

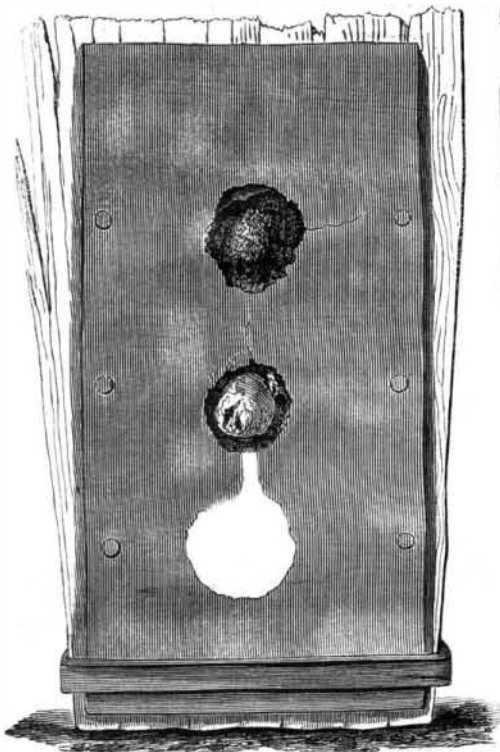
PRACTICE AT SCRAP-IRON TARGET No. 10.

WITH RUBBER ONE INCH THICK PLACED BETWEEN THE FRONT PLATE AND TIMBER.

[OFFICIAL.]

PENCOTE BATTERY, July 26, 1862.

This target was made in Washington Navy Yard, of scrap iron $4\frac{1}{2}$ inches thick, backed by 1 inch rubber, 20 inches oak, and a 1-inch wrought-iron plate, all joined together by six $1\frac{1}{4}$ -inch bolts, and clamped on the top and bottom with wrought-iron clamps, and set up firmly against a clay bank, with timber in the rear to prevent it from being forced into the bank as shown in this engraving.



DIMENSIONS OF PLATE.—8 feet 3 inches long; 4 feet 2 inches wide; $4\frac{1}{2}$ inches thick. Gun, XI. inches, Charges, cannon powder, 1862. Projectiles, Cloverdale cast-iron solid shot. Primers friction tubes.

No. from Gun.	No. to-day.	Charge.	Weight of Projectile.	Insert'n.	Recoil.	Time Fired.	Distance to Bank.	REMARKS.
		lbs.	lbs.	in.	in.	P. M.	ft.	
9	1	30	167		3	11.45	88.3	Shot hit direct, throwing the target on its face.
140	2	30 ^{1/2}	168			1.23		Shot hit direct, throwing the target on its face.

First shot to-day and first at target struck the plate 20 inches from the left side of the target and 18 inches from the right side, throwing the target forward on its face. After a delay of about one hour and a half the target was placed in its former position. The ball entered the plate and passed through the rubber and lays imbedded in the plate, and first course of timber, with its rear level with the outer surface of the plate. The plate is indented on the right edge of the hole $1\frac{1}{2}$ inches, on the left edge $\frac{3}{4}$ of an inch, top edge $1\frac{1}{2}$ inches, lower edge $1\frac{1}{2}$ inches. The plate is not bent on the right edge of the target, on left edge $\frac{1}{2}$ inch. The plate is not cracked excepting directly around the shot hole, which is cracked very slightly. The bolts are all broken in the rear of the target, but on the face of the plate they appear to be good. The two last courses of timber are broken at the center from right to left edges of the target, and have sprung back from the first course 3 inches on the right edge and $2\frac{1}{2}$ inches on the left edge. The first course of timber is somewhat shattered and thrown out on both sides of the target, right side $2\frac{1}{2}$ inches, left side 5 inches. Diameter of shot hole 12 inches.

The second shot struck the plate $17\frac{1}{2}$ inches from right and left edges, and $10\frac{1}{2}$ inches from shot hole No. 1. The shot threw the plate on its face as before, which occasioned a delay of two hours before it was placed in its proper position. The shot broke into pieces, which fell out when the target was thrown down, excepting a small portion which remained in the hole. This shot passed through the plate, rubber and first course of timber, and entered the second course, making a hole $16 \times 18\frac{1}{2}$ inches in

diameter. The extreme depth of hole is 14 inches. The plate is indented on the right edge of the hole 1 inch., on the left edge $\frac{3}{4}$ of an inch, on the top edge 1 inch, on the lower edge 1 inch. The plate is bent on the right-hand side of the target $\frac{1}{2}$ an inch, on the left-hand side $\frac{3}{8}$ of an inch. Opposite the center of the shot hole No. 2 the timber (first course) has sprung out on the right-hand side 5 inches, on the left-hand side 6 inches. The back plate is forced back from the timber 3 inches at the center. The top clamp was broken in two places. No cracks are visible about the plate excepting those already mentioned. The rubber plate was furnished by Mr. Bennett, of New York, last May, for trial as above. Dimensions as follows:—8 feet long, 4 feet wide, 1 inch thick.

