

MUZZLE LOADING ORDNANCE MODELS



I am sure that miniature cannon, in some form or other, has intrigued every member of this audience at some time in his life. Very few boys failed to have the pleasure and thrill of shooting a "real Cannon," whether it was a commercial carbide cannon so popular several decades ago, an improvised and often dangerous weapon built up of junk pipe and nipples, or a well made miniature constructed by someone who had the facilities of a foundry or machine shop.

My interest in models must have come early in life, for I cannot guess at what age this was, it seems that I was already experimenting with the shooting variety even before I started the first grade.

Not only am I intrigued by models, but by the real thing as well, however certain size limitations preclude that I must satisfy myself with the models.

Cannon models are made for various reasons, they can be toys, exercises in skill in much the same manner that ship models are constructed, demonstration or instruction models, pattern models, inventors models, museum models, and souvenirs or memorial trophies.

Toy models are currently available in a great variety of well designed plastic mouldings. They are well done and are very realistic, however they are plastic, and the result of high production moulding

techniques, and only reflect the skill and ability of the mold maker. Other toy models are made of sheet metal or die cast metal. It is seldom that a toy model is made of the same material as it's full scale counterpart.

A toy model in this display is a British Coehorn mortar mounted on a wood block. This is correctly made of cast iron, it is quite true to type, and can readily be fired with powder and ball. This model is of the late 19th century, from a time when quite a bit of realism could be injected into miniature battles.

The German model Falcon of the middle 17th century could well be a demonstration or sales model, to be used to show some potential customer the kind of artillery he would finance. A model then as now, was quite valuable in presenting an idea to a person who was unable to understand drawings or visualize ideas. The carriage is of the type used in movable artillery (traveling carriage), the wheels are massive and shod with iron tires. The tires are held in position with iron straps, the manner in which the straps are held is quite interesting. The barrel is iron, the trunnions and dolphins are a separate assembly forge welded to the barrel. The tube is vented and this model can be fired.

The freelance model of a British short 12 pounder as mounted to the wall of a ship is a well made model, but suffers by being out of scale in certain respects. This model is made of the same materials as the full size cannon, and the details are properly constructed. The bore is oversize, the trunnions undersize. The tube of this model too can be fired, and the vent is much too large to be in scale. It is possible that the builder obtained a tube from a toy that could be fired and built the remainder of the model around it.

There is a group of models all made of mahogany, all of U.S. cannon, that are reportedly pattern models from the Boston Navy Yard. They are supposed to be the work of a modelmaker named Philbrick employed at this yard, but I am unable to substantiate any of the claims. The models are interesting however, all the parts are mahogany, and the scale, detail and workmanship is quite good. It was necessary for me to restore some of the missing pieces on several of the models. This group includes a 12 pounder light boat howitzer on wood carriage, a 13 inch seacoast mortar, a 9 inch Dahlgren on a wrought iron broadside carriage, a 10 inch rifled Parrott gun on an iron pivot carriage, and a 15 inch Columbiad on a wrought iron carriage. All of the models are made 1/10th full size except the Columbiad which scales 1/12th size. It is possible that this model is also 1/10th scale, perhaps of a piece that was never built, for there are details of the carriage that do not resemble any of the cannon pictured in use in the period of the Civil War. The models are very fragile, most of the wood and glue joints are old and brittle, so if you must handle them be very gentle, you may end up with a hand full of splinters.

The French model is a museum model of an 1858 4 kg. bronze "Napoleon" field gun and limber. This is similar to the U.S. model 1857 "Napoleon" of the Civil War except that it is a rifled gun. Both the French

model 1858 and the U.S. model 1857 were developed from an earlier French smooth bore model 1853 "Napoleon." This model, made in Paris, March 17, 1894, is so marked on the breech ring. It has the crown and wreath surrounding an "N", the crest of Napoleon the third, the cipher of the model maker - and a ribbon engraving marked "Le Petite Paul" on the barrel. The model is complete in all details, including sights, projectiles, powder bags, tools, ropes, water buckets, chains and a hand axe. The details are so complete the tiny axe has a wedge holding the handle in the head. At the time that this piece of artillery was developed the French led the world in this field, and this particular model was the best example of this development. The model is 1/8th size, and all materials except the powder are the same as used in the actual cannon.

