

THE SMASHING POWERS OF THE ARMSTRONG 600 POUNDER.

The smashing powers of Sir William Armstrong's 600-pounder shunt gun were tested on Friday (Dec. 11), at Shoeburyness against the Warrior floating target. The target is an exact counterpart of a section of the Warrior's side, and measures 18 feet long by 10 feet in height. It is constructed of iron plates of the best homogenous metal, 4½ inches thick, bolted to a backing of teak 18 inches in depth. Behind this come two sets of ¾ inch plates, riveted to massive ribs of T iron—the whole being shored up by slanting beams of fir of immense thickness. The target was moored at 1000 yards distance from the firing points of the 600 and 300-pounder Armstrongs, and wooden targets for ascertaining the correct elevation for this range floated close by, a little clear of the iron one.

The first shot from 'Big Will' was a dummy cast iron shell, weighing 600 pounds, and was levelled with such unerring aim at the wooden target as to smash it literally to powder. The elevation of the piece in this instance was 20°5, and the charge 70 pounds. The next shot was a steel shell, with a cast-iron head weighing 610 pounds, and containing 24 pounds of powder, which is only four-fifths of its normal charge. Before firing this shot a consultation took place among the artillerymen present as to the elevation to be given, it having been discovered that the wooden target demolished by the first shot had been moored at 1,020 yards instead of 1,000, as he had been originally intended. After some discussion, the gun was fired, at 2510

elevation, the shell passing just over the top of the target a little to the right of the central line.

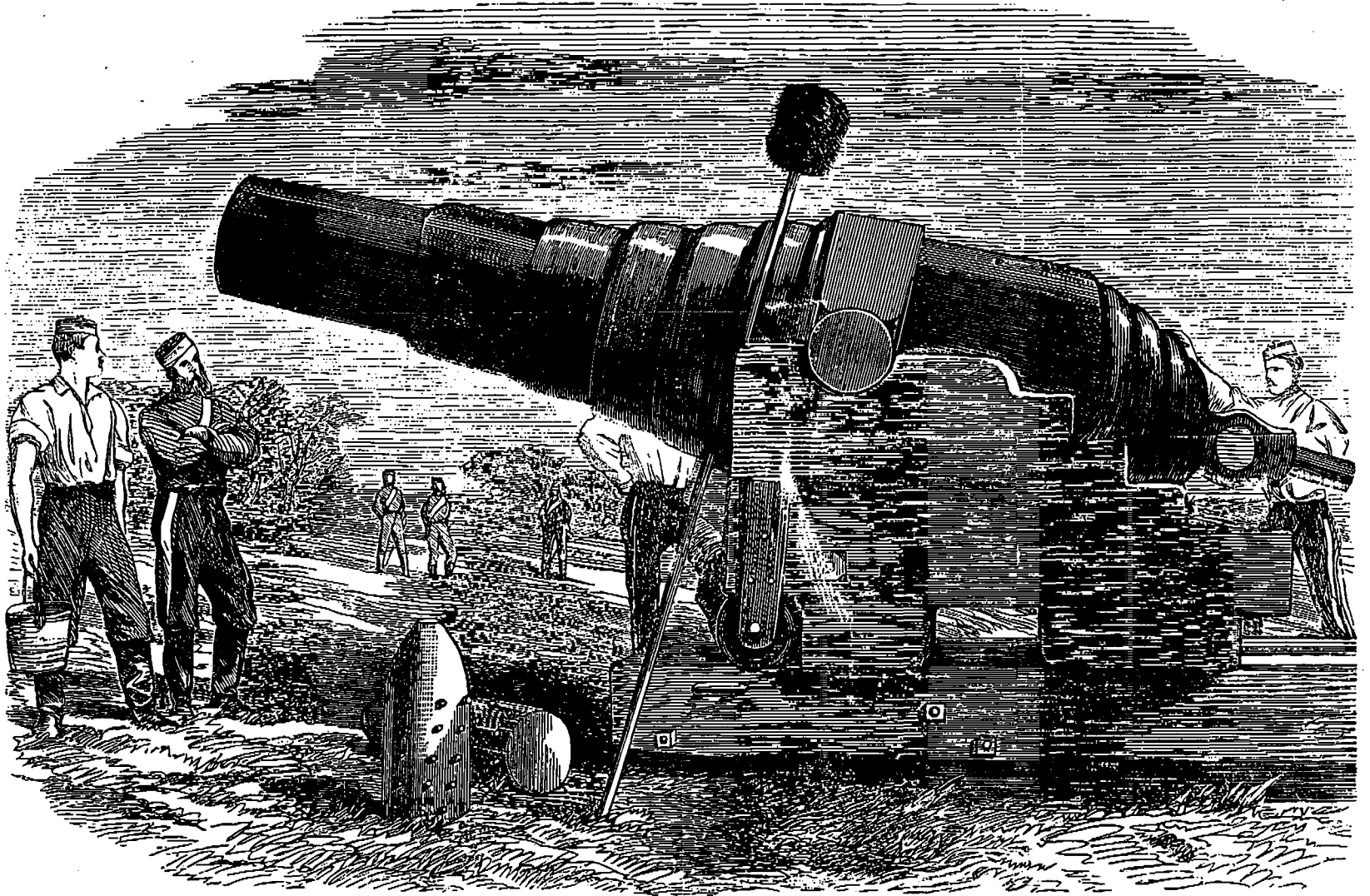
The next two shots—live steel shells similar in all respects to No. 1—demonstrated in a most surprising way the wonderful accuracy of the gun in obeying the slightest change in elevation. For shot No. 3 the piece was depressed to 2°2, the shell passing through the exact centre of the top of the target, and carrying away a piece of the wood framing of a semi-circular shape. The fourth shot was fired at only 3' less elevation, and struck the target as near the centre as possible, making daylight through it, and exploding at the very moment of impact. A hole 2ft by 20in. yawned in the 4½in plate, level with and a few inches on the left of the bull's eye.—The teak backing was splintered into fragments from the size of the cocoanut to the merest fibre, and the ¾in plates and one of the ribs were completely torn away like so much paper. In front, below the hole there lay a huge mass of iron plate, weighing three or four hundredweight, and looking like a piece of crumbled black rag. The plate above the one which was pierced was started from its place and bulged outward, nearly the whole of the bolts holding it to the target being broken away.

