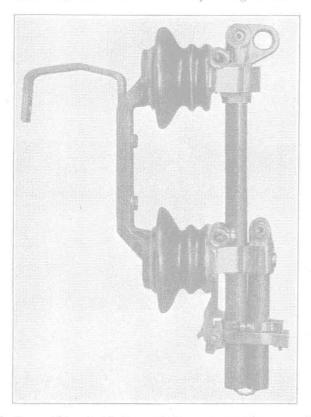
## Open-Type "Fuswitch"

## for Crossarm Mounting

THE W. N. Matthews Corporation of St. Louis, Mo., has developed a new open-type Fuswitch for railroad use to meet the demand for a dependable open-type Fuswitch of high rupturing capacity. This new device is known as the Type-1317 Matthews Fuswitch and has a rating of 100 amp. at 7,500 volts. The Type-1317 Fuswitch is a vertical switch especially designed for 6,600 and 6,900-volt service, but adaptable to 2,300 and 4,400-volt service. It is equipped with the patented Matthews double tube horn, fibre vacuum cartridge. It is adaptable to railroad use where a switch is needed with firm contacts of low resistance to guard against current losses and radio interference. All contacts have exceptionally large contact areas and are of the flat, wiped surface pressure type, assuring a perfect contact it is said.

The patented Matthews fuse cartridge makes the rupturing capacity of this switch high. When the fuse is blown in the long tube a partial vacuum is formed in the short tube, making it impossible for combustion to be sustained, and the arc is instantly extinguished. The



Matthews "Fuswitch" Type-1317 has a rupturing capacity of 100 amp. at 7,500 volts

tubes are made of horn fibre and are protected throughout with weatherproof material. These tubes are inset at the top into the metal contact so that no water can enter them

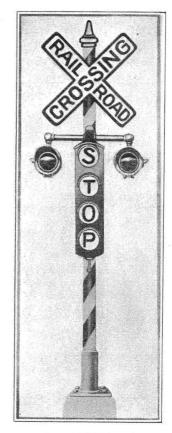
The insulators used on this Fuswitch are of special design and made of wet process porcelain. Their wet flashover value is 22 kv. Fuse links up to and including 100 amp. used on the Type-HQ Matthews Fuswitch are also standard for the Type-1317. This latest Matthews product is about 14½ in. high, and does not take up much room on the crossarm to which it can be bolted or secured with a hanger. It can be quickly converted into a disconnecting switch, with a rating of 125 amp. and 7,500 volts, by substituting a solid disconnect blade.

## Union Type-HC5 Flasher

## with Vertical "Stop" Sign

A NEW highway crossing signal has been placed on the market by the Union Switch & Signal Company. The signal consists of two units, a vertical stop signal mounted on the same mast with

an HC-5 signal. The stop signal has four diffusing roundels with stenciled letters behind them, all carried in one case. Each letter is illuminated by an S-11, 11-volt, 11-watt lamp having a bayonet socket and a candelabra base, which is mounted in the same reflector assembly used with the new HC-5 signal. The terminals for the lamps are of A. R. A. design, and are insulated from the rim on which they are mounted by means of a bakelite block. The reflector is of ground and polished glass and is held in a pressed steel cup. The lenses are red and fitted with sheet steel hoods. The stop signal is continuously illuminated during the time the crossing signal is flashing. Mounted on a crossarm are two red flasher signals illuminated by the same type of



Type-HC5 Signal

lamps as are used in the stop signal and equipped with the same reflector assembly as just explained. The lenses are of standard size, 83% in. in diameter and are fitted with hoods. On the two flasher signals are two small side lenses of clear glass to give an indication to crews of approaching trains that the signal is functioning properly. A standard A. R. A. crossing sign may be mounted at the top of the mast.

The signal has the advantages of a flashing light signal combined with the red "stop" indication. The beam from each unit is visible at long range and at a wide angle. The lenses for the flasher light are of special cover glass and for the stop signal they are convex red roundels. The reflectors, including the lamp sockets, are assembled to the signal cases as a unit and the lamp sockets are adjusted to obtain the maximum beam candlepower from each assembly. The reflector has a high degree of efficiency.

The lenses of the flashing light signals are hinged and open downward and the door of the stop signal opens sideways. This feature permits easy access to the reflector for cleaning without interferring with the lamp adjustment. The surface of the reflector is protected with a special coating which is claimed to be the best for long service.

This signal can be furnished also without the vertical stop sign by requesting the Type-HC5 flashers only. The description of the signal without the stop sign is similar to that above for the combination signal except that pertaining to the vertical stop signal.