

From this it is evident that the wrought iron must be greatly compressed by the cast iron after the first round, and that the statement in the foot-note at page 3 of Captain E. Palliser's Report cannot be accepted as representing a general fact, although it might be true under particular circumstances.

The result of long-continued firing would thus be to throw a gradually increasing strain on the cast iron, and when that reached its tenible strength the gun would begin to crack from the inside; but inasmuch as the soft lining would prevent the penetration of the powder pressure into the crack, the crack would go on very gradually increasing, and would not reach the outside and the gun would burst, but not with that explosive violence which it would have done but for the operation of the soft internal lining of wrought iron.

The gun would be a cheap gun, a safe gun, and a long-enduring gun, but there I must stop. It would in time fail, but probably the time would be long, and the failure not attended with much danger.

But when we come to large guns and heavy powder pressures, I do not think we could trust to this system. We want a gun which will not burst at all, and which will last practically for ever, and for that I am convinced the future lies with the gun either made of Sir Joseph Whitworth's material in five or six concentric rings properly proportioned, or better still in my opinion, in the wire-coiled gun which I have so long advocated, and which, as far as it has been tried, has given the most satisfactory results.

Obituary.

The death of Major G. F. Blackwood, commanding E Battery, B Brigade, Royal Horse Artillery, adds another name to the roll of gallant Scotch officers who have fallen in the Afghan campaign. George Frederick Blackwood was born in 1835, the second son of the late Major William Blackwood, of the Bengal Army, and a grandson of the founder of the well-known publishing house of that name. His maternal grandfather was Brigadier G. F. Moore, for many years colonel of the 5th Bengal Native Infantry, which in his days was a nursery of many officers who afterwards rose to high distinction in the service. George Blackwood was educated at the Edinburgh Academy, and afterwards passed at Addiscombe, where he made a choice of the Artillery branch of the Bengal service. He was gazetted as Lieutenant on the 11th of December, 1857, and was soon hurried out to India, where he served in the suppression of the Mutiny with the Rohilund Movable Column, under the command of Lieutenant-Colonel Wilkinson, 42nd Royal Highlanders. In this force Blackwood was entrusted with the command of two guns. His services here led to a divisional adjutancy of artillery, the duties of which he discharged from 1859 to 1862 at Bareilly and Gwalior. From November, 1862, to December, 1863, he acted as adjutant of the 2nd Brigade of Royal Artillery, and afterwards as adjutant of the 10th Brigade until September, 1864. He received his captaincy in February, 1867, and was selected for the command of the artillery in the Looshal expedition, under Brigadier-General Bourchier, C.B. Captain Blackwood was present at the attacks on Tipal Mukh, Kungnung, and Talkoont, and earned the praise of General Bourchier, who, in his dispatch dated March 19, 1872, wrote as follows:—"Captain Blackwood and officers R. A. nobly sustained the reputation of the corps. The word 'difficulty' was unknown to them." Captain Blackwood's report upon the artillery in the Looshal campaign contained many valuable suggestions as to the nature of the gun most suitable for such service, and on the management of artillery and the equipment of elephants in mountain, jungle, and morass campaigning; and was printed and published by the Government of India. His services in this expedition were rewarded by a brevet majority in September, 1872. He afterwards commanded a battery in the Royal Horse Artillery during the absence in England of Major and Lieutenant-Colonel Hills, C.B. Obligated to take sick leave in England, he was prevented from sharing in the first part of the Afghan war, but after the massacre at Cabul he was moved up to Candahar, in command of E Battery, B Brigade. On the advance of Ayoub Khan, he was ordered out in command of the Artillery under General Burrows, and correspondence from Candahar speaks of the high state of efficiency in which his gunners took the field. In the action with the mutinous troops of the Wali the artillery distinguished themselves in the punishment of the rebels, and General Primrose reports that "the determined energy with which the artillery was brought up to the front reflects the highest credit on Major G. F. Blackwood." Of the battle of Kushki-Nakrud the details are as yet so fragmentary that we cannot profess to speak with accuracy; but the aspects of the field, when visited by the burial parties, showed that the artillery had made a desperate struggle, had fought like heroes, and had inflicted a terrible punishment upon Ayoub Khan's forces. Our Candahar correspondent says: "The first thing that met the eye was the long line of dead horses which marked the position of Blackwood's Battery. Opposite was another long line of dead horses, showing the execution done by Blackwood upon Ayoub's guns." Another correspondent speaks of the desperate struggle made by Major Blackwood and his officers during the final charge of the Ghazis. The position in which Major Blackwood's body was found indicated that he had fallen during the last gallant stand made by our troops against the enemy. He was wounded in the early part of the action, but had his wounds dressed on the field, and returned to die at his post. The following passage in a private letter from a distinguished officer lately holding high command in Afghanistan may be taken to represent the estimation in which Major Blackwood was held throughout the service: "Blackwood's death weighs also most heavily on all his brother officers and friends—not one of whom but deeply regrets his loss, not only as a personal one, but also as a public one to the regiment and army, for no better officer ever entered the service."

