

iii. The relative efficiency of the fire of batteries may thus be judged by the number of targets on which each of them shall have fired.

23. The mode of proceeding will be as follows:—

- i. A battery, having been ordered to fire on a certain target, will open fire with common shell (using any necessary number of rounds), until the officer commanding considers that he knows the exact range. It will then open fire with shrapnel, and continue until the commanding officer considers that he has got three effective shell. When this is the case he will cease firing.

It should be decided before the practice commences whether he is to fire the shrapnel with time or percussion fuzes.

- ii. An umpire with the range party (either the major of another battery, a staff officer, or a lieutenant-colonel) will then inform him as to the effect of his fire.

- iii. If the range was incorrectly found with common shell the series will re-commence.

If the number of effective shrapnel shall be less than three, the practice will continue at the same target, until the officer commanding the battery considers that he has made up that number, and is found to have done so.

- iv. No battery, under any circumstances, will be permitted to change to another target until the desired effect has been obtained, however great may be the number of rounds which may be required to attain that result.

24. The course of service practice will therefore be as follows:—

- i. Advance of the range-takers and ground-scouts.
- ii. Advance of the battery into action.
- iii. Ranging the battery.
- iv. Verifying the range.
- v. Change to shrapnel, distribution of fire, and verification of fuzes.
- vi. Continuance of fire until three effective shrapnel have been obtained.
- vii. Change of target or of position, after the receipt of the sanction of the umpire.

Every gun limber should be inspected before changing target or position (if not throughout the entire practice, at any rate until the commanding officer is satisfied that there is no occasion for such inspection), to ascertain that its complement of ammunition has been completed from the first line of waggons.

25. Lieutenant-Colonels will duly record, and forward to the camp commandant, their opinion of the character of the practice, noticing especially any faults which they would wish to see corrected, and will return the practice reports to the officers commanding batteries, for their information and guidance, in sufficient time to allow them to correct such errors on the next day of practice. These criticisms will be in writing and accompany the reports when forwarded to the Deputy Adjutant General, Royal Artillery.

The battery should be able to range itself accurately and quickly before the rounds allowed for the service practice are exhausted. If it cannot, ranging is to be persevered with, and practice of effect is not to be undertaken.

B. With regard to this latter, towards the end of service practice, some groups are to be fired to test the power of the battery in maintaining practice, the rapidity of its fire, and the effect it can produce. For this purpose it should be ordered either (a) at the end of a ranging group when the fire is perfect to carry it on for a certain number of rounds; or (b) to attack a given target, without approaching within a certain range, ceasing fire within a given time. The results to be carefully noted and recorded.

The question of effect produced should never be lost sight of; it is the only real test of excellence. Officers commanding should never rest content unless the results obtained are in advance of those of former years, and should make every possible endeavour both to perfect our service systems and introduce improved ones.

The Chinese are far from being reassured respecting the situation in Corea, and they attach the utmost importance to vigilance and preparation in that country. The first powerful squadron the Chinese possess is that which has been formed under the superintendence of Li Hung Chang, and which has its headquarters at the arsenal of Port Arthur, in the Yellow Sea. It has of late become noticeable all over the East that this strong squadron is constantly on the move backwards and forwards along the coast between Tientsin and Vladivostock. It is always hovering round the Corean coasts and harbours, while despatch vessels, gunboats, and the like, are perpetually dropping into the Russian harbour of Vladivostock.—*United Services Gazette*.

## The Rifle.

It is reported that in recent experiments with smokeless powder in the new British magazine rifle, the soft bullet is frequently broken up. The result of using hardened bullets has been to injure the barrel, especially in rapid firing.

For a rifle shot to wind up the season with such a sequence as 92, 93, 97, 98, 91, 97 and 95—an aggregate of 663 points in seven consecutive shoots—nearly 95 per shoot, is a performance worthy of mention. This has been done, says the *Volunteer Record*, by Lieut. Richardson, of the 5th V. B. Light Infantry. The conditions as to sighting shots were variable. 92, 97 and 91, were made without sighters, 93 and 98 with one sighter, and 95 and 92 with two sighters—all in military positions.

The new pattern foresight on the Mark IV Martinis now being issued in England, is said to have no apparent block when taking aim. To one London corps a good proportion of the so-called improved rifles have been issued with the old familiar foresight. In many instances these rifles are being selected by the shooting men of that corps, in preference to those with the new sight. As to the relative merits of the old and new foresights, there is a very common opinion that the latter may be the better for rapid firing in the field, but that it has no advantage over the old one for target shooting.

The British military authorities are considering the waste of cartridges which fall from the pouches as men lie down to fire, or are taken out and laid on the ground to be within easy reach, and then as the line advances are left behind and forgotten. From experience of what mounted men can do when armed with magazine rifles, Capt. E. Palliser predicts an extraordinary development of power in the British cavalry and mounted infantry. The detachable magazines will be carried on bandoliers, four magazines in front and four behind, besides a reserve of ammunition. From careful tests made in the 10th Hussars, the empty magazine can be shot out of its place and a full one pushed in with ease at full gallop.

A correspondent of *Shooting and Fishing*, writes from Paris, says: "I have formed the opinion that, as rifle shots, the average Frenchman is far below the American; in fact, I have not a very high opinion of his skill, and think he has much to learn. But, although the Frenchman is, as a rule, such a miserable shot with the rifle, there are many of them very expert with pistol and revolver; in fact, I believe they can teach us a great deal—that is, at short distance shooting; for the majority of pistol shots here seldom have a chance to practice at more than thirty yards, and most of the shooting is done at sixteen yards. One of the expert pistol shots of Paris is Viscount Clary. This gentleman, with a revolver in each hand, and shooting rapidly, has put all the bullets in the bull's-eye. This may seem incredible to some, but it is a fact; he has done it repeatedly; and I believe he is not considered the best pistol shot in Paris."

The British Government is pushing the production of the new Lee-Metford rifle with all the resources at its command. At the Royal Enfield Armoury 3,200 men are now employed, and the extraordinary output of 1,500 stand daily will be soon be raised to 2,000. At the time the Lee system was practically settled upon by the Committee on Small Arms—now something more than a twelvemonth ago—the combined capacity of the Royal Armoury, the Birmingham Arms Co., and one or two small shops in London, did not exceed 600 rifles per day. The committee was, however, at that early stage so well assured of its final decision as to the type of arm to be adopted that a large addition to the machine plant at Enfield was at once ordered and the master mechanic instructed to proceed with the production of such special tools as could be anticipated. This explains the remarkable increase in the productive capacity of the English gun shops, which otherwise would be incredible.

Capt. Philip Reade, U.S. Army, from whose interesting writings on topics of interest to riflemen the *MILITIA GAZETTE* has frequently quoted, has attained new prominence in the world of letters. On Nov. 1, 1888, the *Public Service Review* offered for the best essay on a military or naval topic of current interest a building lot in Barnegat Park (the Army and Navy Home), with \$500, as a prize; each competitor to select his own subject and to send a copy of his essay, not to exceed 10,000 words, in a sealed envelope on or before Nov. 1, 1889. The award has been made to Captain Philip Reade, Third U.S. Infantry, whose subject was "Military Rifles and Service Ammunition in Europe and America." Capt. Reade has just been promoted to that rank, and on his promotion he relinquished the position of Inspector of Small Arms Practice for his division, which for many years he has held, with the rank of First Lieutenant. That position, it was some years ago decided, could not be held by a Colonel or a Captain.