

MODERN SHRAPNEL.

DEADLY EFFECT OF THIS FEARFUL IMPLEMENT OF WAR.

What Happens When a Single Projectile Suddenly Bursts Into Two Hundred Separate Messengers of Death—Shells and Solid Shot.

The improvements in modern guns have embraced all calibers, from that of the small arm firing a projectile only one-third of an inch in diameter to the monster which sends a solid piece of steel 12 inches through and weighing over half a ton.

Keeping step with these advances have been those made in the various classes of projectiles. Even the smallest of these, with its case hardened bullet, is far ahead of the old fashioned lead bullet used in the small arms of 30 years ago.

One of the most effective of modern projectiles is the shrapnel. It is one of the forms of case shot. The others were the old fashioned grape and canister. A case shot may be said to be a collection of missiles in a case, which breaks up either in the gun or at some point in flight, thus setting free its death dealing particles.

As soon as the case is broken each of these particles goes on a separate path, and it's a sorry day for the man struck by one of them. All of these falling upon a piece of level ground would mark out an irregular oval, whose area varies with differing conditions. It has been found that the best point to burst the shrapnel is about six yards above and 50 in front of the enemy.

Colonel Shrapnel of the British service first invented shrapnel in 1803. This early form consisted simply of a spherical shell filled with bullets and a bursting charge of powder in the spaces between. This was a crude invention, which scattered the fragments too much and was liable to go off when not expected and not so when desired.

This form was improved upon during our civil war, and the modern shrapnel can be considered the most dangerous of all life destroying projectiles. It consists of three parts—the tube, the base and the head. The powder charge is in the base, which is firmly attached to the body either by electric welding or by screwing. Leading from the base through the center of the body is a tube which is also filled with powder, which is ignited by the fuse at the point of the shrapnel and carries the fire to the main charge. Between 200 and 300 bullets rest upon a diaphragm just over the powder charge. These are held in place by a matrix of resin which is melted and poured upon the bullets when in place. A skeleton case of cast iron contains receptacles for each bullet in some cases used instead of the resin.

The head is put on in the same manner as the base, and when the fuse is inserted the projectile is ready for use. Some shrapnels have the bursting charge in the head instead of the base. The fuse used is rather complicated, but the United States has as good a one as there is. It is a time fuse and in actual test has shown its reliability.

It can readily be seen that one great objection to the shrapnel is its high cost. The fuse alone costs about \$2.50.

P. E. ISLAND COMMERCIAL COLLEGE.

PRINCIPAL I. OXENHAM

Book-Keeping in all its branches thoroughly taught in connection with Actual Business, Arithmetic, Shorthand, Typewriting, Penmanship, Business Correspondence, Commercial Law.

Our system is the latest and best now in use in Canada and the United States, and success from the start is assured. We open this year, after the holidays, on Aug 15th. Apply at once, or send for our new Prospectus.

\$50,000 Debenture For Sewerage Works of the City of Charlottetown

TENDERS addressed to the undersigned, and endorsed "Tender for Sewerage Debentures," will be received at this office up to the night of

Tuesday, the 23rd of August inst

for the purchase of Fifty Thousand Dollars (\$50,000) of the City of Charlotte town Debentures for Sewerage Works. These Debentures are of the denomination of \$500 each, are payable forty years from date, and bear interest at three and a half per cent, payable half-yearly. Of the above amount \$20,000 will be issued on the 25th inst; \$15,000 on the 1st October, and \$15,000 on the 1st December next. Tenders will be received for the whole amount, or for parts thereof not less than \$500.

The Commissioners do not bind themselves to accept the highest or any tender. D. LAIRD, Chairman

Office of Commissioners of Sewerage and Water Supply, Charlottetown, P. E. Island.

The same gun is usually supplied with three styles of ammunition—the solid shot, the shell and the shrapnel. Some batteries are also supplied with canister for use at close quarters. The bullets in the canister have a wider dispersion, because the case breaks up in the gun. Canister was used to repel the famous charge led by the Confederate general Pickens at Gettysburg. A perfect hail of missiles swept the slope leading up to Cemetery Hill, against whose destructive effects human valor was of no avail.

The shell is used to destroy inanimate objects as well as animate ones. It consists of a hollow cast iron shell, with a fuse and bursting charge of powder. The famous shot fired during the cutting of the cables at Cienfuegos is a good example of its use. The Spaniards having taken refuge in and behind a lighthouse, a shell was fired by one of our ships, which, striking it fairly, burst and utterly destroyed the structure, killing many of the soldiers.

