

(*Paper No. 2074.*)

“Standard Engine Shed of the London and North  
Western Railway Company.”

By FRANCIS WILLIAM WEBB, M. Inst. C.E.

THE standard type of locomotive-engine shed designed by the Author, and which has been adopted by the London and North-Western Railway Company since 1874, and erected at most of their principal stations, is shown in Plate 4. This gives particulars of two large sheds, with repairing-shops between, as erected at Rugby. Each shed is capable of holding sixty engines and tenders, and both complete with the necessary offices, which are arranged at the back of each shed. Attention has been paid, in designing the sheds, to have all the parts made to template, so that no fitting is required on the ground. The roof is of the ordinary weaving-shed, or “saw-tooth” pattern, and the ridges run at right angles to the rails. The roof forms a series of 15-foot spans, while the beams, from which each bay springs, are supported at intervals of 25 feet 6 inches by cast-iron columns (which are also used as down-spouts for rain-water), the space between the columns being sufficiently wide for two lines of rails. Over each line of rails, and extending from end to end of the shed, are wooden partitions, sufficiently wide apart to admit the engine-chimneys between them, and projecting down to within 12 feet 6 inches of the rail-level. These partitions form a kind of inverted trough for collecting the smoke from the engine-chimneys, and the smoke is discharged through a short wooden chimney at the apex of the roof of each span.

The system of glazing adopted is simple and effective, entirely doing away with the necessity of putty. The sash-bars are dove-tailed on each side to receive the glass, which is in one piece, and one side is cut deeper than the other, so that the glass can be put in sideways, while a stop-piece is fixed in the deeper grove at the top of the bar, to keep it from moving laterally when in its normal position. A piece of bent galvanized iron, carried on the bottom rail, supports the glass when in position. The pits are