The model British 9 pounder is an official pattern model, made by J. Allen, Chief Model Maker to the Royal Artillery Repository at Woolwich Arsenal, constructed about 1850. The workmanship on this model is of the highest quality, it is complete in all details. This is a smooth bore piece, with trunnions mounted high on the carriage for increased elevation and longer range, and with a wheel regulator to trim the piece for lateral deflection. The tires are segmented, with a gap between each segment, unlike the French model which has one piece shrunk on tires. The model is equipped with portfires (in sockets mounted on the sides of the trail), the primers were quill fuses which were inserted into the vent and ignited with a portfire. Copper friction tube primers were adopted in the British service the cipher of Lord Raglan, the last Master General of Board of Ordnance. He left his post to command forces in the Crimea. After May 25, 1855 the Royal cipher appeared on ordnance instead of that of the Master General's. This model is discussed in more complete detail in Vol. XI, No. 4, Winter, of the "Military Collector and Historian."

A British inventor's model is included in this display, this is actually a breech loading piece, which digresses somewhat from the title of this talk, but there are few inventor's models of muzzle loading ordnance in existence. The inventor was principally interested in displaying the features of his patent, hence the other details of the model are not true to type. This is a tilting and dropping breech block type model, the block is locked by a plug screw in line with the bore axis. Extracting the screw permits the breechblock to drop by gravity, conveniently exposing a chamber into which the powder and shot could be dropped. A counterbalanced lever on the left of the breech hinges the block closed, entering the screw locks the breech. A conventional vent in the standing breech block aligns with a mating hole in the moving block. This gun would be fired by the conventional fuses as used on regular muzzle loading cannon. The tube of this model is rifled, it can be fired, and would probably have a good degree of accuracy.

The German model of a 91 mm Model 1914 smoothbore mine thrower (minenwerfer), is an example of a trophy type model. It is made of silver plated brass, mounted on a marble block, and bearing an inscribed nameplate. This type of model was made to be exhibited in a military club, or on the desk of an officer. It is well made, true to scale, and is 1/10 size.

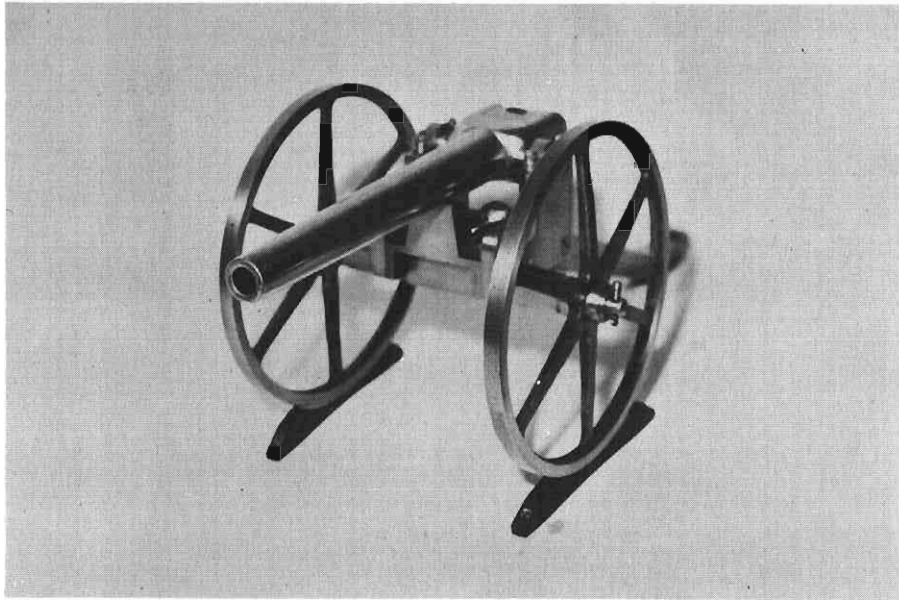
Many models of this type exist, in the form of paper weights, clocks, tobacco humidors, and the like. During the period when heavy seacoast guns were the order of the day some very amazing models were produced. I have seen tobacco humidors, surmounted by detailed models of heavy guns, complete with carriages, completely made of thin sheet metal, a tinsmiths work of art.

