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Published in the Russian Federation
 Voennyi Sbornik
 Has been issued since 1858.
 ISSN: 2309-6322
 E-ISSN: 2409-1707
 Vol. 9, Is. 3, pp. 135-139, 2015

DOI: 10.13187/vs.2015.9.135
www.ejournal6.com



UDC 94(47).081

Mystery of the First Russian Rifle Naval Guns

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Abstract

In 1859 France completed the first ocean-going ironclad warship, «La Gloire», and changed the definition of naval power completely. Russia, as all the other Powers, found that her most powerful naval gun, the 60-pdr, was insufficient for modern warfare, and realized the future naval armament relied on heavy rifled artillery. Both the Army and Navy began purchasing such cannon from foreign providers until a suitable domestic weapon could be produced. The relationship between the Russian military and Krupp is well known. But there was another provided, the Blakely Ordnance Company in England sold many guns to the Army and Navy, beginning with 8-inch MLR in early 1863 to a large number of 9- and 11-inch guns. Deliveries began in November 1863 and continued until mid-1866. But no sources on the armament of Russian ships and fortresses mentions these guns. What happened to them is a mystery.

Keywords: Russia, history of technology, naval history, gun, artillery.

In the process of researching an entirely different subject, I came across some information that bore directly on the history of the Russian Navy and Coastal Fortifications during the years from 1860 to 1867. The predominant view, especially in the West, is that the revolutionary change to ocean-going ironclad warships and heavy rifled artillery left Russia with nothing but smooth bore guns until the M.1867 guns began to be produced. This has always struck me as unlikely, and now there is evidence to refute that common view.

The story seems to be this; in 1862 Captain Alexander Blakely, late of the Royal Artillery and one of the preeminent artillery designers of the age, sent two heavy guns to St. Petersburg to be tested. These two guns were possibly an 8-inch 200 pdr steel muzzle loading rifle, and an 11-inch cast iron reinforced with steel hoops, capable of firing a 400 lb (181.4 kg) bolt using a 35 lb (15.88 kg) charge of black powder. [see the illustrations] It appears the Russian Navy and Army were pleased, and there is indication that a number of 8-inch, and perhaps 6-inch 70 pdr, guns were ordered for the Fleet.

Early in 1863, Blakely was in St. Petersburg, and entered into a partnership with Francis Biard ('Bard' in Russian). Francis owned and operated a foundry, originally started by his father Charles in 1762, located in Kolomenskaia on the mouth of the Neva River to the West of the city. Their efforts were rewarded in October of that year with Contracts from the Navy for 9-inch all steel guns for sea service, and 11-inch all steel guns for the Army for Kronstadt and other fortresses protecting St. Petersburg. The total number of guns seems to have been 160.

The first of the 11-inch guns for the order from Blakely's English facilities began in November 1863, and the planned rate of production was one gun per month for the following two years. Deliveries of the 9-inch guns from England began in February 1864. By October 1864 some forty of the 11-inch guns had either already been delivered or were in various stages of construction; a rate faster than the one gun per month planned the previous year.

Unfortunately, production at the Bard foundry is not known...

It appears that the Russian Army and Navy were happy with the guns there were receiving, for in March 1865 they increased the quantity to 220 guns, specifying 8-inch, 9-inch and 11-inch guns. There may have been a clause in the contract for the Army that encouraged Blakely to think in terms of larger and more powerful guns that the 11-inch, for in June 1865 he had a 12.75-inch 900-pdr gun (similar to the guns sent to Charleston, see illustrations) under construction for them.

All of this activity did not go unnoticed. For one thing, large sums of money were involved. The 160 guns ordered in 1863, with carriages, amounted to 960,000 Pounds. Even a Member of Parliament noted the "...immense orders for the Russian Government – 11-inch gund for the defence of Cronstadt [sic], and 8-inch guns for the Russian Fleet...the iron-clad fleet of Russia was now [1865] armed with Krupp's and Blakely's guns..." and speculated on the power of those guns against Britain's own ironclad warships.

The big question becomes what happened to all of those guns? From early 1863 to the time his business collapsed in 1866-67, Blakely's English facilities possibly delivered 200 guns to St. Petersburg, not including any production by Bard. Yet there seems to be no record or evidence of their use.

I examined Shirokorad's wonderful tome on Russian Artillery. There seemed to be some hints, but nothing specific. Then I saw the drawing on page 127. It purports to be the Krupp 9-inch smooth bores that were "supposedly" mounted on the monitors in 1865-66. Yet it did not resemble any Krupp configuration I was familiar with. So I examined Holley's Treatise on Ordnance and Armour from 1865. In it I found a drawing of the 9-inch Krupp smooth bore and a drawing of a 9-inch Blakely rifle. The two were not similar, but the Blakely gun and the drawing on page 127 are strikingly similar! (see illustrations) We therefore have a *modus ponens* logic problem:

If the Holley drawings are accurate, and

If the drawing Shirokorad provided on p. 127 is an accurate representation of the guns on the monitors,

Then the guns on the monitors were Blakely and not Krupp.