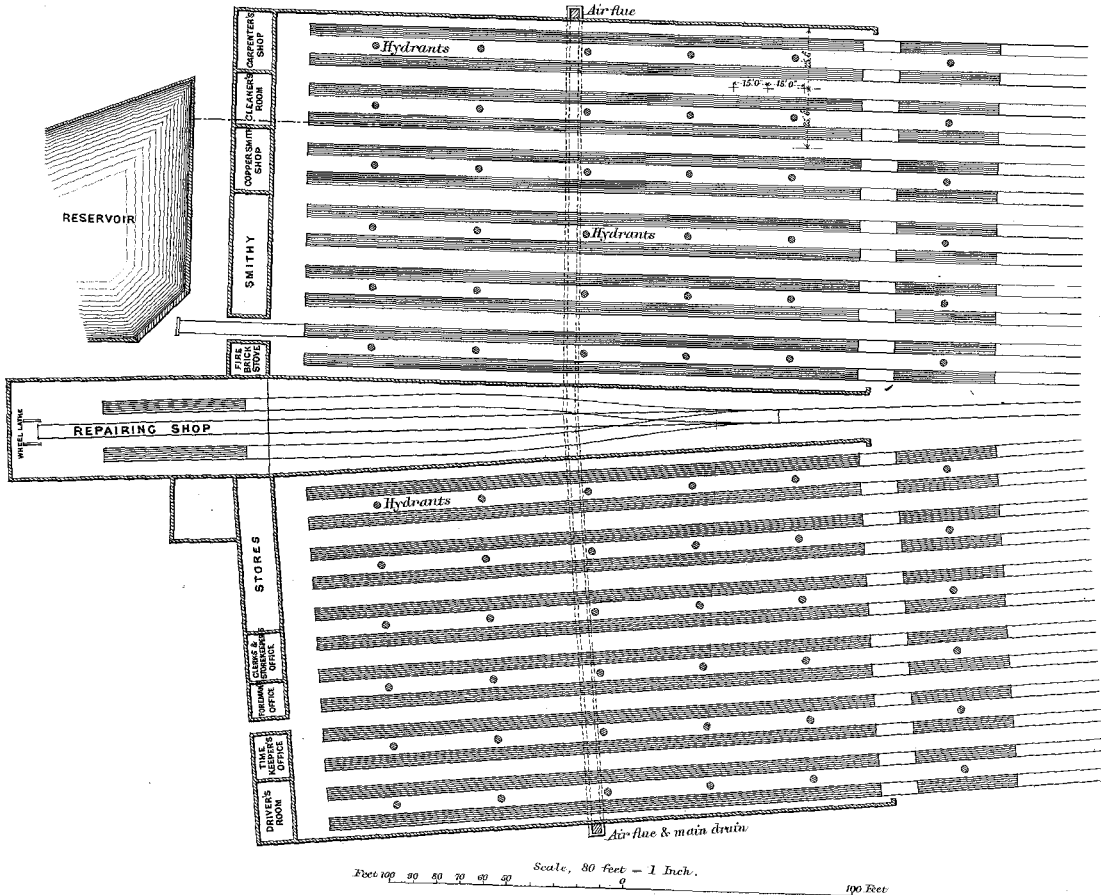
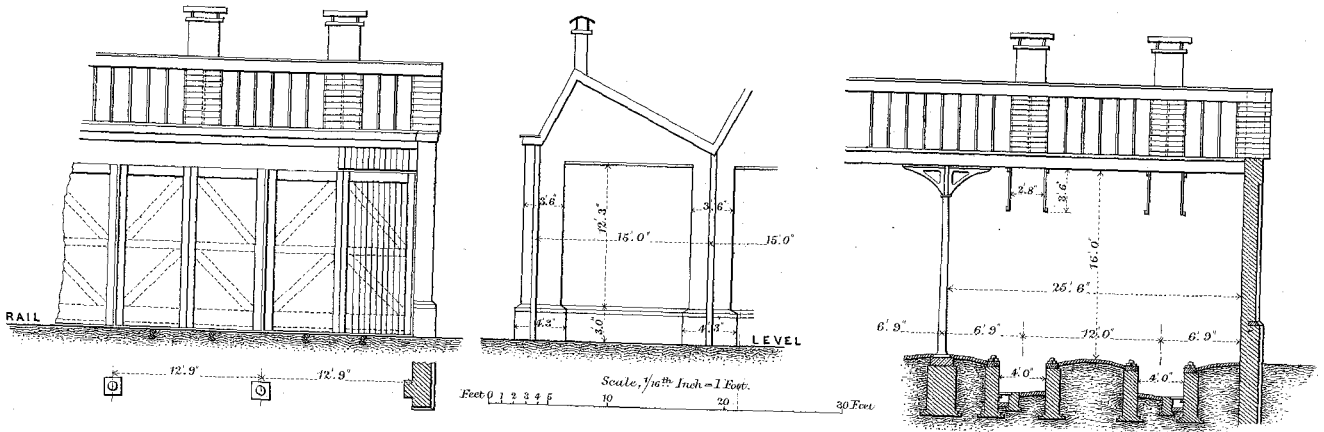
paved with blue bricks, and their bottoms made to slope to one side, along which the drain is carried, so that water cannot accumulate in the centre. The floor of the shed between the pits is also paved with blue bricks, and made to slope towards the rails, where a number of small grids are placed to admit of the passage of the water into the pits when an engine is being washed out.

It will be seen that the system of construction here employed is one that is suitable to any desired extension, either laterally or longitudinally, and is well adapted for the purpose for which it was designed, giving plenty of light and ventilation, while at the same time it is capable of being erected at a cost much below that of such structures generally. Another advantage is that this type of shed is much warmer in the winter than those with the ordinary louvre ventilators, so that no fires are necessary to prevent the water from freezing in the engines.

This Paper is accompanied by a tracing from which Plate 4 has been engraved.

# LOCOMOTIVE ENGINE SHED

AT RUGBY, L. & N. W. RAILWAY.



F. W. WEBB, DELT

Minutes of Proceedings of The Institution of Civil Engineers, Vol. LXXX, Session 1864-65, Part II.

THOS KELL & SON, LITH. LONDON.