

Breech-Loading Ordnance.

So much attention is now being concentrated on the systems of breech-loading guns, which find advocates in France and in Germany, that we give drawings of what may be termed the English system, and we would remark that the French system has been pushed in this country with zeal, power, and wealth, both in private and Government shops, without vouchsafing the English system a public trial; yet by the dates, we show it will be plain to our readers that the English system is long anterior to the French, and it will be remembered that its distinguished inventor declared at the last experiments that the French system was merely his—apart.

We have always called attention to the various explosions of guns which have taken place from time to time; and we maintain that, after the bursting of the Krupp 9½-inch guns at the Dardanelles, Rustchuk, and on board the *Rennet* (the two last of which destroyed a number of officers and men), the question of German breech-loading steel guns is finally and forever set at rest as far as England is concerned.

With regard to the French system, we lately showed that two 12-inch French steel breech-loading guns had burst at Garve, in France; and we are now informed that an English-made gun has burst on board a Chilean man-of-war at Calao, killing a number of seamen. We trust that an inquiry will be made with regard to this explosion. Not long since it was announced that some breech-loading guns on the French system had been ordered in England by the Chilean Government, in order that their navy might bombard the ports of Peru at such ranges as would secure the fleet against molestation from Peruvian ports.

It is known that our Admiralty have ordered fourteen of these guns; therefore we suggest that an inquiry should be made regarding the gun which has burst. Was it a new pattern French breech-loading gun, or was it an old muzzle-loading rifled gun? and in either case was the gun lined with a steel tube? If so, then another list of deaths may be laid to a cause which we have never ceased to condemn.

Mr. William Palliser's breech-loading gun, as shown in the drawing, is lined with a loose wrought-iron coiled barrel, and the longitudinal strain on firing the gun is not borne by the inner tube as in the French system, but is supported altogether by the heavy casing of the gun.

Before being converted to a breech-loader and fired as such, this gun was fired nine times doubly loaded; the last five rounds consisting of 10 lbs. of powder, then a 6½ lbs. shot, then another charge of 10 lbs. of powder and another 6½ lbs. shot. No steel lined gun of the same weight could withstand such a trial; the first round would be sufficient to blow it to pieces.

We understand that the 7-inch gun at Erith is again to be fired doubly loaded. This time the front projectile will be a shell into the rear of which will be fitted a pressure gauge. The last tremendous double charge of 22 lbs. of powder then 100 lb. shot, with 14 lbs. of powder and an 65 lb. shot in front, has hardshipped the gun, and a bulge exists over the seat of the front charge. So that, should the gun burst, it will still have been an interesting experiment proving extraordinary staying power in the system of construction, and offering a favourable contrast to the gloomy list of explosions and deaths which it has been our duty to dwell on as they occurred, and thus to warn the authorities not to be carried away by the advocates of any foreign system till they have carefully tested English inventions which have been proved to be more scientific, safer and cheaper than foreign importations of more than doubtful character.

Ordnance Select Committee.

The arrangements for the formation of the new Ordnance Committee at the War Office have now been completed, and the Treasury has approved the proposals of the Secretary of State for War on the subject. A general officer of the Royal Artillery is to be appointed President of the Committee, with a special salary of £800 per annum, and will be assisted in his duties by an officer of the Royal Navy, of Admiral's rank, as Vice-President, who will draw £700 per annum. In addition to this, there are to be two naval members, two lieutenant-colonels of Artillery, one field officer of Royal Engineers, and two civil engineers, all drawing £500 per annum. Two officers of the Royal Artillery are to be allowed for the purposes of conducting experiments, who will be granted £250 per annum each; and there will be in addition a secretary and assistant-secretary—officers of the Royal Artillery—with salaries of £500 and £350 respectively. These salaries will all be independent of other pay, but will be considered to include allowances. The names of the members of the committee will not be known for some weeks to come.

Dominion Artillery Association.

MEETING OF COUNCIL, HELD ON 14TH FEBRUARY, 1881.

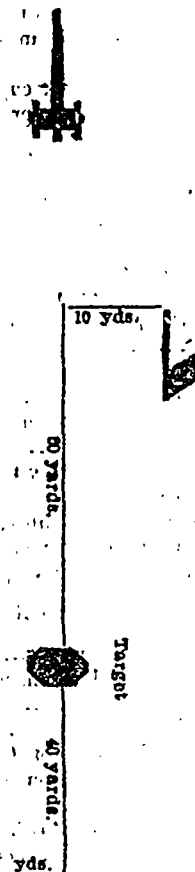
PRESENT:—Lt. Col. T. B. Strange, I. of A., President of Council, in the Chair.

Lt. Col. Irwin, I. of A., Vice-Pres.; Lt. Col. A. A. Stevenson; Lt. Col. Montagu; Lt. Col. Fraser; Major McRennie; Capt. McCrae; Lieut. Evans; Lieut. Donaldson, Secretary.

The following being suggestions, or modifications of suggestions submitted by Lieut. Col. Strange, were agreed to, subject to approval of Annual Meeting, viz:—

"That in future, in all scores for competitive practice, credit shall be given for Shrapnel shell as follows:—Direct hit, 2, ricochet, 1; elevation (if blind) as formerly, and only 1 for fuze when it acts between banierol (nearest gun) and target, and not more than thirty feet above plane. Credit for direction, if in line, 2; inside limit, right and left, 1, 3 pr. M. L. R. common shell (except for direction) as formerly.

"That for all S. B. competitions of garrison batteries, the parallelogram of error be marked by two bannerols only, (suggested to Lt. Col. Strange, by Capt. Gibson, Commanding Toronto Garrison Battery,) thus:—



"That the following be the table of credits for S. B. competitions.

S. B. Solid Shot:—

Direct hit, extra	6
Ricochet	3
Elevation, under	3
" over	2
Direction, in line	2
" inside limit	1

Common Shell, S.B.:—

Direct hit	2
Ricochet	1
Elevation	under 3 over 2
Fuze within limits not more than 30 feet above plane	1
Direction, in line	2
" inside limit	1