

There is another feature of the magazine which also requires notice here. In accordance, no doubt, with the marked partiality of our War Office authorities for a magazine rifle, which may on occasion be worked as a single loader, Sir Charles Ross has provided his rifle with a "cut-off." His conception of a cut-off is, however, in marked contrast to the freak of fancy that fitted our Service rifle with the awful atrocity which does duty in that respect—except when it is bent out of shape or broken off. The cut-off of the Ross rifle is worked by an unobtrusive slide on the right side of the breech-shoe, which simply drops the interior of the magazine so that the cartridge which happens to be at the top is kept clear of the bolt in its travel backwards and forwards. For single loading, then, with the cut-off in use, nothing remains but to place single cartridges one by one on top of those held in reserve, and to fire them separately.

In the interval that has ensued between our first inspection of the Ross rifle some months ago, and the trial at which we were present at the beginning of December, Sir Charles Ross has not been idle. Sufficient has surely been written here to show that he has produced a military weapon which is absolutely practical in every respect, and on the face of it capable of being handled rapidly and easily, even by comparatively unpracticed users. But he has further devised for use in conjunction with this splendid weapon a system of carrying ammunition, that greatly enhances its efficiency. Unfortunately, we are precluded at present from giving a detailed description of this system, which is not yet fully protected; but without breach of confidence this much may be stated, that the cartridges are put up in separate cases into batches of five, each package thus constituting a magazine charge. These cases, which are made in tin or in cardboard, to suit climatic and other requirements, are so made that a single motion strips off the cover, and the contents can be poured direct into the magazine. The cases, opened or closed, can be carried in a bandolier, and this system at once removes one of the crying evils brought to light in the still-enduring South African War, since it is practically impossible to lose ammunition when made up in this fashion.

Having so far dealt with the rifle entirely as regards its constructive details, it remains to speak of it in operation. As is now well known, the Canadian Government has lately adopted the Ross rifle for the armament of the Dominion troops. This was not done, however, without submitting the weapon to tests which were probably more severe than any to which a rifle has hitherto been subjected. We are not at liberty, even did space permit of it, to give in detail the nature of those tests, but some idea of their severity and completeness may be gathered from the fact that they were modelled on the tests of the U.S. Ordnance Board, with every additional rigour of detail that ingenuity could devise. It is enough to say that the Ross rifle emerged satisfactorily from each and every of the series of trials, with the result that the authorities concerned signified their approval in the manner already indicated. More extended mention may be made of an endurance test, made with the rifle that we afterward saw and handled. This consisted of the firing of 500 rounds in 10 series of 50 rounds each. The total time occupied in actually firing the whole series amounted to 19 minutes $\frac{1}{4}$ seconds, the best time for an individual 50 rounds being 1 minute 32 seconds, which, curiously enough, happened to be the last of the series, and the worst—which was the first—2 minutes 39 seconds. Immediately on completing this test, when the barrel must have been nearly red-hot and the wood-work was actually charred and smouldering, the rifle was tested and found to be in perfect working order.

The trials made in our presence were scarcely of so exacting a nature as those conducted in the Dominion across the seas, but they were nevertheless sufficiently thorough to demonstrate the remarkable qualities of the rifle. A certain number of shots were fired at 100 yards for diagram, under circumstances not particularly favorable to that test, but all the same the grouping showed good results. It may, in fact, be said at once that the whole of the trial, so far as the Ross rifle was concerned, took place under a disadvantage, inasmuch as Sir Charles Ross, who handled the weapon as demonstrator, had only landed from an Atlantic steamer on the previous day,