They have the appearance of solid machined steel or bronze but are very light, being made of extremely thin tinplate.

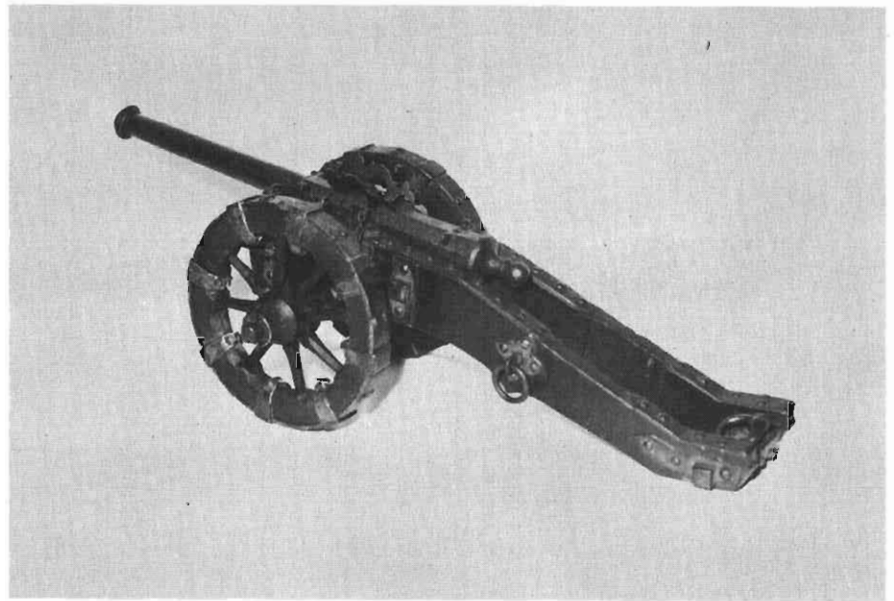
Other trophy models are made of solid gold or silver, the detail varying greatly as to accuracy. These were usually presentation pieces, given to some notable military leader in appreciation of his accomplishments.

The last model under discussion is a modern replica of a Swedish shipboard cannon. On August 10, 1628, the Swedish warship "Vasa" capsized and sunk on her maiden voyage, in the harbor of Stockholm, a few miles from the point where she was launched. For two hundred years salvagers removed most of the wealth in bronze cannon she carried, then she was forgotten and lost. The cold brackish waters of Stockholm harbor resisted the depredations of the marine worms, and the ship lay in a remarkable state of preservation. The wreck was discovered in 1956, and subsequently raised, and is now on exhibition in Stockholm, Sweden. Some of the cannon still remained on board, and the museum administration had models produced as replicas of the heavy bronze 24 pounders on the ship. These are sold, the profits of the sales go to further restoration of the ship. This model in the display is one of these, made to a scale of 1/10th size. It is well done, faithful in reproduction, and deserves a place in this collection.

