

ranged for convenient wall or shelf mounting. Their Textolite terminal boards give maximum accessibility and ample spacing for terminals. Both types are equipped with diagrammatic nameplates, showing connections and arrangements of leads and terminals.

Coded Track Circuit Control

A NEW SYSTEM of track-circuit coding for controlling wayside, cab and highway-crossing signals, is announced by the Union Switch & Signal Company, Swissvale, Pa. The new coded-track-circuit control system is a further development of the coded continuous cab-signal system. Coded energy is fed to the track circuits at all times and is used to control the wayside signal. Or, in other words, one form of track energy, namely coded track energy, is used to control either wayside signals, cab signals, or both. The same decoding equipment is used to decipher the code at wayside signal locations as has been and is being used on the coded locomotive equipment, except that this apparatus is differently assembled to make it suitable for housing in wayside signal instrument cases.

A new development in connection with the new coded-track-circuit control system is the code-following relay. Years of experience with the master relays of coded locomotive equipments, which operate continuously while the locomotive is in service, is convincing proof that a continuously-operating code-following track relay is not only practical, but that it has marked advantages and a definite additional factor of safety.

The coded-track-circuit control

principle may be applied to almost any type of signaling, such as in either steam or electric-propulsion territory; wayside signals or/and cab signals to two-block, three-indication signaling; three-block, four-indication signaling; or even a greater number of signal indications. This system can also be used in connection with different forms of track-circuit energy supply.

The coded-track-circuit control system has several distinctive features. It provides for three or four indications without the use of line wires between signals for signal control. Further distinguishing it from the cab-signal track circuit is the dual function of the coded track circuit, as it controls both the wayside and cab-signal circuits. This system has a number of other distinctive and important features.

Snubbing Rectifier for 2A Signal

A SNUBBING RECTIFIER has been developed by the General Railway Signal Company to improve the operation of Model-2A signals. It is used instead of a fixed resistor and contacts in the snubbing circuit of low-voltage, d-c., Model-2A signal motors. The purpose of the rectifier is to eliminate sparking at the commutator, which often results in commutator troubles, and to provide easier, smoother snubbing action throughout the full movement of the semaphore arm.

The new snubbing rectifier comprises a small copper-oxide rectifier unit, 1½ in. in diameter and 2¾ in. through the center bolt, with suitable leads and attachments for easy mounting on a terminal post of the circuit

controller of the signal, as shown in Fig. 1.

The rectifier is permanently connected across the motor terminals but, on account of its action as a valve,

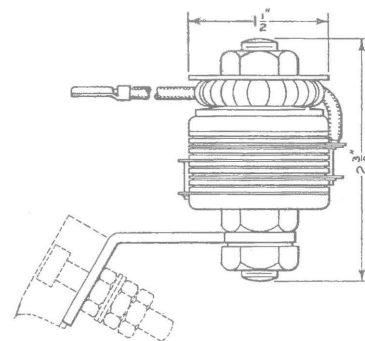


Fig. 1—Side view of snubbing unit

allowing current to pass through it only in one direction, the rectifier is connected so that the motor-operating current cannot pass through it. When, however, the motor circuit is opened, and the semaphore arm falls by gravity, causing the motor armature to rotate in the opposite direction and to operate as a generator, the snubbing

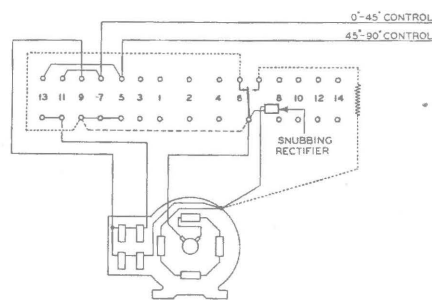
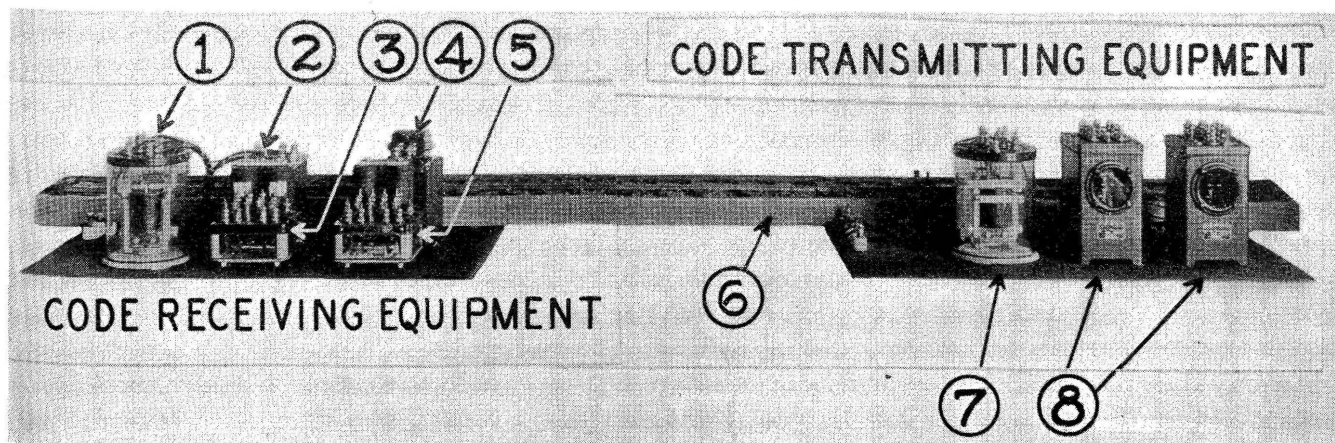


Fig. 2—Circuit for Model-2A signal

circuit is established through the snubbing rectifier, as shown in the circuit diagram, Fig. 2.

The snubbing unit is easily installed



Coding and receiving equipment for one block in steam-road territory

1—Code following track relay, 2—Decoding transformer, 3—H relay, 4—Clear decoding unit, 5—D relay, 6—Track, 7—Code-following repeater relay, 8—D-c. code modulator.