## TELEPHONE TRAIN DESPATCHING.

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From the wonderful development, which has taken place in the last few years in the designing of electrical appliances and the application of such equipment to everyday use, it is not at all strange that the field of the telephone has been extended to include the directing of train movements on steam roads. Prior to October, 1907, the telegraph was used exclusively for this service on the larger and more important of the trunk line railways. On the other hand, it is somewhat surprising that the value of the telephone for use in despatching trains was not generally acknowledged at an earlier date as several of the shorter roads have for a number of years used the telephone for handling traffic with very satisfactory results.

The New Orleans and Northwestern, as early as 1883, used the telephone for operating trains. This service was rendered over a grounded iron wire about one hundred miles long with the ordinary magneto telephones as used at that time, and without the aid of the selector, which mechanism has made possible selective calling on long and heavily-loaded railway

telephone lines.

Some of the other roads, which used the telephone for controlling train movements, previous to 1907, are: Huntingdon and Broad Top Mountain Railroad & Coal Co. since 1883 over a line forty-five miles long; New York and Pennsylvania Railway since 1896 over a line fifty-six miles long; Lake Erie Alliance & Wheeling for some years have been operating by telephone a single track line about one hundred miles in length.

On the low grade division of the Pennsylvania Railroad between Columbia and Parkersburg, where the traffic was probably much heavier than any of the roads mentioned above, the telephone in connection with block signals has been used since 1906, the average number of trains per day being ninety-five, and consisting of 4,800 cars, carrying 280,000 tons.

The telephone equipment used in all of these installations was far inferior to that at present used. The great improvements which have been made in the last two or three years in the apparatus together with the new apparatus designed to