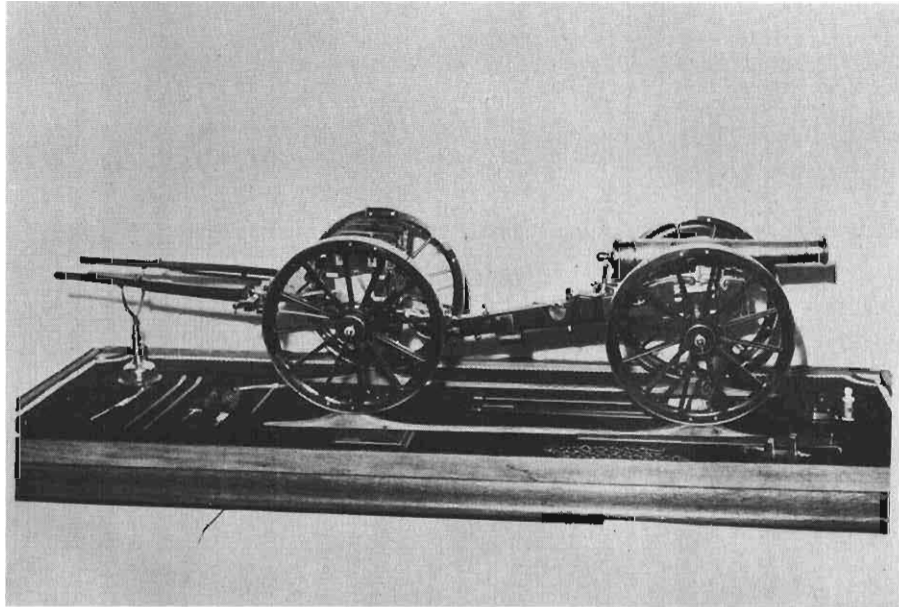
ORDNANCE MODELS



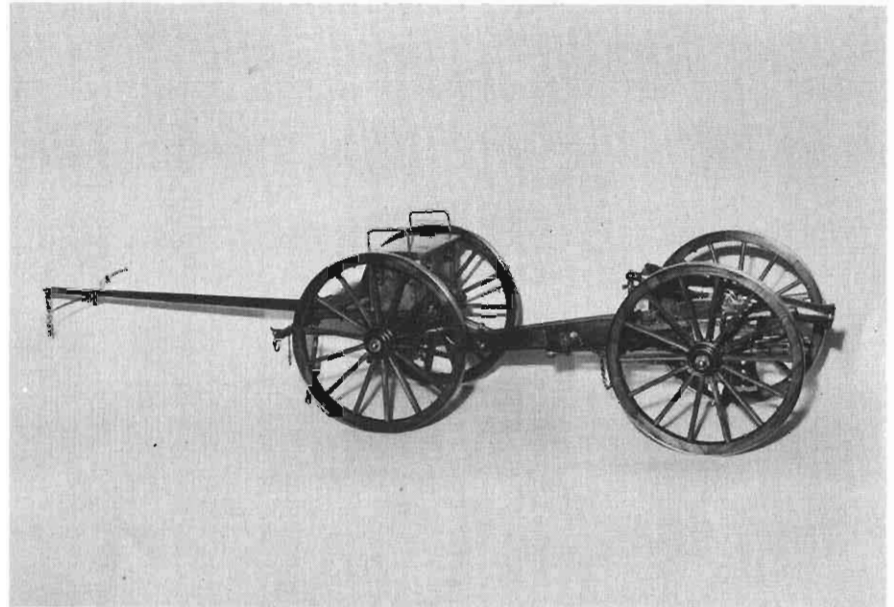
BRITISH INVENTOR'S MODEL OF A BREECH-LOADING RIFLED FIELD GUN.
APPROX. 1860 1/8th SCALE.



