

British and Boer Rifles

What an Expert Thinks of the Mauser and Lee-Metford.

Description and Comparison of the Guns—The Penetrative Power of Bullets.

The following description of the British and Boer types of rifle is from the pen of a well-known writer on military subjects:

With characteristic slowness, England was the last country to adopt the magazine rifle. For years the continental powers had been ahead of us in equipping their armies with rapid-fire small-bore rifles, and it was long after the outbreak of the single-fire weapon had been recognized that the war office finally decided upon the change. Soldiers grumbled when the Martini-Henry was superseded, but the long-bore rifle had long been sounded. The exigencies of modern warfare demanded the use of weapons having an increased range, and this implied more powerful explosives and stronger barrels. The soldier's power of carrying burdens had reached a point when not one pound weight could be added to his equipment. The rifle bore had to be increased, and with the enormous use of ammunition this foreshadowed, each cartridge had to weigh less to enable the man to carry more.

Almost every great power has adopted the bolt system for loading and unloading, and in nearly every case the magazine, consisting of a sheet-iron box, is an addition to the rifle. The French Lebel, on the other hand, has its cartridges stored in a cavity in the wooden stock underneath the barrel.

The original British weapon was the Lee-Metford, the bolt of which was invented by Mr. Lee, Mr. Metford being responsible for the rifling. This latter, as most people are aware, consists of five grooves in the interior of the barrel, which are twisted spirally from breech to muzzle. The object of this rifling is to cause the bullet, when forced through the barrel, to rapidly rotate upon its own axis, thus gaining enormously in precision.

The Lee-Metford had seven grooves, which made one complete twist in ten inches, and for a time this was found satisfactory. Subsequently improvements led to the introduction of the Lee-Enfield, which has only five grooves. The bore of both is the same, and is .25 of an inch in diameter. The weight of the rifle alone is 9 pounds 4 ounces, the bayonet, weighing exactly 1 pound in addition. The length with bayonet fixed is 6 feet 14 inches, being not less than 10 inches shorter than that of the French Lebel with its bayonet in place.

The Lee-Metford and Lee-Enfield rifles are practically the same. The Lee-Metford is a composite one, consisting of a cupro-nickel envelope having a hard lead core, and weighs 215 grains. The nickel cases are punched out of the flat by ingenious machines, and the final operation stamps the envelope and core into one solid mass. In the Dum-dum variety the nose of the bullet is deformed, so as to slightly break the casing, thus causing the bullet to set up on impact. These bullets are not served out for ordinary civilized warfare. The charge, consisting of cordite, a nitro-glycerine-cum-gun-cotton amalgamation, weighs 30 grains and develops a pressure in the breech chamber of 15 tons to the square inch.

In spite of this enormous strain there is practically no recoil or kick of the rifle, most of this being absorbed by the breech mechanism. The Lee-Enfield is sighted to 2,800 yards, its lowest or point-blank range being 200 yards. The first named distance, it must be clearly understood, is not an aiming range, for the human eye, unaided as it is by telescopic sights, cannot distinguish objects at that distance. The back sight is actually set at such an angle as to appear to the shooter to be pointing at the sky. This extreme range is used for annoying an enemy or to search out men lying behind rising ground. The rifle carries considerably further than the sighted distances, and cases frequently occur of bullets carrying over two miles. The magazine, which is readily detachable, holds eight or ten cartridges, according to the mark or pattern issued, ten being the latest mark.

The ammunition is carried in pouches, and each soldier on service always has 100 rounds in all; 77 rounds are carried on mules and in the arm ammunition carts; 77 rounds are stored with the divisional ammunition column, and 55 are placed in the ammunition pack, making 308 rounds in all. Until the last few years but scanty interest was taken by the British soldier in musketry, and even the Indian army far surpasses the scores of its European stiffening.

The soldier is too apt to look upon range work as "skittles," and first-class shots are considered not nearly common enough in our army. The native, on the other hand, is intensely fond of shooting, and the regimental and company emulation is very keen. Field Marshal Lord Roberts is mainly to be thanked for this interest in the all-important subject, he having worked for years to encourage it in every way.

The rifle with which the Boer is now fighting on the Mauser system. It has an iron magazine, which is not an integral portion of the rifle. It holds five cartridges, but is readily reloaded by means of a charger holding five cartridges.

This gives a decided advantage to the Boer who can reload after his five shots with marvelous rapidity. The barrel has an outer skin of metal applied over an inner core in such a way that this most important part of a rifle is materially strengthened, without at the same time increasing the weight. The weapon weighs, all on, 8 pounds 9 ounces, and the Boer, carrying no bay-

onet, thus saves himself a burden of nearly two pounds. In length the two rifles are nearly equal, the Mauser (pronounced Moser) having the advantage of one-third of an inch. The grooves number four, and make one complete turn in nine inches, the direction of the twist being to the left.

