Bill of Materials for Bridge over Harford Run.

CAST-IRON.

Each truss contains,

32 lineal feet of upper chord cross-section $6\frac{3}{4}$ square inches $= 2592$ cubic in.

30 horizontal counter-braces, each 49 inches long, cross-sections $1\frac{1}{8}$ inches $= 1654$ "

8 posts over abutments, 36 inches long, cross-sections $1\frac{1}{2}$ inches $= 324$ "

22 angle-blocks, each 12 cubic inches $= 264$ "

2 rollers at ends of truss, 3 inches in diameter, 8 inches long $= 112$ "

Total cubic inches of cast-iron in one truss $= 4946$ "

The weight of which at $\frac{1}{4}$ pound per cubic inch is $= 1237$ pounds.

MALLEABLE IRON IN ONE TRUSS.

32 lineal feet of top chords, cross-section 3 inches $= 1152$ cubic in.

32 lineal feet of bottom chords, cross-section 6 inches $= 2304$ cubic in

13 plates under lower chords $7\frac{1}{2} \times 6 \times \frac{3}{4}$ $= 439$ "

26 suspension rods, $1\frac{1}{4}$ inches diameter, 45 inches long $= 1440$ "

52 nuts for suspension rods, $2 \times 2 \times 1$ $= 208$ "

Total malleable iron in one truss $= 5543$ "

Weight in pounds $= 1386$ pounds.

For the railroad track are required,

32 bolts, 40 inches long, $\frac{3}{4}$ inch diameter, to suspend the longitudinal timbers $= 387$ cubic in

22 nuts for same, $\frac{2}{3} \times 1\frac{1}{2} \times 1\frac{1}{2}$ $= 37$ "

424 "

Weight 106 pounds.