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THE NAGANT (REVOLVER) AND THE TT (PISTOL)

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An appreciation of the Nagant revolver and TT pistol since their earliest use. The Tokarev pistol was introduced into the Soviet Army in 1930 and was used extensively in the Second World War. Details and sketches of both weapons are given.

NOTICE

In photographic chronicles of the Second World War there is a photograph which was seen by the whole world: a political instructor, in a decisive attitude, is urging on soldiers who are storming German positions. A figure, rushing ahead, has his right hand raised in a beckoning gesture. In it is a pistol -- the officer's personal weapon. This photograph is a monument not only to the heroism of Soviet troops, but also the remarkable military qualities of this domestic weapon. This article is dedicated to the TT pistol and its predecessor -- the Nagant revolver.

The Mosinskiy "three-liner" model of 1891 was, as it were, the guinea pig in a long effort by gunsmiths to create the most advanced repeating rifle for the Russian soldier. After the remarkable 1891 model, the time had also arrived to replace the obsolete 4.2-linear Smith-Wesson revolver, which had been used in the Russian Army for more than 20 years. In its time, it was a remarkable weapon, bringing great fame to its reputable American enterprise. The Smith-Wesson model of 1869 earned its creator a gold medal at the international exhibition in Moscow.

The invention of smokeless powder enabled further improvement of all types of firearms. The gunsmiths now had lighter and more powerful cartridges

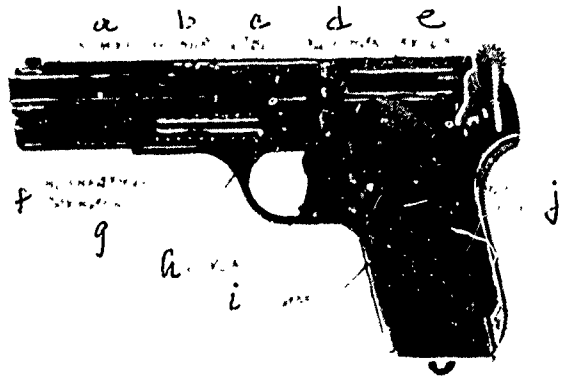
of smaller caliber. The principal set-up of the revolver splendidly recommended itself in the famous Colts, Smith-Wesson and Webley-Scotts. In essence, it had not changed since 1835, when the American Samuel Colt obtained a first patent for a revolver with a rotating breech. The name of the weapon itself contains the explanation of its action -- the term "revolver" comes from the words "to revolve." The cartridges are contained in a cylinder, the axis of which is parallel to the axis of the barrel. Before each shot, the cylinder revolves in such a way that the funneling chamber with its cartridge stops exactly opposite the face of the barrel. The rotation of the cylinder is done by applying pressure to the trigger. A similar version of the revolver was made by the Belgian armament firm of Leon Nagant. His revolver differed from other systems with one very important improvement -- before firing, the cylinder with cartridges moved to the breech of the barrel; thus, there was no blowout of gases between the cylinder and the barrel. Two types of revolver were issued to the Russian Army -- the officers and soldiers. The first had a double-action percussion-release mechanism. The hammer was cocked when pressure was applied to the trigger. The 1895 model revolver quickly became popular among Russian officers and men. With this reliable weapon, they went to battle on the imperial war fronts, revolutionary detachments stormed the Winter Palace with Nagants in their hand, and it became the favorite weapon of Red commanders. The Nagant has been used in our army for more than 50 years, but has given way to a more modern weapon -- the self-loading TT pistol. Automatic pistols appeared at the end of the last century. Designers were attracted by their principal merits: a larger rate of fire than revolvers, ease of reloading, compactness and light weight. The

reloading of a revolver is a fairly troublesome business; the spent cartridges must be taken from the breeches of the cylinder; and it is not easy to fill it with fresh ammunition -- one at a time, cartridge after cartridge. Apart from this, the operation can only be done by both hands. In short, the revolver is unsuitable in critical military conditions, where each second counts. The pistol is another matter. One only has to remove a spent magazine and put in a fresh one -- that is all that is required for reloading.

In 1925-1926, Soviet gunsmiths created a series of experimental versions of self-loading pistols. The designers had to solve a complicated problem. The new pistol, made for a 7.62-mm caliber cartridge, had to provide greater stopping power, kill a live target at short range, and incapacitate it at 50 m. A small caliber - small cartridge mass. With a small cartridge muzzle velocity, which is completely peculiar to the short-barreled weapon, it cannot concuss a live target. This means that everything possible must be done, while still maintaining the established caliber of the weapon, to attain a high cartridge muzzle velocity. It looked as if everything would be easy -- one had to lengthen the barrel. Remember the famous Mauser. Its cartridges left the barrel with a speed of 425 m/sec -- quicker than any other pistol. It is true that these wonderful military qualities were outweighed by the substantial weight of the weapon -- 1180 g, almost twice as heavy as the No. 1 Browning.