The range of both English and Boer rifle is not quite the same, the Mauser having a slight advantage on the extreme sight. The bore measures .311 of an inch, and the bullet almost exactly resembles the Lee-Enfield, weighing 219 grains, while the charge of smokeless powder weighs 42 grains, giving a chamber pressure of over nineteen tons to the square inch, with a muzzle velocity of 2,150 feet per second.

The extreme range, that is, the unaided range of the Mauser, is greater than that of the Lee-Metford, due to the greater pressure and muzzle velocity of the bullet. Fortunately, in contests of to-day it is the aimed fire which is of importance, and the records of British show that the British soldier is armed with a rifle with which extraordinary accuracy of fire may be obtained.

The following table, showing the penetration respectively of the Mauser and now:

Mauser—At 110 yards 33.43 in.; at 440 yards, 19.02 in.; at 800 yards, 13.77 in.; at 1,980 yards, 3.94 in.

Lee-Enfield—Twenty in. of fine, loamy sand, moderately free from stones, proof at any range.

Steel Plate.

Mauser—Iron plate, .324 thick, pierced up to 330 yards.

Lee-Enfield—Milled steel plate, 7/8-inch thick, proof at all ranges.

Clay.

Mauser—Three and a half feet point blank range.

Lee-Enfield—Two feet proof at all ranges.

The penetrative power of these hardened bullets is extraordinary, a bullet possessing sufficient momentum to drive it through four men. It was thought, as the result of experiments on the dead bodies of horses and sheep, that the injuries resulting from the small bore rifle missile would be of a very bad character, but experience has shown this to be incorrect. On the contrary the hole of exit and the hole of entrance (with large bores so different in their size) now are absolutely equal.

Our surgeons report that wounds heal with great rapidity, and that amputations are quite infrequent. From this it will be apparent that the small bore has in some measure removed one terror from the battlefield, for it is a fact that men often are unaware that they have been wounded, so slight is the impact. The word explosive bullet, often used in war time, is capable of many explanations.

It may be news to many that the English Snider bullet, the predecessor of the Martini-Henry rifle, was of this character. It had a cup of hardened clay moulded in its base, and this plug split the bullet on striking any object. Many sporting rifles are loaded on this system, which is now, for small bores, practically out of the question.

The government capacity for turning out these Lee-Enfield rifles is as follows: Every week 3,000 rifles and 1,000 spare barrels can be made, besides 4,000 bayonets. These figures are exclusive of the number capable of being manufactured by private firms. The great national armory is at Weobool, where frequently 60,000 stand of arms are waiting for dispatch north, south, east or west.

The cost per rifle to the government is £3 0s 9d., complete with bayonet, but that is, of course, excluding all profit.—F. D. E. in London Mail.

THE HERO OF LADYSMITH.

When it comes to praising heroes
For the valor they've displayed
There is one to be remembered
For the gallant stand he made,
He is Ladysmith's true hero,
Well deserving wide renown
For his patience and his courage
In the long beleaguered town.

Four long months he grimly battled
With a fierce and eager foe,
Seemingly doomed to slow starvation
Or a sudden overthrow.
But he fought from dawn till midnight,
And he watched from eve till dawn,
Baffling schemes of strong besiegers
As he stubbornly held on.

Though on every side encompassed,
Though with shot and shell assailed,
He kept Britain's colors flying
And his spirit never quailed.
Long and trying were his vigils,
Peril frothed him night and day,
But he watched and fought and guarded,
And he kept the foe at bay.

Famine's spectre rose to plague him
And still ever closer crept;
Every day brought new privations
And disease about him swept.
But thought tried by sore afflictions
Ever brighter grew his fame,
And he held at bay the foe men
Till the longed-for succor came.

By the valor of this soldier
Is the greatest honor due,
For in four long months of battle
To all duties he was true,
And when Boer and British heroes
Are accorded laurels bright
There'll be none found more deserving
Than brave Sir George Stewart White.

POISONED AT DINNER.

(Associated Press.)
Chicago, Ill., March 26.—A special dispatch to the Record from Lima, Ohio, says: "Last night about 100 persons were taken suddenly ill from the effects of poison after attending a dinner given by the Women's Home Missionary Society of Trinity church. Some of them are still in a precarious condition, and several will die. The poison has been traced to chicken salad."

BUILDINGS IN NEW YORK.