While this might be indicative, it is not conclusive. Nor is it conclusive that some of the projectiles for muzzle loading rifles strongly resemble the Blakely pattern, neither that of the French nor that of Armstrong.

Rifled artillery was introduced into the Russian Fleet as early as 1860 aboard the wooden *Gaidamak*, in the form of four 3.4-inch 4-pdr guns to supplement the smooth bores. The following year saw the 4.2-inch 8pdr gun carried in the wooden *Abrek*. In 1862, the wooden *Almaz* and her three sisters carried three 6-inch rifled, two 4.2-inch rifled and two 3.4-inch rifled.

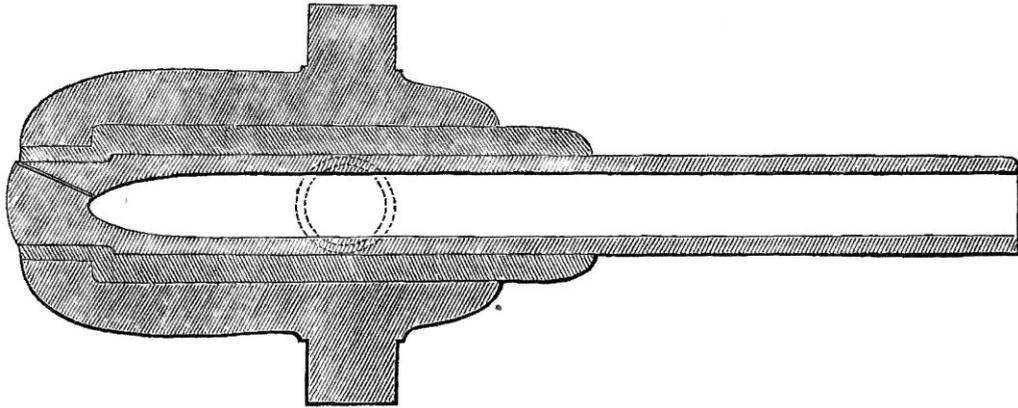


Figure 1. Blakely 9-inch gun from Holley [1, p. 40]

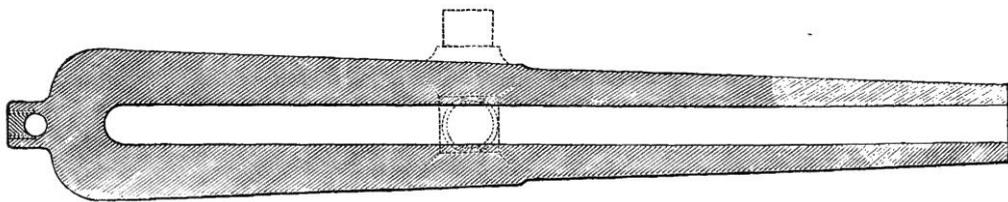


Figure 2. Krupp 9-inch smooth bore from Holley [1, p. 93]

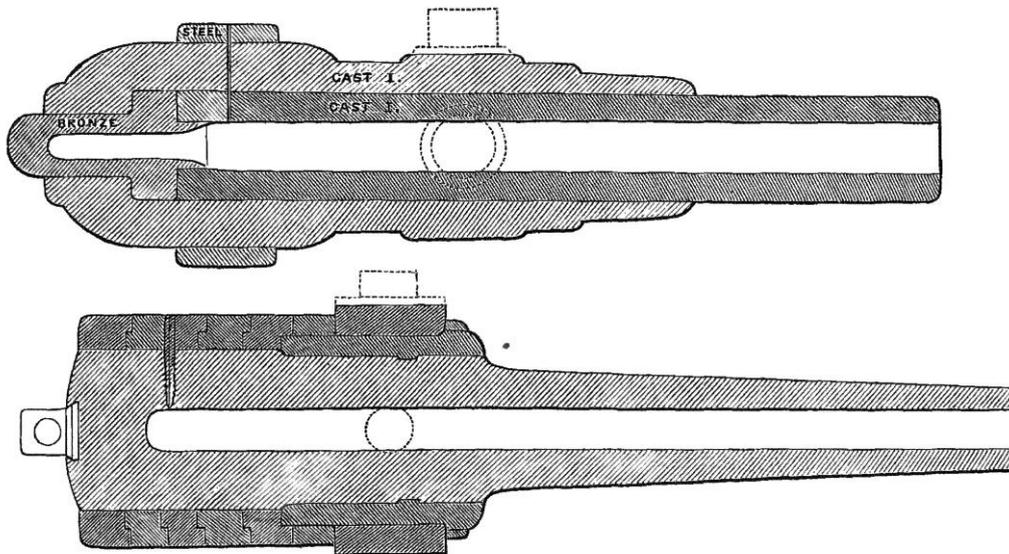


Figure 3. 11-inch Blakely gun probably sent in 1862, cast iron with steel hoops. And the 12.75-inch gun from Charleston. Blakely may have sent an improved version to St Petersburg. From Holley [1, p. 44]

The 4pdr and 8pdr guns were developed in Russia who began experimenting in 1858 to copy the “French” system. But at that time, the French were using two or three grooves, whereas the Russians settled on six grooves. So what was called the “French” system may very well have originated in Britain, possibly with Armstrong or Blakely.

