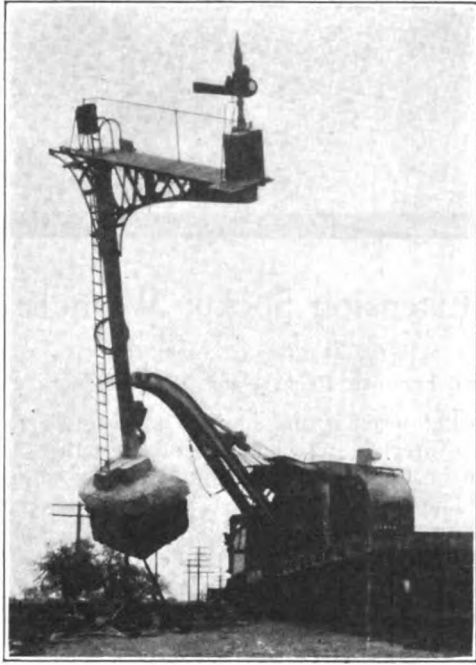


Moving Day

It was necessary recently to move a large cantilever signal mast at Riverbank, Cal., on the Santa Fe. It was decided to move the foundation mast signal and all in-



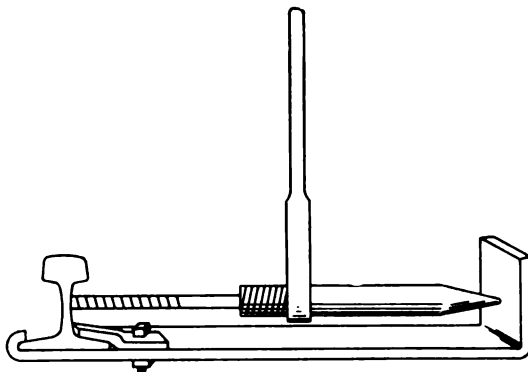
A Good Way to Move Signals

tact. Therefore after removing the dirt around the foundation a wrecking crane was used to pick it up and set in the new location.

A Steady "Old Man"

By P. Stark
Sterling, Ill.

When drilling holes in the web of the rail or in switch points with an Arm-strong ratchet, one often wishes for a third hand to hold up the ordinary "old-man" or the drill while starting. However, by arranging a rail clamp as shown in the sketch the "old-man" rig can be held



The Clip Holds the Old Man Steady

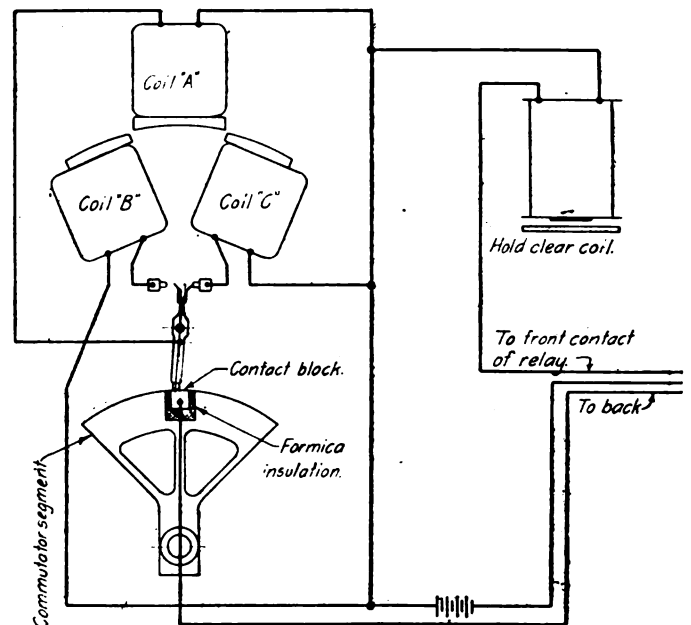
steady, which permits the use of both hands for operating the drill. The rig is made in the usual manner but with the addition of an adjustable clip, made from the same size stock as the rig. When in place ready to drill, the clamp is fastened to the rig by a machine bolt. Several holes are drilled through the clip and rig so that the clip may be used on various sizes of rail bases.



New Magnetic Auto-Flag

The Bryant Zinc Company has just placed on the market a new magnetic type auto-flag, that can be furnished to give either the two or three position indication. The mechanism with the banner is constructed as a unit which may be installed on a bracket attached to the side of a pole or on a channel iron frame for use in the center of the highway.

The operating mechanism is a simple magnetic movement, consisting of two electro-magnets (marked B and C in the diagram) mounted on the upper end of the ban-



Operating Circuit of Magnetic Autoflag

ner rod and one magnet, A, fixed directly above the banner shaft.

The two magnets (B & C) on the banner rod are mounted at an acute angle from the vertical. By means of a simple circuit breaker, energy is applied to the magnet coils in such a manner as to cause the stationary magnet A, and one of the moving magnets (B or C) to attract each other, thus forcing the banner to one side. The circuit breaker is actuated by this movement, energizing the opposite moving coil, causing it to be attracted to the stationary coil, thus forcing the banner in the opposite direction. The banner swings at a pendulum speed through an arc of approximately 42 in. The main banner shaft is supported on ball bearings which reduce friction to a minimum.

With the two-position type when energy is cut off after a train has passed, the banner comes to rest, hanging vertical. A brake may be furnished to bring the banner to rest more quickly and to prevent high winds from swinging the banner.

The three-position type has an additional latching feature operated by a hold clear coil energized through a front contact on the control relay. This coil pulls a latch against a notch segment at that point of the swing