(Associated Press.)
New York, March 23.—The annual report of the department of buildings shows that during the past year there has been erected in Greater New York buildings to the value of \$156,643,321. This is an increase of about \$60,000,000 over 1896.

PITCAIRN ISLAND AND ITS INHABITANTS.

(Written for The Times by J. H. Durland.)

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From the earliest religious experience of Pitcairn Island, its inhabitants were Church of England in faith. The prayer book found by John Adams in the ship's chest had been the rules of the religious community. All the services were conducted after the Episcopal order, which remained unquestioned until 1883.

Owing to the isolated situation of this island, its people remained at home and they had but few visitors. The government warships there called once or twice a year were about the only communication they had with the outside world. Their former experience in taking foreigners into their community to

for a time. His patriarchal appearance commanded the respect of all and he proceeded to teach the people daily from the Scriptures. He had not been with them but a few weeks until the entire population changed their Sabbath observance from the first day of the week—Sunday—to the seventh day of the week—Saturday. Miss Young says of this great change:

"A careful study of the different points of doctrine held by Seventh-day Adventists led first to a conviction on the part of the people that their positions were correct, and finally to their acceptance of them, although they felt that this would be a matter of regret, if not of positive displeasure to many who had hitherto

adhered to the Sabbath of the Lord. About a year after Mr. Tay left them H. M. S. Cormorant made them a visit. The officers soon observed that a change had been made in the observance of the Sabbath day, and began to question the leaders in regard to their changed views. Soon the whole story was told, and the following extract from an article written by a gentleman on board the Cormorant will give the reader some idea how the change was received by those on board:

"It will be a matter of regret, therefore, to many who are interested in the little community to hear that within the last year or two their principles have undergone a revolution, and that they have enrolled themselves among the

THE MISSION HOUSE.

become settlers had been so unsatisfactory that they did not expect to receive any, except shipwrecked crews, to abide with them more than a day or two. Even the latter were expected to leave the island on the first passing ship.

In October 1886, there arrived the British man-of-war Pelican, whose commander had courteously and kindly received on board at Tahiti an American missionary, John I. Tay, a member of a body of Christians known as Seventh-day Adventists. His home was in Oakland, California, from whence he had come for the purpose of teaching the people of this island what he believed were truths hitherto unknown to them. Being a sailor in his younger days, he found opportunity to work his way from San Francisco to Tahiti, where he found the Pelican, on which he secured a passage to Pitcairn Island. He was treated with the greatest consideration and courtesy by all the officers and men, and in his quiet way he roused a spirit of inquiry among some of the ship's company to consider his ideas on religious subjects.

When he was introduced to the people of Pitcairn Island no objections were raised against him remaining with them expressed and shown in a most substantial manner, the warm interest they had always felt in the island of Pitcairn and its people. While this to the islanders was sad to contemplate, they felt that they could not do otherwise than to follow their convictions of duty."

Mr. Tay, not being an ordained minister, could not officiate in some things that the people required for this radical change in their religious faith. The denomination which he represented taught that immersion only is Scriptural baptism. The islanders had been sprinkled in harmony with the teachings of the Church of England. When they became convinced that they should follow the teachings of the Bible, they felt that they could not do otherwise than to follow their convictions of duty."

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Several attempts were made to get a passage to the island, but without success. There were no ships that called at the island but men-of-war, and they made their trips so regularly from Tahiti that no calculations could be made as to when their connections could be made. The only thing left to meet the emergency was to build a missionary ship.

Words of Eloquence

Principal Peterson, of McGill University, Addresses Departing Troopers.

Beautiful Picture of the Loyalty of the Children of the "Mother of Nations."

During the progress of the ceremonies attending the departure of the Strathcona Horse for South Africa, Principal Peterson, of McGill University, made the following eloquent speech:

"The gallant men, in whose honor we are met this afternoon, do not stand in need of much speaking in order to assure them of our cordial good-will. But, if I may be allowed, in response to the majority's most flattering invitation, to free pass for one moment, I should like to say, in the first place, how glad I am to have the opportunity of echoing the sentiments that have been already so adequately and so eloquently expressed by his worship and the chief justice, and to say, at the same time, how proud I am to be identified with this display of patriotism called forth by the magnificent action of one of whom I have the honor to stand in somewhat intimate official and personal relations. Gentlemen of Strathcona's Horse, I tell you on the eve of your departure, that to know Lord Strathcona is in itself a liberal education. His action in regard to this matter has

