(No Model.

M. J. L. TOWLER.

CONSTRUCTION OF DRAW BRIDGES.

No. 376,972. Patented Jan. 24, 1888.

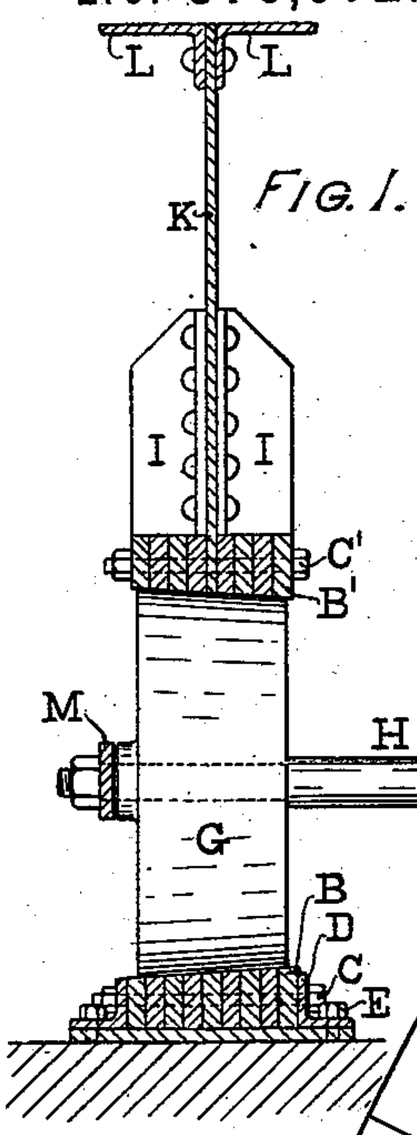

FIG. 1.

FIG. 2.

FIG. 3.

Witnesses
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MAXIMILIAN J. L. TOWLER, OF DETROIT, MICHIGAN.

CONSTRUCTION OF DRAW-BRIDGES.

SPECIFICATION forming part of Letters Patent No. 376,972, dated January 24, 1888.

Application filed October 25, 1887. Serial No. 253,344. (No model.)

To all whom it may concern:

Be it known that I, MAXIMILIAN J. L. TOWLER, of Detroit, in the county of Wayne and State of Michigan, have invented a new and useful Improvement in Construction of Draw-Bridges, of which the following is a specification.

My invention consists in an improvement in the construction of draw-bridges, hereinafter fully described and claimed.

Figure 1 is a vertical section through the drum and track. Fig. 2 is a plan of a part of the lower track, and Fig. 3 is a side elevation of Fig. 1.

In the manufacture of draw-bridges the draw is swung upon a central drum, to the lower surface of which is fastened a track, and this track rests upon rollers, which are supported by a track carried by a bed plate resting upon mason-work. As usually constructed, these tracks are made of solid pieces of iron in sections, planed to the proper bevel, and the upper track is secured to angle-irons on the lower part of the drum by tap-bolts, a construction in which it is very difficult to make the parts fit accurately and closely together.

My invention relates to an improvement in the tracks, and in the connection of the drum with the upper track, and is described as follows:

A represents a bed-plate made in sections and secured to mason-work by the anchor-bolts F. Upon this bed-plate A, I lay the lower track, which is composed of a number of strips of iron, B, bent to the proper form, of varying widths to give the proper bevel to the track, as shown in Fig. 1, and these strips B are laid so as to break joints, as shown in Fig. 2, whereby a continuous smooth track is afforded, which is not the case with the old form of construction. The strips B, which form the track, are secured together at intervals by bolts C, and are secured to the bed-plate A by angle-irons D, which are secured to the strips by some of the bolts C, which hold the strips together and to the bed-plate A by tap-bolts E.

G represents a roller of the usual form, journaled on the radial bar H, and M represents the usual roller-band, which spaces the rollers G.

K represents the web-plate of the drum, to the top of which is riveted the angle-irons L L, and the drum supports the bridge in any desired manner.

The upper track is made up of iron strips B', secured together by bolts C', laid to break joints, and of different widths to give the track the proper bevel, precisely as before described, from the lower track. Instead of being bolted to angle-irons D, fastened to the lower end of the web-plate K, I carry the web-plate K down through the upper track, as shown in Fig. 1, and secure the track to the web by the bolts C'.

I I represent angle-brackets riveted to web-plate K, and bearing upon the upper surface of the strips B', whereby accurate fitting of the parts is made easy, and the surface of the upper track is at all points in position to properly bear on roller G. By this construction I obviate the jar caused by the joints in the track in the old form of construction, and render it easy to attach the upper track to the web, so that it will bear true upon the roller.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A track for draw-bridge turn-tables, made of narrow strips of varying widths laid to break joints and bolted together, substantially as shown and described.

2. A track for a draw-bridge turn-table, consisting of strips B, bolted together by bolts C and secured to the bed-plate by angle-irons D, substantially as shown and described.

3. In combination with the web of a draw-braw-bridge turn-table, a track consisting of a series of narrow strips of iron of varying widths secured to the web by bolts, which pass through said strips and through said web, substantially as shown and described.

4. In combination with the web-plate K, the strips B', bolts C', and angle-brackets I, substantially as shown and described.

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Witnesses:
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