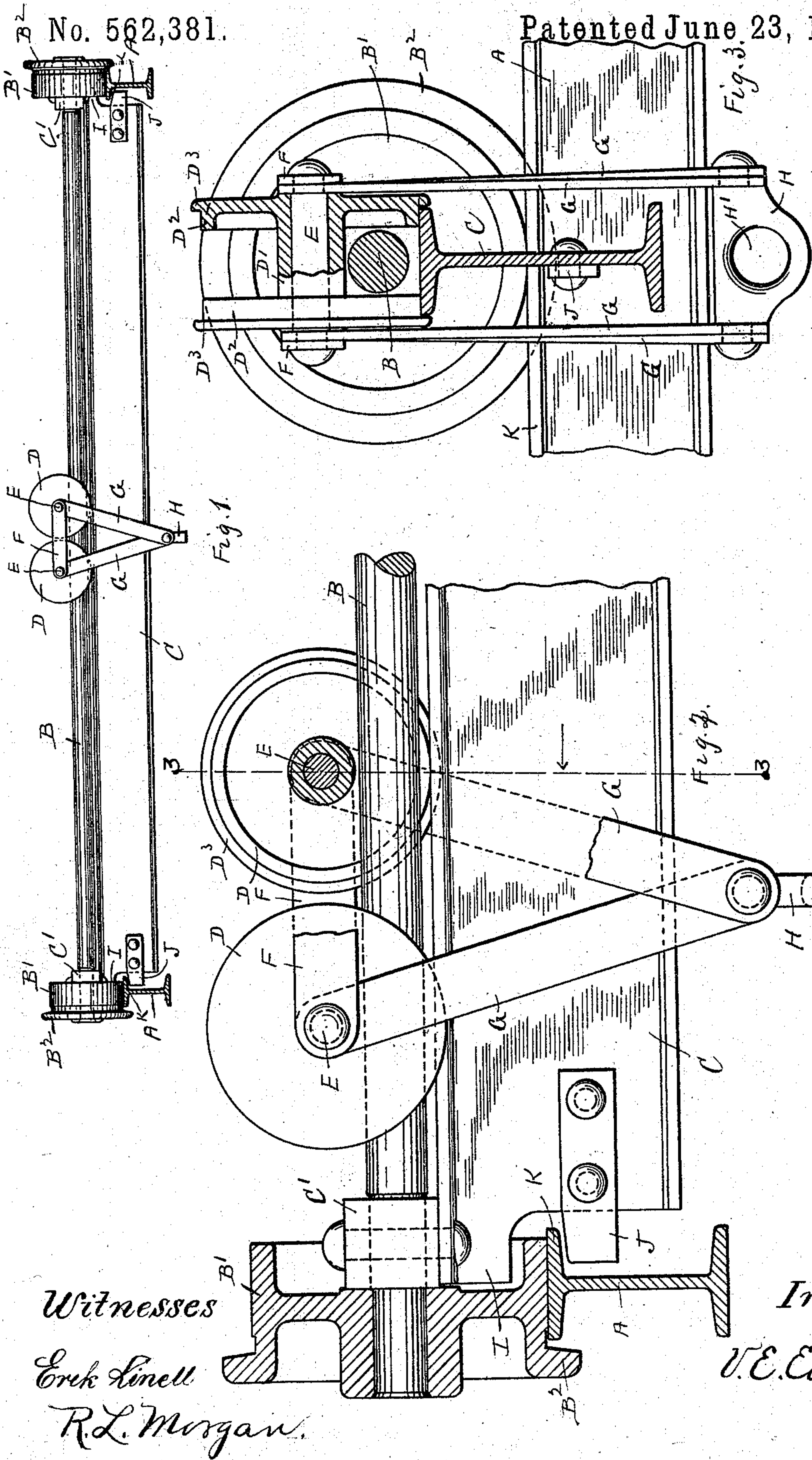


(No Model.)

V. E. EDWARDS.
TRAVELING CRANE.

No. 562,381.

Patented June 23, 1896.



Witnesses
Erik Linell
R. L. Morgan.

Inventor
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UNITED STATES PATENT OFFICE.

VICTOR E. EDWARDS, OF WORCESTER, MASSACHUSETTS, ASSIGNOR TO THE MORGAN CONSTRUCTION COMPANY, OF SAME PLACE.

TRAVELING CRANE.

SPECIFICATION forming part of Letters Patent No. 562,381, dated June 23, 1896.

Application filed July 7, 1894. Serial No. 516,849. (No model.)