But against men in battle formation the shrapnel is the more effective. It sends a perfect shower of missiles which, falling in the midst of a company, would almost annihilate it. Many tests have been made to show this.

Shrapnels fired from a gun a mile away in one instance and a mile and two-thirds in the other were made to strike a board target one inch thick. The fuses were set off by the contact and burst the projectile into 200 or 300 parts, each of which was capable of dealing death to any living thing in its path. Screens were placed at indicated distances behind the target. These may be considered as representing a battalion of infantry in column of companies. From the number of hits upon all of them the efficiency of shrapnel fire against close order formation may be judged.

In one shot 152 hits were made by a single shrapnel. In another 215 hits are recorded, but these are not so well scattered. Imagine, then, the effect of a well placed shrapnel upon a group of men such as is here represented.

The reader can readily understand why wars are now waged at greater distances and why hand to hand conflicts are almost unheard of.—New York Herald.

His Mistake.

"That politician is a 'has been,' isn't he?" remarked the observer. "No," replied the captious friend, "he isn't even that. He's merely a 'used to think he was.'" Washington Star.

ABBEY'S Effervescent Salt taken according to directions, brings refreshing sleep and invigorating rest to the weary body.

RACES. Cymbria Driving Park Monday, August 22nd There will be a Grand Race at the above Park, at which the following events will be contested:

3 minute class (Trotters and Pacers) \$20 Free for all. Green Race \$10

Purse to be divided 50, 35 and 15 per cent. Mile heats, best 3 in 5 to harness. Any horse distancing the field entitled to first money only, the remaining horses to finish the race. 5 to enter and 3 to start in each race. Entries, ten per cent. of purse, to close on Saturday, August 20. Races to commence at 1.30 p. m. Admission—Gentlemen, 25c; ladies free. Refreshments on grounds. No liquor peddlers allowed at or near the grounds. If weather proves unfavorable, races on following Wednesday. Communications to be addressed to D. McMillan proprietor, or to D. McLEAN, Secretary. Oyster Bed Bridge, Aug. 15.

VALUABLE BUSINESS STAND FOR SALE MONTAGUE BRIDGE

This property consists of a commodious store and dwelling, heated with hot water, and said to be the best business stand in Montague.

Title Guaranteed. Possession immediately. Apply to E. H. BEER, Ch'town. 63 2aw&wf.

NOTICE—This is to notify the Public that my wife (Ella May) has left my bed and board, without any provocation, and that I will not be responsible for any debts she may contract in my name or otherwise. WILLIAM GRAVES, Emyvale Lot 30.

BOY WANTED.—To wait in restaurant Apply to A. N. Large.

WANTED.—Man with small capital to join advertiser in profitable business. Address Partner, in care of EXAMINER, 189 2ns.

TETLEY'S Best of TEA Tea Value ELEPHANT BRAND

HOUSEKEEPERS, if you have not tried Tetley's Elephant Brand Tea, you should do so at once.

These Teas are put up especially for family use.—Wrapped in air tight lead packets, the flavor and purity is ensured to the consumer, who is also protected as to the correct value by having the RETAIL PRICE PRINTED ON EVERY PACKET.

Sold by most grocers in Canada and the United States.

25c. to \$1.00 per lb. in 1/2 and 1 lb. Packets.

If your grocer cannot supply you, write us and we will see that your order is filled.

JOSEPH TETLEY & CO., London, Eng., Canadian Head Office: 14 Lincaine St., Montreal.

CROWN AND BRIDGE WORK

When teeth are so far decayed that they cannot be filled they can be restored to usefulness, beauty and durability by our crown system. Crown and Bridge Work is one of the most beautiful operations in dentistry. Crowns are so useful and so comfortable to the wearer, that he or she soon forgets they are different than his or her own teeth. It is astonishing to see how many roots and teeth that are considered worthless can thus be made good comfortable teeth. Crown and Bridge work without improvements, when rightly performed, is scientific dentistry and covers a large number of cases.

We claim to be thoroughly

UP-TO-DATE

In our different branches and our Crown and Bridge Work is made and fitted by ourselves, thereby ensuring perfect results and warranting satisfaction. Call and see specimens of work. Our artificial teeth are guaranteed to give satisfaction in every respect.

You can call in in the morning and have crown and bridge work or artificial teeth same day.