In fact, all present allowed that since the great battle of gun versus plate had begun to be waged, there had never been such a complete triumph for the former combatant. At first it had been intended to try the effects of the 600-pounder upon the Warrior target at 2,000 yards, but the first blow at 1,000 yards so disabled it as to render a new

target necessary. On returning to the firing point the 300-pounder was next tried—four shots being fired; but owing to several causes only one of them took effect, striking the right top corner of the plate, and smashing but not penetrating it, owing to the target having been slewed around to an angle of nearly 40 degrees with the line of fire by the fourth shell from 'Big Will.' This concluded the firing for the day.

A view of this great gun is given in this number of the "Canadian Illustrated News."

GREAT INTERNATIONAL BONSPIEL—We understand that arrangements are being made on a very extensive scale for a grand international curling match between Canada and the United States. Negotiations are at present going on between the Toronto Club and the Buffalo curlers, and it is expected that in a few days all the preliminaries will be arranged. The Buffalo curlers state that if their fellow-curlers on this side of the line will go over to their city they will flood a thirty-acre field, and get a number of adepts at the 'roaring game' from all parts of the Union to meet an equal number of our Canadian players. A number of the Buffalo curlers are expected in Toronto this week, to play the Toronto Club, when the arrangements for this grand bonspiel will, if possible, be completed.



BIG WILL: SIX HUNDRED-POUNDER ARMSTRONG GUN.

SNOW STORMS.

On Thursday the 31st of December, rain fell like a deluge in the country around lake Ontario, in Canada. About midnight the wind rose to a gale, and brought with it thin drifts of snow, and a hard frost seldom equalled in its intensity. That storm lasted over Friday and Saturday, 1st and 2nd of January.

In the Western American States the portion of the storm, which was rain in Canada, was dry snow accompanied by violent wind. The Michigan Central, and Michigan Southern Railways were covered to a depth near the city of Chicago, Illinois, that arrested the running trains. Passengers were exposed to the perils of being frozen, remote from help during many hours, in one case, twenty hours.

Snow-falls, occasionally, of brief duration occurred between the 2nd and 19th of January. On the latter day rain fell at Oswego, on the south shore of Lake Ontario, accompanied by lightning; and at Toronto and Hamilton, and westward there was thick snow drifted by a high north-east wind, the temperature mild. Had it fallen evenly it might have been twelve inches in depth in Hamilton, and as far as twenty miles westward. In London the depth was considerably less, but everywhere it was drifted. In New York

State a railway train from Buffalo, going west, having become storm-staid was run into by another and several lives lost. In Canada the railway trains were stopped. The incidents have been reported in one of the Toronto journals as follows:

RAILROADS BLOCKED UP.

The storm appears to have extended over a large tract of Western Canada, and in some districts it appears to have been even much more severe than it was at Toronto. The railroads were consequently in many places so completely blocked that it was impossible for the trains to move. On the Grand Trunk the storm extended as far west as the village of Widder twenty miles this side of Sarnia, and reached east several miles below Toronto. Along this portion of the line, embracing about two hundred miles of the road, the snow lies to an average depth of between two and three feet. In some places where unusually large drifts have occurred, there are six, eight, and even ten feet of snow, thus rendering it impossible for trains to move until the track has been cleared. The London mail, which should have arrived at this station at 11. 50, succeeded in getting as far as Guelph, where it was compelled to remain. The day express also worked its way to Guelph, where it also stopped, and must remain until such times as the track is

again clear. On the eastern portion of the road the trains are also delayed, as no trains left here yesterday afternoon or evening.

On the Great Western they appeared to have experienced almost as much difficulty from the storm as they did on the Grand Trunk. On the main line all of the trains were detained, and several of them did not reach Hamilton station, having been blocked up somewhere in the west. On the Toronto branch two of the regular trains were cancelled, and some of the others ran over the road, taking several hours to perform the trip. On the Northern road, we believe, the storm was also very severe, but we are unable to learn any particulars with regard to the trains.

Around the Union Station and all along the Esplanade the snow is drifted into immense ridges, and two engines that were being used for the purpose of keeping the track in the vicinity of the station open, were finally blocked up and completely snowed in. One of them got off the track while those in charge were attempting to move it through a heavy drift. Up to twelve o'clock last night they had not been removed, though several engines were attempting to clear the track for them.

The snow ceased falling about ten o'clock on Tuesday night though the wind was high for several hours after.