

INSTRUCTIONS TO TRANSIT-MEN.

The object of the survey about to be undertaken is to secure a continuous chain of instrumental measurements through the country, as near as possible to the shortest and most practicable route for railway construction. The information obtained by means of the survey, should be fully and carefully put on record in such a way, that no difficulty will be experienced here after by any one in understanding it perfectly. It is important therefore, that uniformity of system in making measurements and preserving records should be adopted throughout, and with that object in view, the undersigned requests attention to the following:—

1. The first entry in the "Field Book" each morning should be the date, and the name of the person acting as "Transit-man."

2. The Transit-man is requested to make full notes as he proceeds, of the character of the country, lakes, timber, &c., on both sides of the line.

3. All field notes must be clearly and distinctly made in pencil on the spot, no additional notes should be entered with the original notes after the day on which the latter are written. Field notes should not be inked or changed in any way; copies of them may be made in ink and reduced levels entered in ink.

4. All plans and profiles must be plotted so that the end of the survey line (whatever may be direction of local sinuosities) nearest the Pacific Ocean shall be at the left hand of the paper, and the end of the survey line nearest the Atlantic at the right hand.

5. Horizontal scales must be 400 feet to an inch; vertical scales 30 feet to an inch.

6. The Transit is to be used, because no reliance can be placed on the compass in passing through a mineral region.

7. In certain cases, however, where local magnetic attraction does not exist, the Compass may be substituted for the Transit.