COMPARATIVE COST.

The sum expended by Vanderbilt on his new house in Fifth Avenue, New York, is \$1,500,000—three times the amount voted annually by the Dominion Parliament to maintain their whole militia force of 40,000 men!

Relics of the Past.

A FIND OF OLD-TIME ARCHIVES AT THE KINGSTON BARRACKS.

Kingston, Nov. 19.—Mr. Geo. W. Newlands, while reconstructing the storehouse in the Tete-du-Pont barracks, came across some very ancient archives, some of which date back as far as 1818. One of them, dated 12th September, 1818, is a shipping bill of commissariat goods to Fort George, signed by E. Urquhart. The name of the boat upon which the goods were shipped was the Frontenac, and was sailed by James Mackenzie. Another is an order to E. P. Coffin, deputy commissary-general, for the removal of the 79th regiment from Kingston to Montreal. There were only one woman and three children in the regiment. This document is dated 1820. Another document is as follows:—

" COMMISSARIAT OFFICE,

" Lachine, 14th July, 1821.

" One small batteau, manned by four Canadians, Antoine, Loisselle, guide, proceeded from this port to convey to Fort Wellington such of the settlers, with their families and baggage, as have been obliged from sickness on their way up to remain at Cascades or Cedars or Coteau du Lac, as well as pensioner Lane, with his wife and baggage, who were left by the party of the 76th Regiment. Upon their performing this service, and receiving such loading as will be appointed for them, they are to return to this port. Wages, thirty shillings per man for the trip.

(Signed,) " JOHN FINLAY, D.C.G."

" The following persons are put on the batteau in charge of Antoine Loisselle:—Pensioner Lane, wife and child and baggage, on their way to Fort George per March route. Settler Andrew Climie, wife and eight children, on their way to Lanark settlement.

(Signed,) " J. THOMPSON,
" D. A. Commissary-General.

" Coteau du Lac, 17th July."

Imperial Military News.

—The Moncrieff principle of mounting guns on disappearing carriages, which allows the weapon to sink under cover of the parapet with the recoil, and rise to the firing position when loaded by the action of a counterpoise, is being extended to such of the British stations abroad as present defensive features suitable to the employment of the system, which is much more useful in some situations than in others. A number of these carriages have just been prepared at the Royal Arsenal, Woolwich, for conveyance to Bermuda, and embarked on the steamship *Solway*, one of a new line of packets established for trading with Bermuda and Nassau.

—Yesterday the twenty-first official year of the Volunteer organisation was brought to a close, and, in accordance with the regulations, returns must be forwarded at once to the War Office by every regiment, setting forth the enrolled strength, number of officers, &c. At the date of the last returns there were out of 206,250 enrolled Volunteers, no less than 197,585 officers.

—Portsmouth.—The trials which have been made on board the Excellent (gunnery ship) at this port of directing guns by electricity have been deemed sufficiently satisfactory to warrant the introduction of the system in all broadside ships, in addition to the fittings at present in use for firing broadsides by electricity.