

*Oberon* is moored so that she will float in twelve fathoms water when the mine is fired against her. The mine will consist, it is stated—although we have no authority for repeating the statement—of 1000 lb. of the disc gun cotton in a service case, suspended at a depth of 48 ft., and at a horizontal distance of only 30 ft. from the *Oberon's* port side. Workmen have been on board the *Oberon* since she has been lying at her present moorings, rigging out a spar by which to suspend the mine.—*Broad Arrow*.

THE MARTINI-HENRY RIFLE.

The decision of the Judicial Committee of Privy Council in favour of the claims of Mr. Henry for a renewal of his patent will give satisfaction to all who are acquainted with the facts. It is needful however, to take note of the sharp distinction which exists in fact between the claims of this inventor and the points on which so much controversy has been raised. The Martini Henry rifle which is now being served out to the troops is a compound weapon, consisting of the Henry barrel and the Martini action. Now, in the first place, there is no doubt in any sane mind that the shooting depends mainly if not entirely on the barrel. If the charge could be lighted by a lucifer match the effect on the shooting would be precisely the same as when the cartridge is ignited by mechanical means. Some allowance must be made for the effect of the pull on the steadiness of the hand, perhaps, but outside this narrow limit, the value of a rifle as a weapon of precision depends on the barrel; and the barrel alone was the subject of contest in the recent action between the Henry Company and the other gun-makers of the United Kingdom.

It has been stated that almost every other nation in Europe has adopted a weapon unlike the Martini-Henry, from which it is inferred that the decision of the Fletcher Committee is worthy of very little respect. This statement, however, ignores the distinction between the action and the barrel. We believe we are correct in stating that the superiority of the Henry barrel is universally acknowledged. Instead of the Martini action, other nations have adopted some form of the bolt system, of which the German needle gun was the first example. There is good reason to believe that the bolt action, as improved and simplified, for example, by Major Pieri, of the French Service, who has invented the "Fusil à Détente-Supérieure," and the "Cartouche Métallo-Craoutchouc," has some, and perhaps no inconsiderable advantages over the Martini action. To begin with, there are five parts instead of twenty five separate pieces in the mechanism. But it is not for a moment pretended by the advocates of this or any other modification of the bolt system, that the weapon makes better shooting than the Martini Henry. The argument is that the Pieri system—if we may take that as the best type of the bolt action—is very much cheaper than the Martini, and that its simple mechanism can be more easily managed by unskilled hands; and from this point of view it might be granted that if our Government had to begin *au fond*, the Henry barrel, and the Pieri action (having the Henry barrel with the improved Henry action), would stand a fair chance of being considered favourably. But the first expense has been incurred. The Army is being supplied with the best shooting weapon in the world; if not with the best in such other respects as have a bearing on its price

and convenience rather than on its efficiency, and it is only reasonable that the inventor to whose ingenuity we are indebted for that aim, should be rewarded for a labour of skill in which he has spent fourteen years of his life while awaiting the success he has now achieved. In the argument urged by the opposing counsel, that the difference between the Henry barrel and its rivals was so slight as to be almost inappreciable, we read the best evidence in favour of its claims: since it proves that it was only by appropriating his principle so nearly as they dared that rival gunsmiths have attempted to compete with him in the markets of the world.

If we may venture an opinion on the general question, we may be allowed to say that the spiral spring of the Martini action is probably not perfect, and the heating of the barrel consequent on the use of metallic cartridges is also a slight drawback. But, then, this drawback is one which it shares in common with all breechloading rifles in which metallic cartridges are used. A remedy for this defect might possibly be found in M. Pieri's "cartouche métallo-craoutchouc," which is metal coated with india rubber. Here, however, the expense faces us; for, in spite of the inventor's assertions, it is hard to see how a metal cartridge coated with indiarubber, and containing the same weight of brass as one without the coating, can be made as cheap as the latter. This is a logical puzzle which it requires all the enthusiasm of the inventor to explain. In the matter of recoil, it is obvious that the shortened cartridge of the Martini-Henry must, *ceteris paribus*, be at a disadvantage as compared with the long cartridge used with the bolt action. There is no room here for a matter of opinion, as the matter resolves itself into a calculation of forces. On the whole, we do not look for a reversal of the decision arrived at by the Small Arms Committee, at least for the next seven years; but what we may reasonably anticipate is an improvement in the details of the mechanism within that period. In the meantime, if any other nation should possess itself of better weapons—cheaper ones, and very efficient ones too, they may have already—we are content to wait till our soldiers can pick them upon the field of battle.—*Broad Arrow*, 14th Nov.

