

**A "BULLET" FLASHLIGHT NOVELTY.**

The latest in flashlights resembles a bullet. It measures 6 by 1 3/4 inches. It is made of heavy brass, well finished. Besides being a timely novelty, it is a real serviceable article, being equip with a high grade dry



This is Not a Real Bullet, But It Looks Just Like One. Inside Its Brass Shell There Are Concealed a Powerful Flashlight Battery and Lamp.

battery and Mazda lamp. It gives a strong, white, steady light of service to civilian and soldier or sailor alike.

**MEASURING FOOT-CANDLES EASILY.**

In the accompanying illustration a new foot-candle meter, devised by Dr. Clayton H. Sharp, is shown which makes it possible to measure illumination intensities in artificial lighting installations. The device is made in a convenient portable size and can be operated by anyone after becoming accustomed to reading the scale.

The instrument consists of a small lamp operated by dry batteries with a special volt-meter and rheostat so arranged that the lamp can be burned always at the same voltage. The lamp is placed in a small wedge-shaped box the top of which is made of translucent paper. This top is about 8 in. long and on it are made a number of small grease spots or dots in a row with a scale of foot-candles underneath. The lamp is inside the box at one end.

In operating this device, if there is more light outside the box, the grease spot is darker than the paper around it. The distance of the grease spot nearest the lamp is so chosen that when the lamp is burned at the correct voltage, this grease spot gets the light or illumination inside the box equal to that from 25 candles one foot away, or 25 ft. candles. The next spot gets less and so on down to the last spot. To use the device the lamp is set at the correct voltage, which is done by turning the rheostat handle until the voltmeter points at the right mark. Then the observer looks at the top of the box and picks out the point where the grease spots change from bright spots to dark spots and the marks on the scale tell just how much light or illumination, measured in foot candles, is being received on the outside of the box.

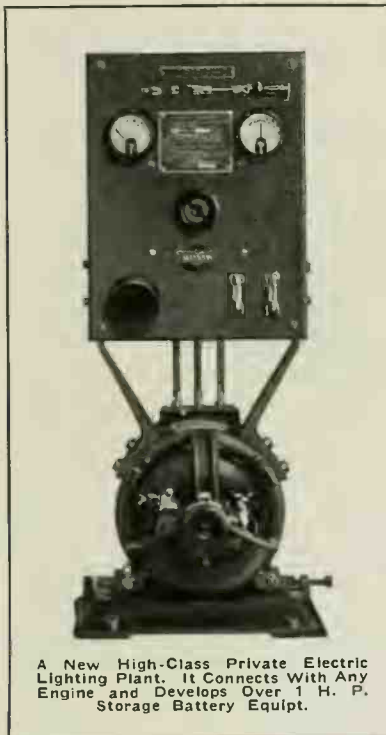


An Extremely Simple Foot-Candle Meter Recently Brought Out.

**NEW 800 WATT ELECTRIC PLANT.**

Electrical contractors are now in the Farm Lighting Plant business seriously and are finding it necessary to supply their customers with outfits of a better class than the cheap plants sold during the earlier days of the business.

The private lighting plant shown in the illustration has been placed on the market by a Milwaukee concern. It is of the belted type and consists of a generator and switch-board made up in one unit and a storage battery. The various elements of the plant are of well-known standard makes. The best grade instruments and rheostat are used on the switchboard, which also includes a new type of magnetic cut-out which is of an improved design. Glass enclosed fuses are furnished. These plants are made in three standard sizes provided with sixty, ninety, and one hundred and twenty ampere-hour batteries, respectively. The generator has a capacity of 800 Watts.



A New High-Class Private Electric Lighting Plant. It Connects With Any Engine and Develops Over 1 H. P. Storage Battery Equipt.

**THE GERMAN WATCH TRICK.**

A pet trick that the German soldiers employ is to leave a watch hanging on the wall of their abandoned trenches. Said watch connects by electric wires with a high explosive bomb, which explodes when the watch is removed from the wall.

**NEW AUTO SPARK COIL TESTER.**

Here is a brand new device, developed to facilitate the testing and adjusting of the Ford spark coil unit and for testing automobile lamps of any candle-power or voltage, electric horns, spark plugs, for finding short-circuits, grounds, etc., recently put on the market.

**THIS ELECTRIC IRON HAS BUTTON CONTROL.**

Women waste time, electricity (which is money), ruin clothing and ironing board



Well! Well! The Maid Can Answer the Door-bell at Last Without Burning Up a \$20.00 Lace What-you-may-call-it, for When She Releases This Electric Iron the Button Cuts Off the Current.

covers, and in many instances start disastrous fires with the old type electric iron.

Many times an ironer will be called away for a long time and forget to turn off the switch. The iron is often ruined and current wasted before she returns. This happens often when people are called away in a hurry. When the new electric iron here shown is used and there is a hurry call, the ironer will unconsciously slam the iron on the stand and hasten away. The push button is automatically released, the current stops, money is saved, perhaps property, and even lives.

The button works exceedingly easy. There is no strain on thumb muscles. The ironer hardly realizes she is holding it in.

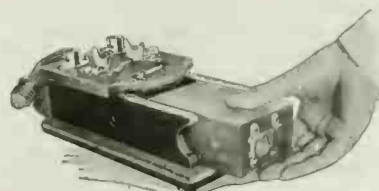
The catch on the iron stand is put on and off in a jiffy.

The average ironing requires varying heat. Handkerchiefs, sheer waists, laces and all light material need less heat than heavy pieces. When ironing light pieces the current may be released for several minutes by simply removing thumb. When more is required, simply replace thumb over button. Many dollars are thus saved in a year's time. Danger of scorching valuable linen is reduced or entirely eliminated. The stand catch may be adjusted to keep the iron hot or not as desired.

One of the most important features of this tester is the fact that it tests the Ford coil under alternating current, this coil being wound for and operating in actual service under alternating current.

The new Tester, in one form, is designed for use with alternating current lighting circuit, while another type is identical in every respect, with the exception that it is designed for use where alternating current is not available and receives its energy from a six-volt storage battery or four dry cells.

The Tester is assembled in a highly polished mahogany case. All metal parts are heavily nicked.



The Testing of Auto Spark Coils Is Greatly Facilitated by This New Device.