

swings over the desk, clearing all papers or other obstacles upon it.

A familiar type of transmitter arm to be met with on the Canadian Pacific Railway is the Van Aiken arm (Fig. 8), which derives its name from its inventor, Mr. S. L. Van Aiken, of the New York Central. The arm is arranged with an adjustable mouthpiece on the transmitter and an adjustable receiver to allow for the different sizes and shapes of faces. The switch connecting the set to the line is operated when the arm is moved to the position in which it is used by the operator. A foot switch is used to close the transmitter battery in place of a key switch is generally used on the previous mentioned arms.

There are still a great many different types of apparatus similar to these that could be described, but the space allowed on one paper will not permit of it. Each piece of apparatus has been designed to meet the special conditions which exist and change on each road, and they are so designed and arranged that they permit the operator to use both hands in order that he may write his orders and messages with perfect ease.

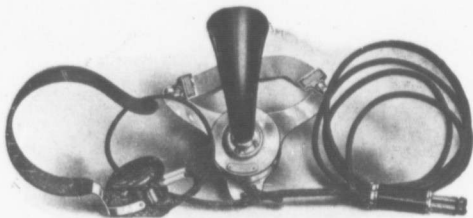


FIG. 9—DESPATCHER'S TELEPHONE EQUIPMENT.

The despatcher's equipment is practically the same on all railroads and consists of a chest transmitter supported by a band passing round the despatcher's neck, and a head receiver (Fig. 9). This apparatus is not unlike the telephone equipment worn by the operators in central exchanges, and it is connected to the circuit by means of a flexible cord terminating in a plug, which when inserted in a jack installed on the desk completes the line connection. This arrangement is provided the despatcher so that he may be able to move around at will and manipulate his train sheet. As the despatcher is listening in on the line continuously, apparatus light and easy to wear is provided for him.

When a standard telephone set is used at each end of the line, commercial transmission is said to be equal to thirty miles of No. 19 B. & S. cable, and translating this into open wire,