

Light Rays Newest Aid in Allies Trench Attacks.

Englishman Invents New Engine of War Called "Light-o-Mine," Which Set Off by a Ray of Light, Explodes Mines.

Paris, August 25.—Light as an adjunct and aid of modern warfare is the newest ally of the allies, summoned to aid in the campaign against the Central Powers by H. Grindell Matthews, an Englishman.

Having sold his patent to Great Britain, Mr. Grindell Matthews is at present in Paris interesting the French Government officials in taking up his apparatus and making use of it.

Grindell Matthews' engine of war is called a "light-o-mine," and comprises an electro-clockwork arrangement that is attached to a series of bombs and which is set off by a ray of light. The new form of trench fighting, the raiding tactics first carried out by the British and now being engaged in to a great extent by the Russian troops on the French front and by the polus themselves, avails itself largely of the use of this "light-o-mine."

The apparatus itself is about a yard long and four inches square. It consists of a lens at one end, open and resembling a pocket flash lamp. Inside is a dry battery, a sensitized plate and a clockwork, and from that lead wires. When a raid is made on an enemy trench, this apparatus is carried, and with it a line of trench bombs. Now a line of trench bombs consists merely of twenty or fifty or a hundred or two hundred yards of ordinary iron piping, a little larger, for instance, than gas piping. The piping is cut in suitable lengths—say ten or fifteen feet long each. From each of the ends protrudes two bits of wire, the positive and the negative for the current to be transmitted to detonate the bombs. The piping is packed tightly with alternate chambers of T N T as the Allies' standard high explosive is called, and shrapnel, bits of iron nails and slugs of metal.

The raiding party carrying this equipment and preceded by a wave of grenade throwers, raids the enemy trench after a short but intense bombardment. They bayonet or blow up with grenades the survivors in the trench, then hastily lay this line of piping, all connected up with the wires, in the bottom of the trench, covering it over with a few spadefuls of earth. The end of the long pipeline of bombs is attached by wires to the "light-o-mine" apparatus, and this is hidden in the enemy trench, leaving the bull's-eye lens exposed and pointed back at some object in the Franco-British lines.

About this time the German batteries in the rear have been advised that an enemy detachment is occupying a front trench section at that point and a few shells begin to drop in. That is the signal for the raiders to clear out



Zam-Buk
I saved me a lot of money

writes Mr. R. Howard, Sr., of Bracebridge, Ont. He continues: "Four years ago I sustained a scratch on my leg, which turned to an ulcer. I was confined to my bed for six months by the doctors' treatment, during which time I did not earn a cent, and in addition, spent dollars upon dollars before a cure was effected. Recently I sustained a scratch on my other leg. It became very inflamed and swollen, and finally turned to an ulcer. This time, however, I knew about Zam-Buk, and I acted very differently. I used Zam-Buk alone, with the result that not only was the ulcer healed in much shorter time than the previous one, but I was able to go to work all the time it was healing, and I did not lose a single day's pay. I sincerely hope that my experience may be the means of showing other working people the great healing value of Zam-Buk and of saving many from needless expense and unnecessary suffering. Zam-Buk is just as good for eczema and all skin diseases, ringworm, boils, piles, cuts, burns, etc. 50c box, 3 for \$1.25, all druggists, or Zam-Buk Co., Toronto. Send 1c stamp for postage on free trial box."

and return to their own positions. Cautiously the enemy reconnoitres forward when he hears nothing and no shots are fired from the lost trench. Finally he approaches and finds it deserted. The first thing he does is to clamber over the parapet and look for wires leading across the No Man's Land to the raiding party's positions, and finding none has no suspicion that a mine has been placed in his trench. Troops are sent forward to recapture the trench, and just when it is comfortably held by the Germans again a star shell is sent up from the Franco-British position in a line following that towards which the lens of the "light-o-mine" is pointed. The light serves to set off the long line of piping, full of T N T and shrapnel, and the Germans are blown out of the trench.

It would not be feasible to detonate the mines by wireless on the principle used by John Hayes Hammond, Jr., in guiding his manless boat, as in the first place it would thus be necessary to place a mine above the German trenches after a mine were laid and the enemy would notice the uprightness at once. In the second place the activity of the wireless apparatus of both Allied and German machines overhead, signalling directions to batteries, would "jam" the connection necessary to fire the mine by activity.

Some years ago an Italian naval officer named Valatti announced that he had invented a contrivance for detonating explosives at some distance off by wireless rays. Tests were made in the harbor at Rome and on one occasion he apparently exploded a mine buried on the far side of one of the hills surrounding the harbor. He flashed the rays from an Italian warship. Investigation indicated, however, that he used fake mines, prepared automatically so they would explode after a certain time had elapsed.

Valatti merely buried his mines with the acid arrangement so fixed that it would eat into the explosive chamber after a certain period. Then he spent the intervening time in attempting to locate the mine with his new wireless ray. When the acid got in its work and the mine exploded, at a distance of several miles, Valatti announced that his ray had located the mine and detonated it.

