placed. The new wall-plate being in position, the excavation necessary for each of its imposed arches was made separately, each being erected, blocked and partially packed before the excavation for the succeeding one was commenced. The last arch being up, the heading was again driven forward for a new wall-plate. Side drifting to place the wall-plates, on which the arches were then built as in the method just described, was tried, but was almost immediately abandoned as more costly than that method.

It is only just to remark that, owing to the great care thus taken by the contractors in all doubtful places, neither fatality nor accidental interruption occurred during the progress of the work.

TIMBER.

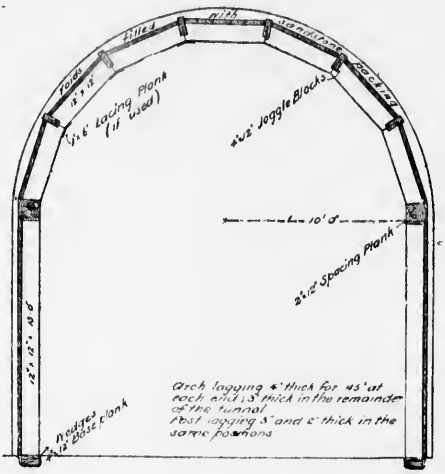

FIG 2 SECTION OF TIMBERING

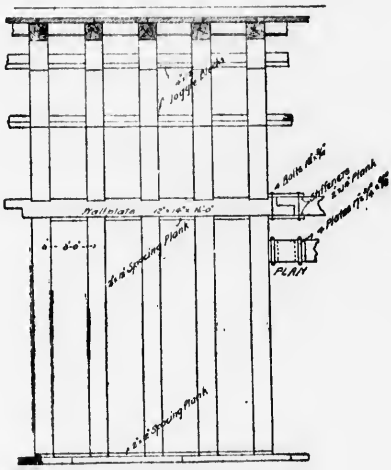

FIG 3 ELEVATION OF TIMBERING

The system of timbering is shown in Figs. 2 and 3. All timber was of white oak, and was carefully inspected; all sticks had to be in a thoroughly sound condition, and arch segments were rejected if they showed any sign of longitudinal cracking or splitting. The system of erection was as follows:—