Challenged the Admiration, not only of the home country, but of the Empire at large; and in the century that lies before us, a century which we hope and trust will see a large expansion given to the idea and sentiment of Imperial unity, Lord Strathcona's name will go down to history as one of the master builders of the Empire. Canadians had already given proof, in the expedition of the Nile, of their readiness to serve the common cause, but that, gentlemen, was but the first prelude of a grand Imperial chorus that was soon to swell forth. No more dramatic scenes have ever been enacted in history than the landing on South African shores of the various children of the Gray Mother of Nations. 'Lo,' she says, 'to how they come to me, how they return to me, east and west, my children scattered; north and west, the world they wander, but they come back to me; come, with their brave hearts beating, longing to die for me.' Gentlemen, the great war, which, in the view of certain

prophets of evil omen, was to strain the bonds of Empire to the breaking down, has proved, instead, the most potent instrument of Imperial federation. Gentlemen, who fear has been expressed to the interest of your fighting qualities, but by the time you get to South Africa, the war may have been well-nigh ended. We shall welcome peace, whenever it comes, but I think our judgment of

The Character of Our Enemies

is greatly at fault if we do not see they are likely, even after the inevitable, even after their banners are ended, to carry on the warfare behind the fortresses of Pretoria, with which I know no men more fitted to cope than the men of Strathcona's Horse. And it may be, in any case, an army of occupation will be required while the settlement of the country is going on. One of all of you standing on the heart of this province of Quebec, I think you can tell the dwellers in the Transvaal they have nothing to fear from such a settlement. The history of this province is proof of it. (The independence she enforces, limited only by the obligations of Confederation and loyalty to the throne, attest that adherence to British sympathy of self-governing communities for which Great Britain is reaping her reward to day. When that settlement has been effected, one more proof will have been given to the world that it is not the ascendancy of one race over another that lies nearest to the British heart, but equal rights for all—equal rights for all in the simple folds of the British flag. Great Britain, gentlemen, has never acted upon the Roman maxim, that empire must be retained by the same forceful methods by which it was acquired; and the reward of that she is reaping to-day in the loyal affection and

Willing and Enthusiastic Co-operation of the new nations within the Empire. Inured with the pride for liberty which she has been successful in inspiring in all the nations under her sway. Gentlemen, in the name of all who strained their eyes to see your martial forms to-day—men, women and children—I wish you God-speed. Go forth to play your part in the great Imperial drama that is being enacted on the plains of South Africa. We shall follow your career with affectionate interest. Mingle your ranks with those of the men from the Old Country, with the contingents from Cape Colony and Natal, with the New Zealand and other parts of the great Australian continent. Never in the history of the world could such a scene have been witnessed before, and it would be altogether impossible to-day for any other country to duplicate it. Gentlemen, your action will arrange to make solid the feeling for Imperial unity."

TROOPS FOR PHILIPPINES.

(Associated Press.)
New York, March 23.—The transport Sumner, which sails for the Philippines to-morrow, will carry more than a thousand cavalry, infantry and artillery recruits, and a large number of civilians.

Gen. Cronje's Sedan

His Picturesque Meeting With the Conqueror—Showed No Emotion.

The Boer Leader Ate Heartily and Smoked Like a Philosopher.

C. E. Hands, special correspondent of the London Daily Mail, telegraphed from Paardeberg on February 27th as follows:

At 3 o'clock this morning a sudden and fierce Mauser fire was heard in the direction of Cronje's laager, the cracking of the enemy's fusillade being answered by British volleys. Whatever was happening we were unable to tell on account of the darkness.

On the opposite side of the river, near the main camp, the firing was heavy, and we knew that something was being wiped off the slate or added to it. For half an hour the firing lasted, then died away, cracked again, and dropped. The silence was punctuated only by occasional shots.

At daylight firing recommenced, but with a difference. British shots preponderated. By 6 o'clock it had entirely ceased, and then a rousing cheer from Signal Hill told that the obstinate Cronje had given in. At 7 o'clock he was a prisoner in Lord Roberts's camp.

The glory of the surrender is

Largely Due to the Canadians; their trenches were systematically advanced to within eighty yards of the Boer trenches. The enemy kept up a terrible fire, but our men pressed forward, covered by the steady fire of the Gordons, and when daylight came the Canadians occupied the position and rendered the Boer trenches untenable.

We now commanded the entire laager, and Cronje's game was up. Disappointed at the failure of his reinforcements, he sent word that he surrendered.

It was a picturesque scene when Cronje was brought to Lord Roberts at the headquarters camp. A heavy-shouldered, almost hump-backed man, heavy-bearded and heavy-lipped, clad farmer-like in drab, and wearing a broad-brimmed felt hat, lumbered along on a little grey Boer pony, followed by an escort of Lancers.

