

this fact, as an additional precaution, after the concrete has been levelled off, or rather crowned to the usual street regulations, and had time to harden, it is well to coat the whole surface of concrete about an inch thick with asphalt mixed with fine ashes, to add to its body, flashing it up at least six inches against all projections where it would be possible for water to trace through and get at the iron of the flooring system. On the surface thus prepared, the roadway, gutters, and sidewalks are laid as in the ordinary street, only with greater care. A proper provision for drainage must not be overlooked, and frequent spouts ought to be introduced to carry the water rapidly away, clear of the trusses. While Macadam and stone-block pavements have been used for bridge-platforms, they are enormously heavy as compared with wood, and, while more expensive in themselves than a wood-block pavement, add very largely to the general cost of all the iron-work, owing to their excessive weight. Under most any circumstances, wood blocks are the best for bridges, and if they have a good, uniform bottom to rest upon, the conditions that have caused the failure of the wood-block pavements in most of our cities are removed. Blocks four inches deep will answer all requirements for ordinary traffic, and a depth of six inches the heaviest. The blocks should not rest immediately upon the prepared floor surface, but on tarred, well-seasoned plank, one inch thick, with a thin layer of fine sand interposed between the asphalt and the plank.

BEAM-BRIDGES.—Special notice is directed to the