All Work Painless

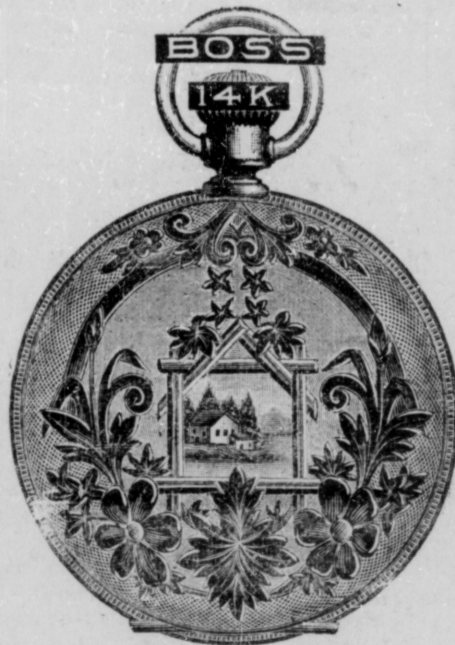
Charges Moderate

BERLIN DENTAL PARLORS,

Over Store of Prowse Bros.

Office Hours—8 a. m. to 8 p. m.

A Curious Fact



It is really remarkable the number of cheap plated watch cases that are made and sold these days—cases that will wear anywhere from six weeks to three years, and most of them containing a guarantee warranting them to wear for 20 years. A good filled case, one that will wear for 20 years, costs within a dollar of what it did seven years ago. That dollar represents the reduced cost of making—the gold costs just the same.

I sell gold filled cases, cases that have stood the test of years, and personally guarantee every case that I sell in addition to the manufacturers warrant. I have some of the latest and most desirable patterns in stock, also silver. Any make of movement you want.

E. W. TAYLOR

TOURISTS HOTEL GUIDE.

Leading Hotels in Elpis Province and their Location.

Table listing hotels in Elpis Province such as Davies Hotel, Queen Hotel, Revere Hotel, Rankin House, Dunsan House, LePage House, Eureka Hotel, Finlay House, Clifton House, Hotel Russ, Campbell Hotel, Albion Terrace, Seaforth House, Railway House, Aitken Hotel, Tapper House, Sea View House, Ocean House, Laudsdowae Hotel, Clarke's Hotel, Commercial Hotel, McDonald House, Manson House, Clarke House, Sea Side Hotel, Acadia Hotel, Pleasant View House, Hotel McLean, Mutch's Hotel, Cliff House, Shaw's Hotel, North Shore House, Florida Hotel.

Good board at cheap rates may be obtained at mealy farm houses on the coast.

Steamboat Time Tables

SOUTHPORT WEST & EAST RIVERS

Steamer leaves Charlottetown for Southport 6.30 a. m., and returns every half hour until 11.30 p. m. (Sundays excepted). Steamer leaves Southport for Charlottetown 6.45 a. m., and runs every half hour until 10.05 p. m. (Sundays excepted). Sunday—Leaves Charlottetown at 7 a. m., and every half hour until 8.35. Steamer sails from 11.05 to 12 noon. Monday—Steamer leaves Charlottetown for Rocky Point at 6.30, 8.30 and 11 a. m., 1.2, 4 and 6.30 p. m., every week day. Sunday—Leaves Charlottetown 9.00 a. m., 12.45, 2 and 4 p. m. Thursday—Leaves Charlottetown for West River Bridge 4 p. m., calling at Westville when required. Friday Morning—Leaves West River Bridge for Charlottetown at 3 p. m., calling at Westville, returning at 4 p. m.

EAST RIVER.

Monday—Leaves for East River 3 p. m., returning Tuesday. Leaves Haydon's Wharf 7.30 a. m., calling at Haggarty's and Hickey's Wharves, leaving Charlottetown 3 p. m., making return trips. Leaves Saturdays at 5 a. m., leaving Haydon's Wharf for Charlottetown at 7.30 a. m., calling at Haggarty's and Hickey's Wharves, making return trips at 3 p. m., from Charlottetown. Steamer leaves for Mt. Stewart every alternate week, as the tides may suit. Str. "Jacques Cartier" Leaves Charlottetown for Orwell at 8 o'clock on the afternoons of Tuesday, Wednesday and Thursday, and arrives from Orwell about 9.30 a. m. on the same days. The boat also returns from Orwell about 8 p. m. on Thursdays. Leaves for Crapaud at 3 a. m., and 3 p. m. on Friday, and arrives from Crapaud about 10 a. m. On Saturday the boat leaves for Crapaud at 2 p. m., and arrives at Charlottetown at 10 a. m., and 8.30 p. m. The boat calls at Vernon River every alternate Wednesday, tides permitting. Str. "Electra" Leaves Charlottetown for Murray Harbor, Georgetown and Montague every Thursday at noon. Arrives at Charlottetown from Murray Harbor, Wednesday evening about 6 o'clock.