Dismounting, he found himself before the little, wiry, close-knit Roberts. It was the greatest contrast possible, but Lord Roberts, who was wearing a sword, received the Boer general with a dignity that made him look six feet high.

Cronje bore himself with dignified simplicity, accepting with a bow the chair which Lord Roberts himself proffered him. They talked together for some minutes, Cronje's secretary, Mr. Keizer, interpreting.

Cronje said it was impossible for him to hold out against the position the British had gained, and he had to recognize the inevitable. The Boer leader showed no emotion at his situation, accepting it with a smile, and even occasionally smiling grimly. He had had a very uncomfortable time, he said, and had lost terribly.

Between 3,000 and 4,000 prisoners marched out of the laager, as well as Mrs. Cronje and a grandson, who accompanied the commandant.

The only disappointed man is General Hector Macdonald, who was nursing his wounded foot and talking of the anniversary of Majuba. He thought the victory cheaply bought.

Later—As I have already telegraphed, the game was finished this morning. A few minutes of daylight were this morning enough to show Cronje the decisive nature of the advantage the Canadians had gained in the darkness.

He sent out a white flag at 6 o'clock, and

Then Came Out Alone.

and, after some brief negotiations, rode in charge of General Pretorius to Lord Roberts's camp. Even now when all was lost he could not miss an opportunity of deceiving the hated rook, who this day eighteen years ago left him with a bullet in his body which he carries still.

After a few minutes' conversation, during which Lord Roberts was most considerate and courteous, Cronje asked for breakfast, and ate heartily and unconcernedly.

"Look," said a young officer, "he gives us all this trouble, and is now fast working our ham."

After breakfast he smoked a cigar—one of a few remaining choice ones with which the staff is supplied. He smoked with philosophic enjoyment. When it was finished he asked for another, as he was without his pipe.

Then an officer went and asked him how many men surrendering it was necessary to provide rations for.

"About 3,000," he said. A few hours later, when the disarmed Boers marched into camp and were counted, it was found that Cronje was a thousand wide of the truth. There were over 4,000, besides a number of women and children.

They marched a Disarmed and Unimpressed Rattle, and it seemed impossible to believe that these foes could hold British troops at bay a single moment. They were rusty, seadily clad, heavy moving, and without a look of activity or resolve, or mark of intelligence save only the shifty, cunning eyes.

The Black Watch were given the honor of occupying their laager—a destination somewhat odorous—for despite the fact that on Sunday thousands of horses and cattle were thrown into the swollen river, the laager in the river bed was still permeated with a fearful stench. It is almost impossible to believe it could be endured by any human being.

The shells had made a dreadful wreck of the laager, but the wonderful entrenchments outside the banks were not damaged as they were practically impervious to our fire. The earthbanks were protected on both sides, and the trenches were deep, widening as they descended, so that while there was small chance of a shell passing the narrow neck, there was plenty of room for men in the cavern below. Each trench was made for two men.

Cape to Cairo Railway

The Carnegie Steel Company Expects to Get Contract for Material.

Prospecting Party Ready to Survey Proposed Route—Carnegie-Frick Settlement.

(Associated Press.)

New York, March 23.—Referring to the settlement of the differences between Andrew Carnegie and Henry C. Frick, the Press says to-day:

"As is known to all Great Britain and to the newspaper reading public of the United States, the one pet scheme of Cecil Rhodes, 'The South African Colonies' is his Cape to Cairo railway project. This one idea has had far more to do with the Boer war than ever has been told. As all England knows of his great project, so does all Pittsburgh, which means the steel manufacturing industry of the United States, know that the Carnegie Steel Co. has expected to obtain the contract for furnishing the steel rails, bridge building material and other construction work for the great railroad.

"The Carnegie Steel Co. went so far last fall as to form a prospecting party of civil engineers, draughtsmen and others versed in surveying and engineering to go over the proposed route of the Cape to Cairo railroad. The prospecting party expected to be in Central Africa for two years at least, and it was to start from Pittsburgh for Capetown next month. Had the bitter feud continued between these two millionaire iron and steel kings, the affairs of the Carnegie Steel Co. possibly would have been tied up by litigation, the numerous miles closed by injunctions obtained by Frick, and all the possibility of this company getting the enormous contract for steel rails for the Cape to Cairo railroad would have been off."

BRITISH SUBJECTS ILL-TREATED

(Associated Press.)

Kingston, Jamaica, March 23.—Dispatches from Surinam, Dutch Guiana, received here to-day, say the feeling of the Dutch there is strongly antagonistic to the British and that British subjects in prison have been so brutally treated that they recently revolted and shot one of the keepers. The British residents of Surinam are said to be suffering from the same grievances as complained of by the Tjilders of South Africa.