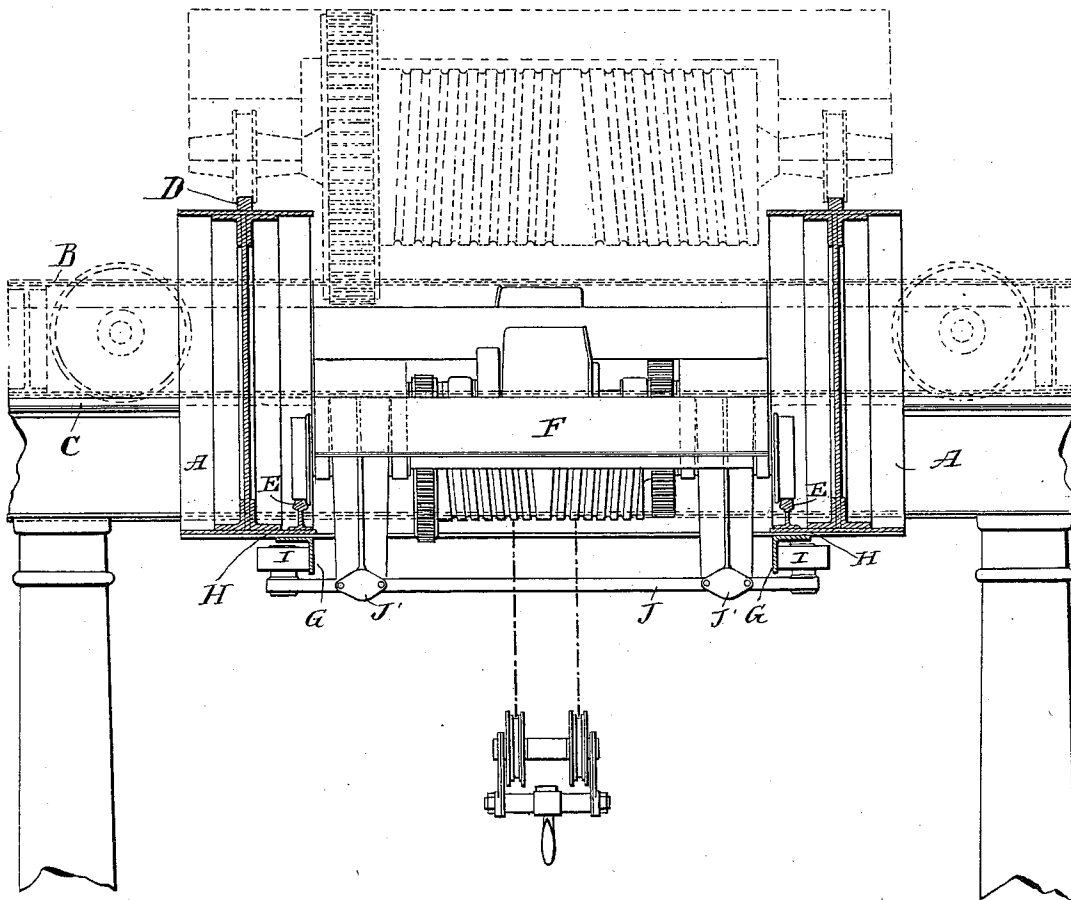


(No Model.)

W. H. MORGAN.
OVERHEAD TRAVELING CRANE.

No. 579,718.

Patented Mar. 30, 1897.



Witnesses

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WILLIAM HENRY MORGAN, OF ALLIANCE, OHIO.

OVERHEAD TRAVELING CRANE.

SPECIFICATION forming part of Letters Patent No. 579,718, dated March 30, 1897.

Application filed June 18, 1896. Serial No. 596,092. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HENRY MORGAN, of Alliance, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Overhead Traveling Cranes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in overhead traveling cranes, and more particularly to that class of cranes wherein a trolley traverses a track supported on the inner lower flanges of the bridge, the object of the invention being to provide devices for preventing the lower flanges from collapsing under the weight, the girders from spreading, and the trolley from leaving the track.

With these ends in view my invention consists in parts and combinations of parts, as will be more fully described, and pointed out in the claims.

The accompanying drawing represents a transverse section of a traveling bridge and an end elevation of a trolley, my improvements being attached to the parts.

A represents the bridge-girders, secured at their ends to carriages, one of which is shown at B. These end carriages travel on a stationary trackway running lengthwise the shop, one line of rail of which is shown at C. The girders A are provided on their upper surfaces with a trackway D, on which one or more trolleys travel lengthwise the bridge, and are also provided on the upper faces of the lower inner flanges with the trackway E, upon which one or more trolleys F travel lengthwise the bridge. As these trolleys travel lengthwise the bridge and carry hoisting-chains or other elevating devices it follows that the space between the girders must be clear, so as to afford an unobstructed path lengthwise the bridge below the hoisting-drum of the trolley for the hoisting-chains, and as the trolley F is supported on the lower flanges of the girders there is a tendency of the girders to bulge out under the weight of the trolley and its load. To overcome this tendency and to strengthen and support the

flanges and also prevent the trolley from jumping the track, I have provided the lower flanges on their under faces with the L-shaped angle-irons G. These irons are secured to the under side of the flanges H and necessarily operate as strengthening-braces for the flanges. The primary object of these angle-irons, however, is to form rails or tracks for the flat-faced wheels I, mounted on vertical bearings carried by the bars J. These bars J are secured to supports J', depending from the trolley, and I prefer to locate one bar near each end of the trolley. The wheels I, mounted on the bars, rest against and move in contact with the outer faces of the angle-irons, and as they are supported on parts carried by the trolley it follows that they travel with the trolley and constitute movable braces, which absolutely prevent the girders from spreading and also prevent the trolley leaving the track.

It is evident that many slight changes might be resorted to without departing from the spirit and scope of my invention. Hence I would have it understood that I do not wish to restrict myself to the exact arrangement of parts herein shown and described; but,

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In an overhead traveling crane, the combination with a traveling bridge, of a traveling trolley thereon and rollers mounted on vertical bearings carried by said trolley and bearing against the outer faces of rails secured to the under side of the bridge, substantially as set forth.

2. In an overhead traveling crane the combination with a traveling bridge, of a traveling trolley thereon and rollers mounted on vertical bearings carried by said trolley and bearing against the outer faces of angle-irons secured to the under side of the bridge-girders, substantially as set forth.

3. In an overhead traveling crane, the combination with a traveling bridge, having a trackway formed on the lower inner flanges thereof and angle-irons secured to under face of each bridge-girder, of a traveling trolley adapted to travel on said trackway, and rollers

ers mounted on vertical bearings carried by the trolley and adapted to bear against the outer faces of the angle-irons.

4. In an overhead traveling crane the combination with a traveling bridge comprising
5 girders and end carriages, a trackway formed by rails secured to the lower inner flanges of the girders, and angle-irons secured to the lower faces of the girders of a trolley mounted
10 on the rails, a bar secured to brackets depending from the trolley and horizontally-disposed

wheels mounted on bearings carried by the bar and bearing against the outer faces of the angle-irons, substantially as set forth.

In testimony whereof I have signed this
specification in the presence of two subscribing witnesses. 15

WILLIAM HENRY MORGAN.

Witnesses:

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