Ericsson Interlocking and Railway Signalling Equipment at the Barcelona Exhibition 1929.

It is now fifteen years since Telefonaktiebolaget L. M. Ericsson in Sweden took up the manufacture of material for electric interlocking and signal plants, its manufacturing capacity for this line of material as well as for completely installed plants having experienced a steady development, while the working out of new systems and the application of the most modern principles for installations of this description have given it a leading position in this line. Also, the company is able to view with satisfaction a steadily growing market for its output of railway safety and signalling devices. Extensive plants of this description have been installed by L. M. Ericsson in Sweden, Norway, Denmark, Finland, Estonia, Russia and Poland.

These plants are of various kinds, a number of them being mentioned in the following.

A. Interlocking plants for railway stations, with electric interlocking machines for the control and manœuvering of points, semaphores, day light-signals, skotch blocks and crossing gates. Points and skotch blocks which are not manœuvered from the interlocking machine but are set locally, may be locked and supervised from the interlocking machine with the aid of electric locking devices. Points, skotch blocks and crossing gates which are manœuvered from the interlocking machine may be locally set and manœuvered with the aid of patented devices without affecting their relation to the interlocking machine. Also, with Ericsson's latest type of central electric interlocking machine all locking and inter-dependence between signal and point levers is electrically accomplished. The traffic and train movements in a station yard are easily supervised by means of the illuminated track plan with repeater lamps for the light signals (mounted in the signal cabin) and the track system consisting of insulated track sections, thereby permitting a much wider area to be covered by a single central interlocking machine.

B. Manual lock-and-block apparatus for station and section blocking.

C. Apparatus for automatic section blocking, by means of which the signals for the different sections are automatically set by the trains and show 'clear' only when the following section is clear.

D. Automatic signal plants for grade crossings.

E. Electric crossing gate installations.

F. Equipment for the electric locking of points controled by a mechanical interlocking machine, for the purpose of preventing the setting of the points during the passing of a train.

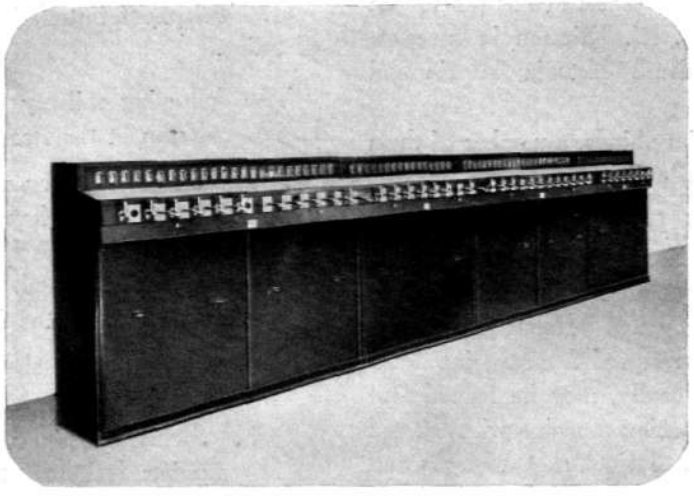
G. Telephone installations for denoting the arrival of trains.

The following railway apparatus is exhibited by L. M. Ericsson at the Barcelona exhibition.

1. Electric interlocking machine with signal, point and point locking levers. All locking and interdependent functions between the levers are electrically accomplished. The following apparatus are connected to the interlocking machine.
   a. Day light-signal with one yellow and two red lights.
   b. Switch machine with D. C. motor, enclosed points lock and tongue control.
   c. Electric locking device with enclosed point circuit breaker for ascertaining the position of the point.
2. Lock-and-block apparatus for station and section blocking in manual plants.
3. Model of a warning signal installation for a grade crossing. At the crossing and on both sides of the same, the track is divided into insulated sections. When an approaching train enters an insulated track section, a warning signal (intermittent red light) is displayed towards the road and powerful bells ring. The signals cease automatically when the train has passed by the crossing. The signals are controled by relays connected to the insulated track sections,

while the intermittent light signals are obtained by means of a light flashing instrument.

4. Electric points locking device for points with central control. The locking device is mechanically conected to the point and electrically to an insulated track section in front of the point. The presence of a train on this track section prevents the setting of the point. The necessary current is obtained from a dry cell placed in the points locking device, thus making the whole arrangement purely local.
5. Point circuit breaker for verifying the true position of the tongue.
6. Mercury rail contact for closing a circuit during passage of train.
7. Terminal boxes for connecting the cable conductors to the rails.
8. Cable distribution box with terminals, for the branching of the main cable to eight smaller cables.
9. Cable terminal box with forty terminals.
10. Wood and fibre splices for insulated rail joints.
11. Contact splices of various kinds, for rail joints as well as for connecting wires to rails.
12. Electric arm coupling for mechanically operated semaphore.
13. Arm contact for semaphore.
14. Lantern hoist contact for semaphore with electric lighting.
15. Repeater for electric supervision.
16. Relay with visual indicator.
17. Telephone for signalling train arrivals.
18. Photographs of installations made by L. M. Ericsson.



Stockholm 1929. Kurt Lindberg, Boktryckeriaktiebolag.