Grindell Matthews' proposition is quite different, however. The actual starting of the contrivance for setting off the bomb being begun by the effect of the ray of light entering the eye of the lens, and thence being carried out by the electric battery and the clockwork. The mines can be set off in daylight, ordinary light having no effect on the lens. Only if the lens were directed squarely at the sun would it produce the required effect.

The young inventor has spent all his life up to the beginning of the war in wireless experiments, and already has established two stations, sixty miles apart, in England, where one can phone by wireless. "I believe eventually that wireless telephony will entirely supersede wireless telegraphy," said Grindell Matthews. "But I believe either wireless telephony or telephony is limited to very long distance work, like from one continent to another, or across continents, or seas or chan-

nels. I do not believe, for instance, that there ever will be a time when New York or London or Paris is served by a wireless telephone system. There would be too much complication in getting all of the wave lengths of different sizes and keeping them so. But eventually the wireless telegraph will be supplanted by the wireless telephone, just as the land telegraph with wires will eventually be entirely supplanted by the ordinary telephone system."

OLD TIMERS.

When old men meet they ask for news of friends they used to know. "Say, what's become of Hiram Hughes?" "The anthrax laid him low." "Well, what's become of William Bill, and what's become of Fred?" "They're both sleeping on the hill, and each is doubly dead."

"Why, truly, friend, if these things be, we're pretty much alone; but where is Silas J. McGee?" "He sleeps beneath the stone." "I used to know a lovely maid, whose name was Julia Jones." "She's resting in the willow's shade, out in the place of bones." No wonder that the old are bent beneath their weight of gloom; they cannot gossip worth a cent and not bring in the tomb. Mirth to their discourse they would lend, and cheerfully behave, but when they ask about a friend they hear about a grave. "Oh, what's become of Jim and Joe, and Nell and Bess and Jane?" "They died the death long years ago, and dead they still remain."

Hot Weather Philosophy.

In this hot weather it will make us feel a little more comfortable to think of cool things, like snow and ice. So, first let us remember that there is a wet season ahead, and after that the snowy and frosty season. We shall have to be out in all kinds of weather, and the only way to enjoy life under all the different conditions is to be comfortably clad. For instance, if your feet are encased in nice, stylish, well-fitting Bear Brand Rubber Shoes, the state of the streets will not worry you in the slightest degree. Of course, nobody is buying rubber shoes just yet, but the time will soon come, and then, isn't it better to buy one good, well-fitting pair that will last you the greater part of the winter, rather than half-dozen pairs of shoddy shoes, that you will always find broken on the mornings that the slush is inches high?

CLEVELAND RUBBER CO.,
New Martin Bldg., St. John's.
sept15,tu,f,t

Many dresses are built on the lines of the chemise; that is, the bodice portion extends to the hips and the skirt attached is of a contrasting color.

HOME!

For everyone there is a place known as home, and it is the duty of someone to make it cheerful and attractive. Perhaps that someone is you.

Now that the evenings are beginning to close in earlier, persons will be more indoors than during the summer months, and now is the time to

Brighten Up The Home,
and make it pleasant.

Nothing changes the appearance of a place more than

Wall Paper.

It can be bright, and clean, quiet, and restful, or it may be soiled and so old that the monotony of looking at the pattern for day after day gets on your nerves.

We have a large stock of carefully selected

Room Papers of the Right Kind with Borderings to Match.

These are all modern designs, and it will give us pleasure to help you with your decorating problems.

Come & Inspect Them.

ROBERT TEMPLETON,
333 WATER STREET.

MINARD'S LINIMENT CURES DIPHTHERIA.



Don't Get Sick!

Don't wait until that Cough or Cold develops into the Cough that you are not able to throw off.

If you have contracted a Cough or Cold don't keep on saying, "Oh, it's only a cold; that will wear off after a few days!" That is just where you are making one of the biggest mistakes in your life. Try a bottle of Stafford's Phoradone Cough and Cold Cure and watch results. Price 25c. Postage 5c extra.

If you have an impression or tightness on your chest, mix equal parts of Camphorated Oil and Stafford's Liniment, and apply to the chest on a piece of thick flannel.

Stafford's Phoradone is prepared only by

DR. F. STAFFORD & SON,
St. John's, Nfld.
Manufacturers of 3 Specialties:
STAFFORD'S LINIMENT
STAFFORD'S PRESCRIPTION "A"
STAFFORD'S PHORADONE.
sept18,t

The St. Shott's Garden Party.