RUSSIA'S DREAD OF VOLUNTEERS.

Perhaps our readers are hardly aware of the recent attempt of Russia and Germany to institute a code for regulating warfare which would render Volunteering and all patriotic effort against a foreign foe impossible. The late Conference held at Brussels had laid before it the grand scheme to which we allude, prepared by Russia and acquiesced in by Germany. A higher tribute to our Volunteer organization, perhaps, was never more unwittingly paid, nor a higher evidence of the untold value of that organization in having prevented machinations against our shores. The reader, perhaps, will hardly believe us, and it is astonishing that that wonderfully pulled up newspaper press, which everybody boasts and talks so much about should have had the facts before their eyes and under their noses for months, and yet never even discovered their significance, or cared ought of their plain teachings, because they think it a far higher game to bewilder their intellects with great striving after sage oracular prophecies over inter-European politics, and mighty struggles with sensational discoveries, to stir up the wonder-loving populace into buying their

infallible teachings at the low charge of a penny. Of course the country can never be invaded—such is the cry. Ask them the reason why, and they regard the questioner as a fool, and tell him, "The navy is our defence, and what have we to do with Volunteering?" Money—worship has added the brains of our people, and it almost seems as if it threatened to lick up the last embers of enthusiasm which descended to us through many generations of heroic fathers, who in their days made invasion and defeat impossible, because they waited not for invasion, nor trusted their protection of their vile bodies to ships and sailors merely, but went forth and stayed the would-be invader on his own soil. We shall not doory our navy—though our commercial humanitarians have pulled its teeth by giving up the right of search and capture of an enemy's goods in what they call neutral bottoms—and Russia and Germany may care less for its inert omnipotence than for the omnipresent energy of an armed and trained people of auxiliary—not regular—soldiers. It is never the design of the invader and the tyrant to bind or break down opposition to the carrying out of their will by force of arms. True economy holds standing armies—regular soldiers—as very unnecessary evils, if there were not more damnable wickedness in their wake. Despots not only trust their own regular soldiers, on whom, as the price of blood, they lavish the splendours of a court, and offer niches in the history of their achievements, but they try to institute among their allies and neighbours similar ideas. It may be said that in modern times there is no such thing as setting up the soldiery against the people—the man of war against the man of peace—the military hireling against the producers and maintainers of wealth. It is said that these are things of the past—and now the people have their rights, and are recognised in their liberties—that Magna Charta and Reform Bills, revolutions and plebiscites, free trade and a free press, social congresses and peace congresses, and a host of inactive but muddled creatures, short sighted and bespectacled, puffy, and lazy, and fat, have rendered such things now barely possible—in fact, all but impossible. We fear it is just the action of these men of folly who fear the sight of a sword and deprecate the pulling of a rifle trigger, that push the very hideous thing into being which their wretched inhumanitarianism dreads. Our peace dreamers may prove too truly the harbingers of war. No peace that rests on weakness is secure; and all lasting peace that rests on resistance as the harmony of nature is upheld by the resistance of gravity, or that the foundations of a building rest on the resistance of the solid earth. Society is held together by power, and built up by energy. All energy is strength, and must rest on material out-puttings. The peace of nations is secured by exactly the same means as stability elsewhere—strength; the strength, energy, and resolution of their people to be free and proud. The Czar of Russia knows this well, and many potentates; whose hereditary policy is to increase the boundaries of their empire—to himself yont, like a well known Scotch laird, who stayed not from small beginnings till his land reached from sea to sea, and till the proverb recognised the greed of the Campbells, and the prayer for the Lord's deliverance therefrom—know it too. The recent International Congress (as it was called) at Brussels was simply a conclave convened by crowned buglers and would-be invaders for furthering the ends of their fraternity. Its aim was to induce the