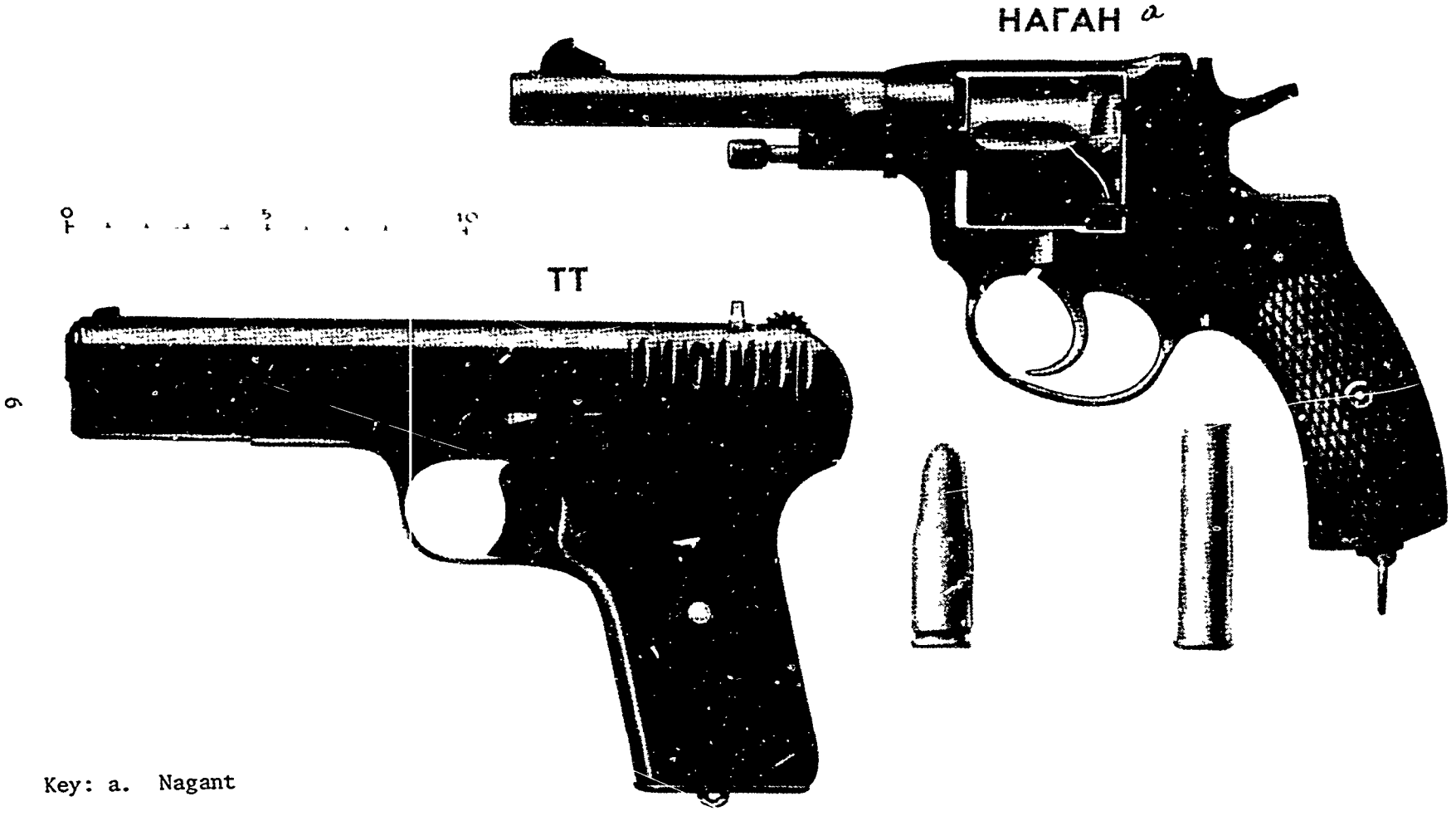
Fedor Vasil'yevich Tokarev had amazing success with this difficult engineering task. His model excelled other domestic and foreign models during testing. With a larger muzzle energy (it is characterized by the production of mass on the square of the muzzle velocity of the cartridge), the Tokarev pistol was comparatively light and compact.

The 1937 model Tokarev (TT) 7.62-mm. self-loading pistol became the basic personal weapon of commanders of the Red Army. In 1933, the TT underwent partial modernization -- to improve its technological production. The Tokarev pistol has been a weapon used in our armed forces for more than 2 decades, and has served faultlessly in grim battles during the Second World War. Thousands and thousands of front-line soldiers owe their life to Fedor Vasil'yevich Tokarev, who supplied them with a reliable and powerful weapon -- the TT.



Schematic sectional view of the TT pistol.

Key: a. Casing
b. Bolt
c. Barrel
d. Firing pin
e. Hammer
f. Return spring
g. Barrel link
h. Trigger
i. Cartridge clip
j. Sear



Key: a. Nagant

Table [for figure on p. 6]

The 7.62-mm 1895 model revolver (Nagant)

Caliber	7.62 mm
Weight without cartridges	0.795 kg
Length	230 mm
Actual rate of fire (without reloading)	7 shots, in 15-20 sec
Cylinder capacity	7 cartridges
Cartridge muzzle velocity	272 m/sec

The Tokarev (TT) 7.62-mm self-loading pistol

Caliber	7.62 mm
Weight without cartridges	0.854 kg
Length	195 mm
Actual rate of fire (without reloading)	8 shots in 10-15 sec
Magazine capacity	8 cartridges
Cartridge muzzle velocity	420 m/sec