Canadian Gov't Railway System

On and after MONDAY, 27th June, 1898, trains of this Railway will run daily, (Sundays excepted), as under.

Table with columns: Trains Outward, STATIONS, Trains Inward. Lists stations like Charlottetown, Hunter River, Emerald, Kensington, S' Side, Port Hill, O'Leary, Albertoe, Tignish, Charlottetown, Bedford, Mt Stewart, Casdigan, Georgetown, Mt. Stewart, Morell, St. Peters, Souris, Emerald, Cape Traverse.

CONNECTIONS.

Table showing connections between various railway lines and stations, including Point duChene, I.C.R., Moncton, I.C.R., Levis, I.C.R., Montreal, I.C.R., StJohn, C.P.R., Bangor, M.C.R., Portland, M.C.R., Boston, B. & M.R., Montreal, Boston, B. & M.R., Montreal, C.P.R., I.C.R.

THE EXAMINER CALENDAR

For August, 1898. MOON'S CHANGES 1st day, Full Moon. 9th day, Last Quarter. 17th day, New Moon. 24th day, First Quarter. 31st day, Full Moon.

Table showing moon's changes with columns: Day of Week, High Water (Morn, Aft), Sun (Rises, Sets). Lists days from Monday to Wednesday.

Wants, Lost, Found, &c.

FOR SALE.—1898 Wive Camera size 4x5 will hold 15 plates of 50 cent films has 2 tripod sockets, 2 view finders, for focusing magazine, and three diaphragms. Apply to Harry W. Weeks. 192 135.

LOST ON TUESDAY.—Between Black Sams Bridge and Brindia Livery Stable a Silver Woven Wire purse Finder please leave at the EXAMINER office—or Nortons Auction room. 192 2in.

TO LET.—A house containing six rooms situated back of Merchants Bank of P. E. I. Apply at the office of L. L. Beer.

WANTED.—A capable servant for general housework, 2 view finders, for focusing magazine, and three diaphragms. Apply to Harry W. Weeks. 192 135.

WANTED.—A girl for general housework in a family of two. Apply at this office. 199 6.

WANTED.—The end of a good cook. Wages \$10, no washing, sept a household. Apply by letter to Mrs. Bayfield Charlottetown P. O. Box 14.

LOST.—Between Capt. McRae's and the Post Office, a pair of gold spectacles in case. Finder will be rewarded by leaving them at THE EXAMINER office. 180

TO LET.—A house on Prince Street, containing 9 large rooms, besides halls and pantry. The house well situated for a boarding house or private residence. Apply to Thomas McQuaid, Lower Queen St. 173

WANTED.—A smart young woman that has had some experience in dining room work, good references required. Enquire at Queen Hotel between the hours of ten and twelve a. m. 173 1/2

WANTED.—Agents for new season, new samples, new plan of engagement. Lake Bros Co., Montreal.

TO RENT OR FOR SALE.—A blacksmith stand near Rocky Point Ferry with eight acres of land. Apply to John Newson Ch'town. 55 3 mos.

WANTED.—Successful canvassers in any line to act as closers, \$20.00 per month and expenses. Address box 679, Montreal.

WANTED.—Immediately an experienced cook with reference. Apply to Lady Davis. 173 1/2

BRICK HOUSE, POPLAR TERRACE, KENT STREET.—That desirable residence, 2 gardens and outbuildings, opposite new Prince of Wales College. House has sixteen rooms and all modern conveniences. To Let or For Sale. Apply to F. W. L. Moore, Attorney at Law, Executor Estate late Frederick W. Moore. 178 10

TO LET.—This house and premises known as the "Old London House," situated on Water St., next to Government Warehouse No 1. Apply to Peake Bros & Co. jan 28-17

That Wearing Tearing Maddening Headache

is often the result of eye strain instead of drugs, in such cases the only reasonable and effectual remedy is A pair of properly fitted eye-glasses or spectacles, which relieve the muscular strain and therefore cure the headache. We have made a special study of fitting glasses, and would be glad to have you call on us if troubled in any way with your eyes.

G. F. HUTCHESON Queen St. Graduate Optician

NOTICE.

Notice is hereby given that the first annual Meeting of the Wheatley River Mill Company, will be held in the hall of a said Company, at Wheatley River, in Queen's County, on Monday, the twenty-ninth day of August, A. D., 1898, at seven o'clock p. m., for the purpose of organization, electing officers, making by-laws and the transaction of general business. Dated this 18th day of August, A. D., 1898.

ALBERT McKay Chairman of Committee 189 dy wif