CONTEMPORARY MODEL OF A GERMAN FALCON ABOUT 1640. 1/8th SCALE

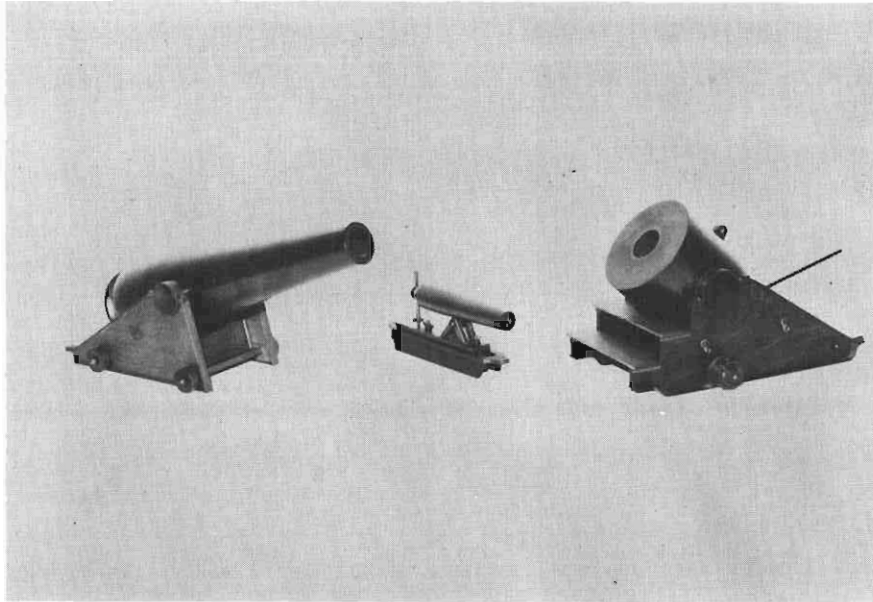


WOOLWICH ARSENAL MADE MODEL OF A BRITISH FIELDGUN AND LIMBER.
1/8th SCALE

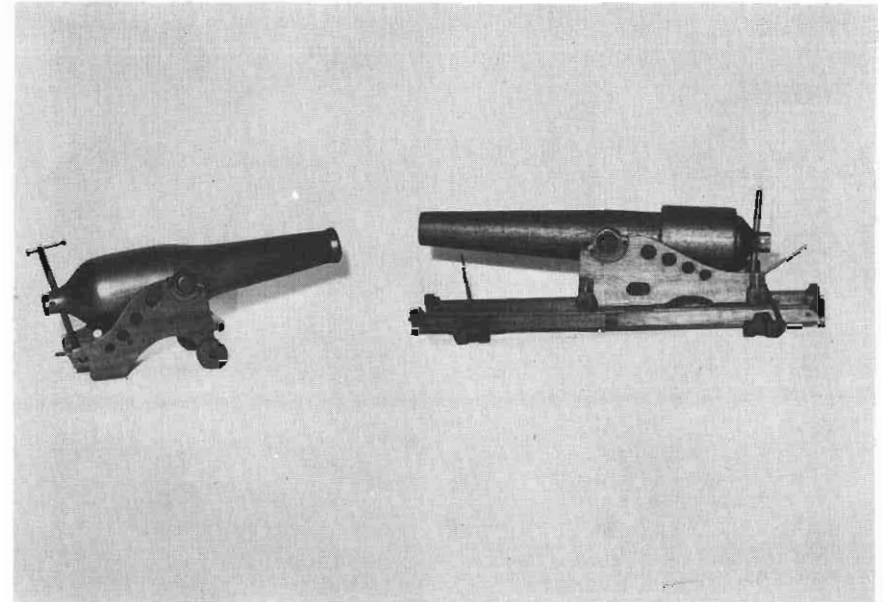


MUSEUM MODEL OF A FRENCH MODEL 1858 4 KG FIELD GUN AND LIMBER
1/8th SCALE

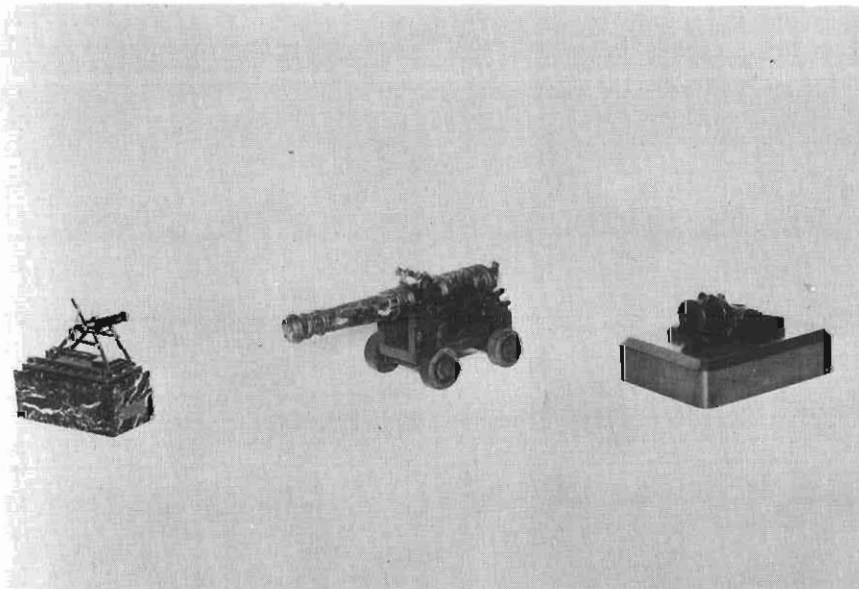
ORDNANCE MODELS



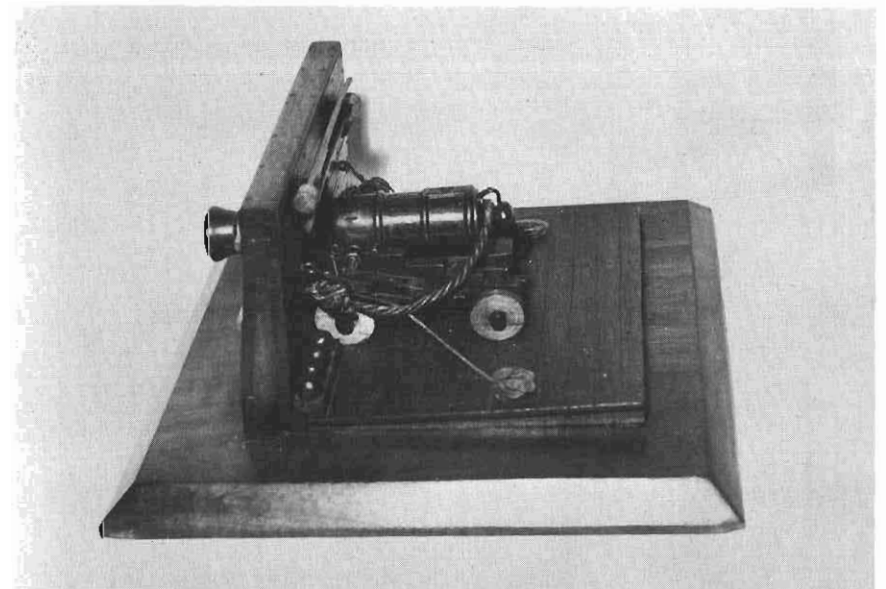
LEFT . . MAHOGANY MODEL OF A U.S. 15" COLUMBIAD ON IRON CARRIAGE. 1/12th SCALE. . . . CENTER . . MAHOGANY MODEL OF A U.S. 12 POUNDER LIGHT BOAT GUN ON WOOD CARRIAGE. 1/10th SCALE . . RIGHT . . MAHOGANY MODEL OF U.S. 13" SEACOAST MORTAR. 1/10th SCALE



LEFT . . MAHOGANY MODEL OF U.S. 9" DAHLGREN ON IRON BROADSIDE CARRIAGE. 1/10th SCALE. . RIGHT . . MAHOGANY MODEL OF U.S. 10" PARROTT GUN (RIFLED) ON IRON PIVOT CARRIAGE. 1/10th SCALE.



LEFT . . GERMAN MODEL OF A 1914 LANZ 91 MM SMOOTH BORE MINE (BOMB) THROWER. 1/10th SCALE . . CENTER . . MODEL OF A SWEDISH 24 POUNDER. THIS IS A MODERN REPLICA IN 1/10th SCALE OF A GUN RAISED FROM THE WARSHIP "VASA" WHICH WAS SUNK IN 1628. . RIGHT . . CAST IRON MODEL OF A BRITISH COEHORN MORTAR. 1/8th SCALE.



FREELANCE MODEL OF A BRITISH SHORT 12 POUNDER AS MOUNTED ON QUARTER DECK OF A WARSHIP IN 1805 APPROX. 1/12th SCALE.