A very enjoyable garden party took place at St. Shott's on the 10th inst., in aid of the new Church which has been recently erected, and proved in every way a perfect success. It was carried out under the superintendence of Mr. Wm. T. Molloy who executed his duty with infinite dexterity. Dancing, which began at 3.30 p.m., was performed on a large gallery constructed for the occasion by the young men of the place. A large assembly was present including visitors from Biscay Bay, Trepassy, Peter's River, Cape Pine and Cape Freels. At 4 p.m. the carriages began to arrive and drove up to the entrance of the dancing grounds where their occupants were met and welcomed by the distinguished Mr. Molloy who conducted them to the scene of the garden party. After an hour's interval supper was partaken of in the Church where two magnificent tables were spread, waited on by several matrons and young ladies. Two more meals, tea and breakfast, were served at 11 p.m. and 4 a.m., respectively, and refreshments were at everyone's disposal during the night. Amusements of various kinds were exercised by both old and young; songs were beautifully rendered by Messrs. Francis Molloy and Patrick Finlay, and card playing was fully indulged in by the old folks, whilst the young made the dancing gallery ring trying to imitate the steps of their Irish ancestors. About 5.30 next morning all the guests dispersed feeling tired but needless to say well pleased with the night's performance.

Great credit is due Mr. and Mrs. Molloy, also the other people who assisted; and it behooves the host of its kind ever held at St. Shott's we wish all the more to have the Superintendent understand how fully we appreciate his tact and extend to him our heartfelt congratulations on its great success.

ONE PRESENT.
Cape Freels, Sept. 15th, 1916.

Your Boys and Girls.

There are many people that expect children to be naughty when the restraining influence of the parents is removed. But what is the matter with those children who are just as good when the "cats away" as they are at other times? You might think there is something uncanny about such children. But really they are quite normal and full of fun. I know them myself and can say that they have the same instincts for play and mischief as other children, yet there is a difference.

The difference is in the attitude of the parents, especially the mother, toward the play of the children. The mother has learned to suppress her own instinct to say "don't" every time one of the children starts to do something that is not on her program. The children have the impulse to do a thousand things that seem foolish to you and me, but most of them are quite harmless and need not be stopped unless the adults are very selfish and irritable.

Everyday Etiquette.

"A man to-day helped me to pick up some parcels I had dropped and then started to walk along with me. Is that proper?" asked Madge.

"No indeed," answered her mother. "After recovering the parcels for you he should raise his hat and pass on."

As a rule, the simpler one's clothes the smarter they are.

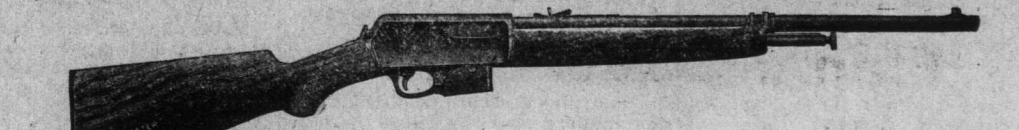
Shooting Season Opens Sept. 20th.

Ask us for anything you need for a Shooting Trip or a Trapping Venture. We can fill your orders.



FOR SMALL GAME HUNTERS.

We have many suggestions in Breech-loading Shot Guns, ranging in price from \$5.75, and Rifles from \$2.50 each; and a large stock of Ammunition loaded with Black Powder, Smokeless and Ballastite, and from No. 10 to BB Shot.



FOR BIG GAME CHASERS.

The following will appeal: Powerful Rifles of different calibre, Repeating Remington and Winchester; Bear, Lynx, Fox & Otter Traps, etc.



CAMP OUTFITTING.

Our reputation in this line is so well known that it is scarcely necessary to say we can fill any order down to the needs of the humblest woodsman and up to the requirements of the multi-millionaire.

Ayre & Sons, Ltd.

Ladies' RAGLANS

Grey and Fawn, with Belt and Military Collar, for

\$6.75.

These are a New Lot just opened, and are

Exceptional Value
at the price.

S. MILLEY

BE READY for the cold weather. Get in your supply of **FUEL GAS COKE** is an excellent substitute for hard coal. We have **COKE** of best quality, made from Pennsylvania Coal, which we are selling at \$8.50 per ton at the Gas Works, or \$9.20 per ton sent home. Send in your order now. **ST. JOHN'S GAS LIGHT COMPANY.**

A new hat trimming is heavy dark ribbon with light fancy ribbon worn in and out of it.

Here and There.
Turkeys, Ducks and Chicken at ELLIS.

L. C. A. S.—The Ladies' College Aid Society will continue its work for the Soldiers Tuesday afternoons in the usual place. Regular meetings of the Society will be held every Thursday afternoon.

Kalomite Laundry Marvel, the clothes washing wonder of the century. Try it. Ask your Grocer for it and save labor. **GEO. W. GUSHUE, 216 LeMarchant Road.—aug17,t**

Fashions and Fads.
One-piece gowns of navy blue serge, mohair or jersey are in favor. The smartest wash gowns are best made with the utmost simplicity. The most favored material for stamped pillow tops is tan cloth or linen. For young girls' dancing frocks there is nothing better than pastel and white. Some very smart dresses of navy blue satin have ivory buttons for decoration. Separate skirts are sufficiently in favor to be made up in some very novel styles.

Minard's Liniment Cures Diphtheria.