

the chord-link ; each tie is in two parts, the adjustment being made with a sleeve nut.

The floor beams, of which there are two in each panel, are formed of two pieces of pine, each six by fifteen inches, placed side by side and trussed ; they are placed above the lower chord and rest upon cast-iron plates with raised centres, by which the weight is distributed equally upon the several links. Owing to the skew of the bridge, which is reduced to six feet three inches in the superstructure, the two floor beams which come in the same panel on one truss are divided on the other. The floor stringers, running lengthwise with the bridge, are seven in number, those under the rails being each formed of two pieces of seven by fourteen inch pine ; on these are laid two courses of one and a quarter inch matched flooring placed diagonally, the planks of the second course crossing those of the first, three layers of tarred paper, heavily coated with fresh roofing pitch, being placed between the two ; on these is laid a Nicholson pavement four inches thick, the whole being covered with sand and pitch in much the usual manner. The rail is of the street rail pattern, weighing 68 pounds to the yard, and made at the Palo Alto Rolling Mill, at Pottsville, Pa. ; it is laid on a longitudinal strip of oak resting upon the pine flooring. The floor is given a slight arch, and is drained into gutters on each side, which discharge through cast-iron scuppers, placed at such intervals as to avoid wetting the floor beams.

A foot-walk is placed upon the west side of the bridge, supported by brackets which are bolted to the floor beams ; the floor is made of two inch plank and a substantial wooden hand-rail is placed on the outside. The top chord is protected from the weather by a covering of pine boards, finished with a narrow overhanging cornice ornamented with brackets. The whole superstructure, including the iron parts, is painted with three heavy coats of a mixture of oil and crushed iron ore, manufactured by the Iron-Clad Paint Company, Cleveland, Ohio ; all cracks and weather checks in the timber having been stopped with putty, after putting on the first coat. The wooden keys and all joint-bearings were painted with the same composition before putting the truss together, and the closed covering is covered with a roofing paper made by coating thick brown paper with a coarse variety of this paint.