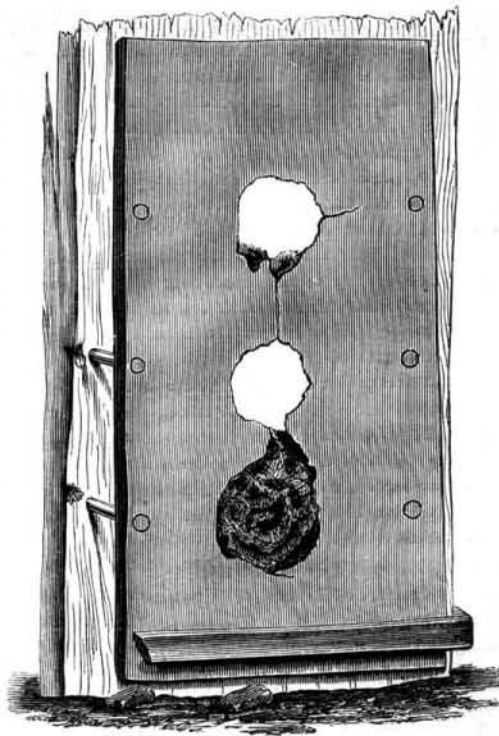
PRACTICE AT SCRAP-IRON TARGET NO. 10.

WITH RUBBER ONE INCH THICK PLACED BETWEEN THE FRONT PLATE AND TIMBER. JULY 28, 1862.

Gun XI. inches. Charges of cannon powder 1862. Projectiles, Cloverdale cast-iron solid shot. Primers, friction tubes.

No. from Gun.	No. to-day.	Charge.	Weight of Projectile.	Insert'n.	Recoil.	Time Fired.	Distance to target.	REMARKS.
		lbs.	lbs.	in.	in.			
141	1	30	169	106	3	10.31	88.3	Hit direct.

First shot to-day and third at target, struck the plate $18\frac{3}{8}$ inches from right-hand side of target and $10\frac{1}{2}$ inches from the left-hand side, and $5\frac{1}{2}$ inches from lower edge of shot hole No. 1, passing through the plate, rubber and first course of timber. The shot broke into pieces, several of which were thrown in the rear of the battery, and several were laying in front of the target. The main body of the shot remains in the hole with its rear $9\frac{1}{2}$ inches from the outer surface of the plate. The plate is indented on the top edge of the shot hole $\frac{3}{4}$ of an inch, on the lower edge $\frac{1}{2}$ an inch, on the right edge $1\frac{1}{8}$ of an inch, on the left edge $\frac{3}{8}$ of an inch. The plate is bent on the right-hand side $1\frac{1}{2}$ inches, on the left-hand side $1\frac{5}{8}$ inches. In the right-hand side of the shot hole No. 2, the plate is cracked from the edge of the hole 13 inches, on the left-hand side there is also one extending 10 inches from the edge of the



hole. Between the shot holes No. 1 and No. 2, there is a crack from edge to edge of the holes, and between shot holes Nos. 1 and 3 there is a piece broken out measuring $2\frac{7}{8}$ inches at the top and $5\frac{7}{8}$ inches at the bottom; on the right-hand edge of the plate is also a small crack. The lower clamp is broken. The first course of timber is completely broken up and thrown out at the sides, the second course is somewhat broken. The target was forced out 7 inches from its position, it being secured by a rope leading from a tree in the rear prevented it falling on its face as before.

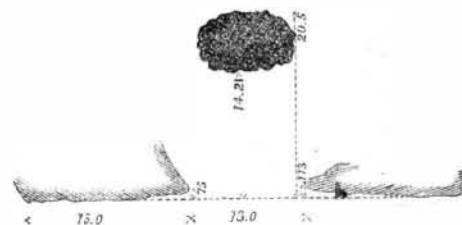
BENNETT'S "RUBBER WITH IRON" TARGET.

ORDNANCE DEPARTMENT,

Washington Navy Yard, August 1, 1862.

In relation to the rubber furnished by Mr. Bennett, of New York, I have to report as follows:—A target was made of scrap iron $4\frac{1}{2}$ inches thick, backed by 20 inches solid oak and a 1-inch wrought iron plate of rubber 1-inch thick, placed between the $4\frac{1}{2}$ -inch plate and timber, all being secured by six $1\frac{1}{4}$ -inch bolts, and clamped on the top and bottom with wrought-iron clamps, and set against a clay bank.

Gun XI. inches. Charges 30 lbs. cannon powder 1862. Projectiles, Cloverdale cast-iron shot of 168 lbs. Muzzle of gun from target 88.3 feet. On the 26th ult., two shot were fired at the target with result as follows:—



The shot passed through the $4\frac{1}{2}$ -inch plate and rubber, and penetrated the timber the same as previous shots fired at other targets made in the usual way without rubber, the only exception being that the target was thrown on its face at both fires.

On the 28th ult. another shot was fired with the same penetration. The target was thrown forward from its position 7 inches. A rope having been passed around the target and made fast to a tree in the rear, prevented it from falling, as before.

Whether the repeated falling forward of the target is to be attributed to an accidental coincidence, or is the legitimate result of the use of a material so elastic as rubber, I am unable to say.

THE MACHINISTS AND THEIR TROUBLES.

The disturbance in this trade, which lasted five weeks and over, has virtually ceased, and large numbers of the men have gone to work again. We are pleased to see that good sense has resumed its sway once more, and that the better portion of the machinists are attending to their business with all the energy they are possessed of. The advance has not been granted by the proprietors of the several shops, but they have agreed to satisfy the reasonable demands of the workmen, provided they resume work forthwith. In the Morgan Iron Works a number of men have been at work for two weeks past; the first week that labor was resumed, a number of strikers yet unemployed collected about the Works during the noon hour, with the intention of assailing those who had been at work. On learning this fact, Mr. George Quintard, proprietor of the Works, immediately sent out to the nearest restaurant and ordered dinner for all those who remained in the Works; this piece of generosity was highly appreciated by the mechanics.

It is a noticeable fact that while the proprietors have sternly refused to accede to advance the wages generally to 25 per cent, they have acted most generously toward unfortunate men with families and in many ways manifested their sympathy with their wants. It is understood that much suffering prevails among the families of many of the strikers.