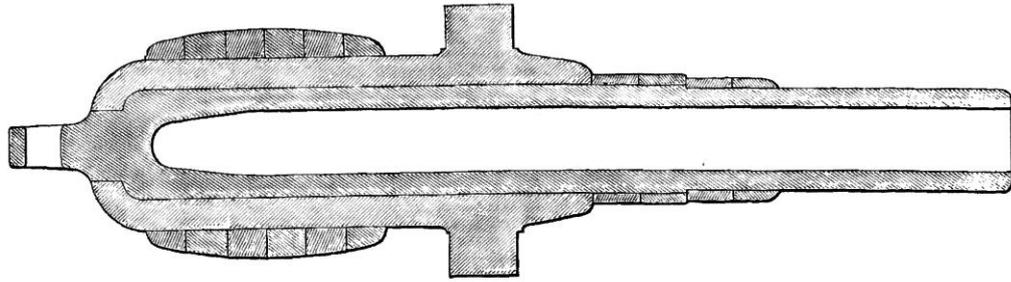


Figure 4. 8-inch all steel gun of the type sent to St Petersburg, from Holley [1, p. 41]

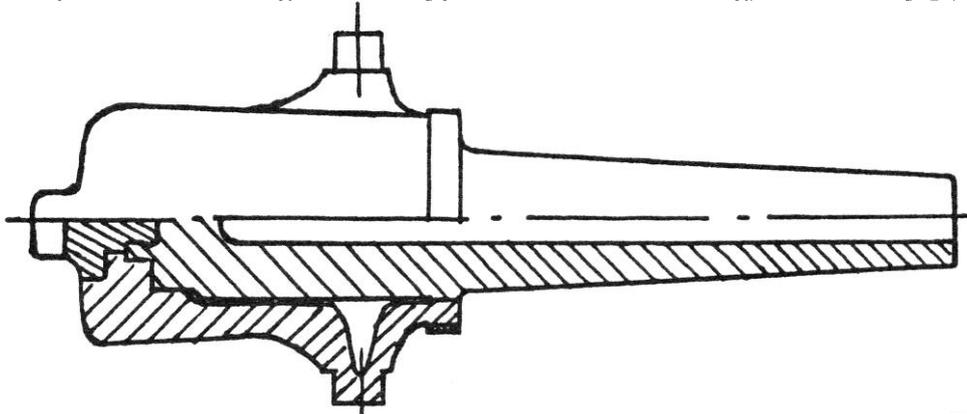


Figure 5. From page 127 of Shirokorod's tome [3, c. 127]

The origins of the 6-in rifled are something of a mystery. We do not know if the guns were muzzle- or breech- loaders. If they were breech loaders, than Krupp is the most likely provider. If they were muzzle-loaders then the possible sources are very limited. At that time, 6-in was an unlikely caliber. The only two potential suppliers were Dahlgren and Blakely. The former can probably be ruled out, as the 80-pdr had the disconcerting tendency to burst, so most likely Blakely's 70-pdr provided these guns.

In summary, if the Russian Navy saw fit to put some rifled guns – admittedly shell guns – on several small wooden ships, does it stand to reason that the ironclads and steam warships, still the body of the Fleet, must make do with smooth bores, especially considering the tremendous sum of money the Government paid to Blakely and Krupp? I think not. I believe the story of the 1860 to 1867 period has yet to be told. The trick, of course, is to find the evidence.

References:

1. Holley A.L. A Treatise on Ordnance and Armor. New York: D. Van Nostrand, 1865.
2. Roberts S. Captain Alexander Blakely RA. www.captainblakely.org. 2011.
3. Shirokorad A. Encyclopedia of Motherland Artillery. Minsk: Harvest, 2000.
4. Tredrea J., Sozaev E. Russian Warships in the Age of Sail 1696-1860. Barnsley: Seaforth Publishing, 2010.
5. Watts A.J. The Imperial Russian Navy. London: Arms and Armour Press, 1990.

УДК 94(47).081

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Аннотация. С постройкой во Франции в 1859 г. первого океанского броненосца «Ла Глуар», ситуация с ранжированием военно-морской силы кардинально поменялась. В России, как и в других державах, неожиданно обнаружили, что самые мощные 60-фнт орудия стали недостаточными для современной войны, и стало понятно, что будущее военно-морских вооружений за тяжелой нарезной артиллерией. И армия, и флот начали искать зарубежных поставщиков, пока это оружие налаживалось в производстве на отечественных заводах. В настоящее время хорошо известны связи между русскими военными и Крупном. Но был и другой поставщик – компания Блекли из Англии, которая продала множество пушек для армии и флота, начиная с 8" дульнозарядных нарезных в начале 1863 г. и большим числом 9" и 11". Поставки начались в ноябре 1863 г. и продолжались до середины 1866 г. Но до сих пор нет однозначного ответа – на вооружении каких кораблей и крепостей стояли эти орудия. Что произошло с ними – также остается загадкой.

Ключевые слова: Россия, история техники, военно-морская история, орудие, артиллерия.