PATENT SPECIFICATION

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PROVISIONAL SPECIFICATION.

Improvements relating to Interlocking Apparatus for Railway Points, Signals and the like.

We, LESLIE HURST PETER, WALTER ALLAN PEARCE, both subjects of the King of Great Britain, and THE WESTINGHOUSE BRAKE AND SAXBY SIGNAL COMPANY LIMITED, Manufacturers, a Company incorporated under the Laws of Great Britain, all of 82, York Road, King's Cross, London, England, do hereby declare the nature of this invention to be as follows:—

This invention relates to interlocking apparatus for railway point and signal levers of the kind in which the interlocking action is effected electrically instead of mechanically and has for its object to provide improved apparatus of this character.

According to the principal feature of the invention the point or signal lever is provided with an electrically released lock which is adapted to arrest the movement of the lever near one or other of its extreme positions when the lever has been moved from its extreme position to a position separated from that extreme position by a relatively small fraction only of the total stroke or travel of the lever, or the lock is adapted to retain the lever in the extreme position even when the usual catch handle has been actuated, this initial action being insufficient to effect any change in the setting of the points or signal. The arrival of the lever at this point of arrest or the actuation of the catch handle is arranged to cause the closure of contacts included in the circuit of the electrically released lock, this circuit also including contacts arranged to be closed only when other point or signal levers to be interlocked with the lever are in their appropriate extreme positions.

The initial movement of the lever or catch handle will evidently enable the operator to test whether the desired movement of the lever is permitted by the setting of the other interlocking levers without affecting the circuits controlled by these other levers and the corresponding point setting or signal indications while the actual effective lever movement is only permitted provided that the interlocking conditions are favourable to the desired movement of the lever.

[*Price* 1/-]

It will thus be seen that the circuit of the electrically released lock is normally deenergised and is only completed at the end of the initial movement of the lever or the movement of the catch handle provided that the interlocking levers are all in their full extreme positions so that security against a simultaneous attempt to move two conflicting levers is afforded.

In point and signal interlocking apparatus as generally constructed, the point and signal levers are associated with recessed locking bars with which electric locks are arranged to cooperate, these locks being arranged to be energised so as to release the locking bar and permit movement of the corresponding lever only when conditions are such that the operation of the said lever may be safely permitted and according to a further feature of the present invention the locking elements of the electric locks cooperating with the recesses in the locking bar are arranged to be out of contact with the locking bar while in their effective or locking positions so that shocks transmitted to the locking bar, for example owing to the operation of one electric lock, shall not be transmitted to other electric locks associated with the apparatus and cause their release.

In order that the nature of the invention shall be more readily understood it will now be described, by way of example only, as applied to power operated points and signals provided for controlling the passage of traffic to or from a siding off a main or through line.

As usual the passage of traffic over the points to the main line is controlled by a signal located on the siding in advance of the points and the passage of traffic from the main line to the siding is controlled by a signal located on the main line in advance of the points.

The levers provided for controlling the operating circuits of the two signals are each provided with an electric lock which is adapted to be energised so as to free the lever with which it is associated and permit the signal to be operated when the lever is moved to an intermediate position separated from the extreme position by a