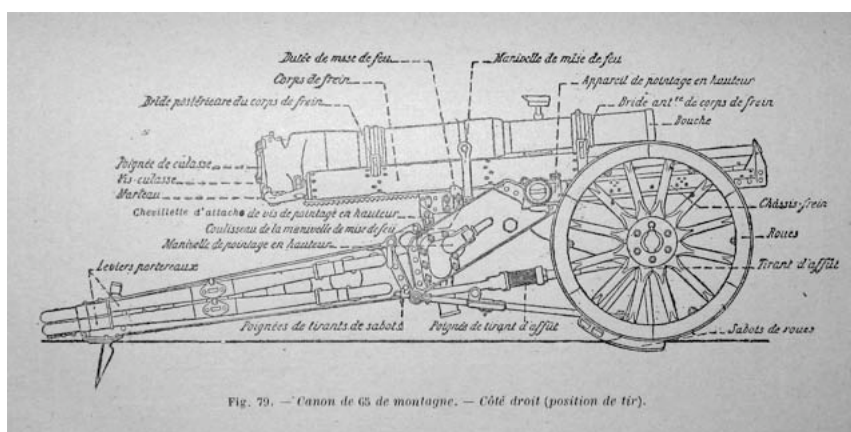


Fig. 79. — Canon de 65 de montagne. — Côté droit (position de tir).

Fig. 4 : The gun in firing position.

As a result the actual, residual, recoil force was quite low and the all-up weight of the gun was only 400 kg. But as a field gun it was over-complicated. If the ballistic performances weren't tremendous (it fired a 4,1 kg shell to a maximum range of 5500 meters), it was a small gun which could be man carried in four loads.

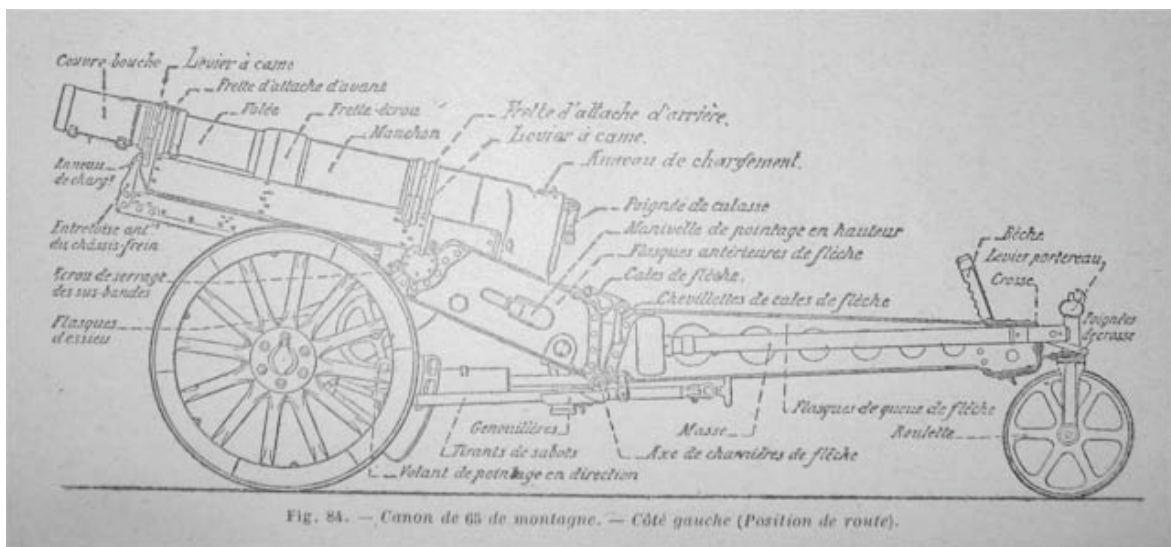
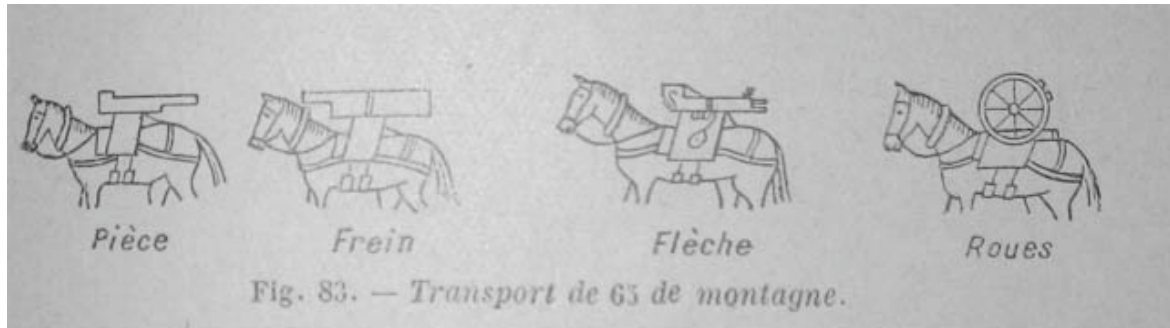


Fig 5 & 6 : The 65 mm mule packed (above) and in transportation position (bellow).

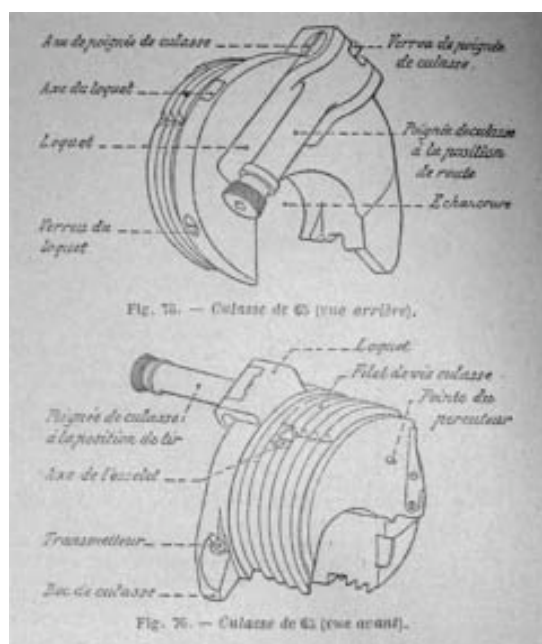


Fig. 7 : Breech system.

Short bibliography

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- 9 **KOSAR (Franz)** - *Gebirgsartillerie. Geschichte, Waffen, Organisation.* Stuttgart, Motorbuch Verlag, 1987; in-4, 241 pp., cartonnage de l'éditeur.
- 10 **KOSAR (Franz)** - *Leichte Feldgeschütze.* München, J.F. Lehmanns Verlag, 1971; in-8, 301 pp, pleine toile bordeaux.

The sources used were essentially Hogg's description completed by Kosar's publication on the *Gebirgsartillerie*. The drawings were taken from Alvin's artillery manual and the color pictures came from the Haifa's naval museum.