

## Relay Shipment Container

Store Department Atchison, Topeka & Santa Fe, Topeka, Kans.

THE SIGNAL section of the Santa Fe store department has devised a special box for use in shipping Union Style-SLV-12, TV-20 or Model-15 relays. Formerly, an ordinary packing box was used for each shipment and great care was necessary in properly padding the relay so as to prevent damage in transit. These boxes, however, are ready for service at any time and no special wrapping is required. An iron handle is provided on the top of each box to facilitate handling as well as



Padded container protects relays in shipment

making them more suitable for passenger-train shipments.

The box is 10 in. by 11 in. square by 11 in. deep and is made of 1-in. boards. The corner joints are halflap and 1/16-in. angles support each corner, these being secured with screws. As will be noted in the illustration, the lid of the box as well as the bottom are padded with  $\frac{1}{2}$ -in. sponge rubber. Each corner is also fitted with sponge-rubber padding, Contributions Published in This Department are Paid For at a Rate of \$2 to \$8 Each, Depending Upon Their Usefulness, Illustrations, Length, etc. A Subscription to Railway Signaling Will Be Given to Contributors at Their Option in Payment for Kinks Used.

which is protected by upholstery cloth covering.

The hinged lid is locked with a signal department padlock. In accord with the stenciled sign, the box is always returned to Topeka, the system supply point. A number of these boxes were made in the company shops from a design prepared by the signal stockman. Besides saving labor and time, these containers have eliminated relay damage formerly occasioned by rough handling.

## Cleaning Mechanical Locking Bars

By Franklin George Signal Wireman, Canadian Pacific, Weston, Ont.

ANY ONE who has had the job of cleaning the locking bars, dogs and fittings of an interlocking machine which has collected a hardened crust of old oil and dust over a period of years, appreciates the difficulty of the task. Not long ago, when I was cleaning a locking bed, I used oil, gasoline and turpentine in an effort to loosen the dirt, finally having to resort to the tedious method of scraping the individual pieces in order to get them clean. However, after someone suggested using paint remover, we discovered that this is the quickest and easiest method.

When paint remover is used for this purpose it should be heated slightly, so as to cause it to liquefy, and then applied with an ordinary paint brush. After allowing it to stand for a very few minutes, it should be wiped off with a cloth or waste, and the locking will be effectively cleaned. The paint remover must be thoroughly wiped off, because it will cause corrosion if allowed to remain on the locking for any appreciable length of time. After being wiped dry, the locking should be wiped with a cloth that has been saturated with signal oil of a suitable grade.

This method of cleaning locking is thorough and easy. The principal advantages over the scraping method are the savings in time and effort and the avoidance of scratching and roughening the bars and dogs.

## Offset Tool For Crank Arms

By P. A. Starck Sioux City, Iowa

A TOOL similar to that shown in the accompanying sketch will provide a convenient means of offsetting the arms of vertical and horizontal cranks. Although it may be readily applied to the heated arms of cranks held in a vise, its particular field of usefulness is with an oxygen-acetylene torch for offsetting cranks already in place on ties or foundations. In such cases the use of the tool makes it unnecessary to remove the cranks from their supporting stands as must generally be done when other methods are employed.

The tool consists of a handle about 4 ft. in length, which may conveniently be made of 7%-in. octagonal steel, to one end of which is welded a socket of the same material forged to a rectangular form. The opening in the socket should be of such dimensions that it will readily pass over the arm of a standard crank, about 7% in, by 23/4 in.

To offset the arm of a horizontal crank, which is already in place on a



Cranks can be offset without removing from stand

foundation, heat the crank arm at the first point of offset with the acetylene torch. Place the socket of the tool around the crank arm about to the heated portion, with the handle of the tool extending in an upright position. The first bend of the offset may then be formed by pushing or pulling upon the handle of the tool. The tool may then be removed and the bent portion of the arm allowed to cool. After cooling sufficiently, the arm should again be heated at the proper point and the offset completed by a second application of the tool.