To all whom it may concern:

Be it known that I, VICTOR E. EDWARDS, a citizen of the United States, residing at Worcester, in the county of Worcester and State of Massachusetts, have invented a new and useful Improvement in Traveling Cranes, of which the following is a specification, reference being had to the accompanying drawings, forming a part of the same, in which—

Figure 1 represents a side view of a traveling crane embodying my invention. Fig. 2 is a side view of one end of the traveling crane on a larger scale than shown in Fig. 1, portions being shown in sectional view; and Fig. 3 is a vertical sectional view on line 3 3, Fig. 2.

Similar letters refer to similar parts in the different views.

In the drawings, A A denote a pair of parallel rails upon which a truck is supported consisting of the shaft B, having the flanged wheels B' B' attached to the ends of the shaft so the wheels and shaft will turn together. The wheels B' B' are provided with flanges B² B², placed upon the outside of the rails A A to hold the truck from lateral motion. Suspended from the shaft B is a beam or bridge C, which is attached at its ends to blocks C' C', journaled upon the shaft B so the bridge C will be capable of a swinging motion.

Mounted upon the bridge C are the trolley-wheels D D, each of the trolley-wheels being made in the form of a spool having a body D' and heads D² D², provided with flanges D³ D³, the trolleys D being adapted to run upon the upper edge of the bridge C and be held from lateral movement, as represented in Fig. 2. Each of the trolleys D rotates about a spindle E, the two spindles E E being connected at their opposite ends by links F F and from the opposite ends of the spindles E E depend links G G, united at their lower ends by a yoke H, provided with a hole H', from which the load is suspended. The movement of the load in one direction is effected by the rolling of the truck along the rails A A and in a direction at right angles therewith by the movement of the trolleys along the bridge C.

While my improved crane comprises, like other cranes of its class, a pair of parallel

rails, a truck moving along the rails, a bridge carried by the truck and a trolley from which the load is suspended capable of moving along the bridge, the details of construction are entirely different from similar traveling cranes now in common use.

The truck embodied in my improved crane consists of a single shaft with a pair of wheels attached thereto, and the bridge consists of a single beam on the shaft of the truck and suspended beneath it so as to be capable of a slight swinging motion about the axis of the shaft.

The beam C, forming the bridge, projects at I I over the rails A A, so the rails will catch and support the bridge in case it is detached from the shaft B, and a clip J is riveted to each end of the bridge and projects beneath the upper flange K of the rails to prevent the bridge and truck from being lifted off the rails and the entire upper surface of the flanged rail A is utilized as the track for the truck-wheels B' by extending the face of the truck-wheels over the projecting ends of the bridge, as shown at I, Fig. 2. The flanges B² of the truck-wheels are placed outside the rails in order that the flange of the advancing wheel will be brought in contact with the edge of the rail whenever one end of the shaft moves in advance of the opposite end, the contact of the flange of the advancing wheel serving to check advance movement of that end of the truck and bring the shaft B at right angles with the rails A A.

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

1. In a traveling crane, the combination of a pair of rails, a shaft, truck-wheels carried by the end of said shaft, a pair of blocks mounted to swing on said shaft, a bridge consisting of a single beam attached near its ends to said blocks, whereby said bridge is free to swing on said shaft and a trolley adapted to run on said bridge, substantially as described.

2. In a traveling crane, the combination of a pair of rails, a shaft, truck-wheels carried by the ends of said shafts, a pair of blocks mounted to swing on said shaft, a bridge consisting of a single beam attached near its ends to said blocks, whereby said bridge is free to swing on said shaft, trolley consisting of a

pair of spindles, spool-shaped wheels held on said spindles and supported on said bridge, links connecting said spindles, a yoke suspended beneath said bridge and links connecting said yoke with the ends of each of
5 said spindles, whereby said yoke is held from swinging in the direction of said bridge, substantially as described.

3. In a traveling crane, the combination of
10 rails A, a truck adapted to run on said rails, a bridge suspended from said truck and between said rails, said bridge having the projecting ends I, I overlapping said rails, substantially as described.

15 4. In a traveling crane, the combination of a pair of rails A, A, provided with flanges K, K, a truck arranged to run on said rails, a

bridge suspended beneath said truck and between said rails and clips J, J attached to the ends of said bridge and projecting under
20 the flanges of said rails, substantially as described.

5. In a traveling crane, the combination with a pair of rails, a truck provided with wheels at its opposite ends adapted to run on
25 said rails, and a bridge supported by said truck with its ends overlapping said rails and entering the body of said wheels, substantially as described.

Dated this 3d day of July, 1894.

VICTOR E. EDWARDS.

Witnesses:

RUFUS B. FOWLER,
EMMA KESTER.