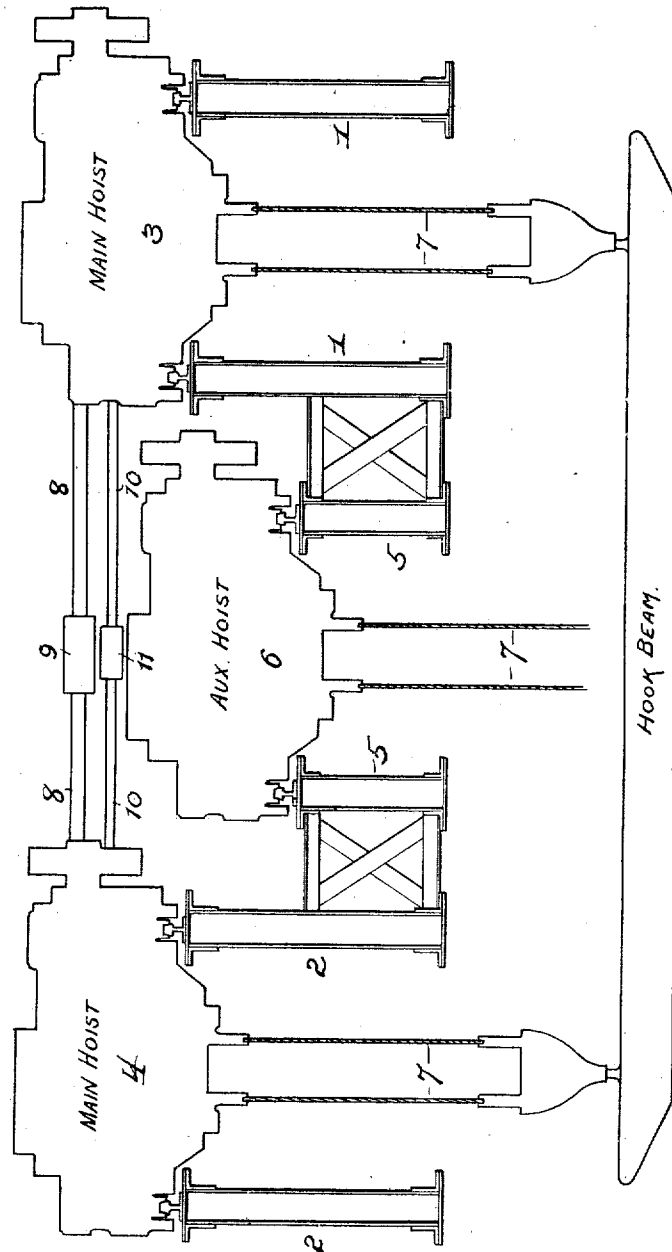


No. 844,424.

PATENTED FEB. 19, 1907.

C. L. TAYLOR.  
OVERHEAD TRAVELING CRANE.  
APPLICATION FILED JUNE 7, 1906.



WITNESSES

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# UNITED STATES PATENT OFFICE.

CLARENCE L. TAYLOR, OF ALLIANCE, OHIO, ASSIGNOR TO THE MORGAN  
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## OVERHEAD TRAVELING CRANE.

No. 844,424.

Specification of Letters Patent.

Patented Feb. 19, 1907.

Application filed June 7, 1906. Serial No. 320,620.

*To all whom it may concern:*

Be it known that I, CLARENCE L. TAYLOR, 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 it consists, broadly, in a crane carrying three trolleys, each traveling on its own trackway, with means for coupling the hoist and travel gearing of the two main trolleys, whereby all the trolleys may be used independently of each other or in conjunction to lift a load equal to the total capacity of them all.

My invention further consists in the parts and combinations of parts, as will be more fully described, and pointed out in the claims.

The accompanying drawing is a view in cross-section of the bridge of a crane, showing diagrammatically the outlines of the three trolleys.

The bridge is composed of six parallel girders arranged in pairs, the two outer pairs 1 and 2 carrying main hoist-trolleys 3 and 4 and the inner pair 5 carrying the auxiliary trolley 6, the girders of the inner pair being braced, as shown, to the inner girders of each outer pair. These six girders are supported at their ends in the usual and well-known manner on end carriages, and the bridge thus constructed is propelled by the usual motor and gearing.

The girders 1 and 2, supporting the main hoist-trolleys 3 and 4, are located with their top surfaces in the same horizontal plane, while the tops of the girders 5, on which the auxiliary trolley travels, are in a plane considerably below the main girders, so as to permit the auxiliary trolley to travel back and forth throughout the length of the bridge without interference or contacting with the coupling devices connecting the travel and hoist mechanisms of the main trolleys.

Each trolley has one or more hoist-drums, with a motor and gearing therefor, and each is also provided with a travel-motor, and when uncoupled each main trolley may travel back and forth on the bridge inde-

pendently of the other, and each may be used for hoisting independently of the other.

The hoist-chains 7, carried by the several hoist-drums on the trolleys, depend between the girders carrying its respective trolley, and projecting from each main trolley inwardly over the auxiliary trolley are the shafts 8, which latter are geared up to the hoist mechanism or are continuations of shafts of such hoist mechanisms, the two shafts 8 being detachably connected by the coupling 9.

Projecting from each main trolley inwardly over the auxiliary trolley are the shafts 10, which latter are geared to the travel mechanisms of their respective trolleys or are continuations of shafts of such travel mechanism, the two shafts 10 being detach-

ably connected by the coupling 11. By disconnecting the couplings connecting shafts 8 and 10 the trolleys 3 and 4 may be actuated independently of each other, and when coupled as shown both main trolleys may be propelled by the motor on one or both trolleys, and the hoist-drums may be actuated by one or both hoist-motors.

When coupled up, the ropes or chains from the main girders may support a ladle-carrying beam or hook-beam, as shown, and, if desired, the middle trolley may be coupled up to the same beam.

When the main trolleys are so coupled, the auxiliary trolley is free to move lengthwise the bridge, but can be used in conjunction with the main trolley for lifting a load equal to the total capacity of the crane.

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

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

1. The combination with a bridge having six girders arranged in three pairs, of main hoist-trolleys mounted on the outer pairs of girders and an auxiliary trolley mounted on the inner pair.

2. The combination with a bridge having six girders arranged in pairs, the top surface

of the girders composing the intermediate pair being in a plane below the tops of the outer girders, of a main trolley on each pair of girders, and an auxiliary trolley mounted 5 on the intermediate pair.

3. The combination with a bridge and three traveling trolleys thereon arranged side by side, each trolley adapted to travel throughout the length of the bridge, of means 10 for coupling the hoist mechanism of the two outside trolleys.

4. The combination with a bridge, three parallel trackways extending lengthwise the bridge, and a traveling trolley on each track- 15 way, of means for coupling the hoist mechanism of two of said trolleys.

5. The combination with a bridge, three parallel trackways extending lengthwise the bridge and a traveling trolley on each track- 20 way, the intermediate trolley being in a lower plane than the other trolleys, of means for coupling the hoist mechanisms of the two outer trolleys.

6. The combination with a bridge, three 25 parallel trackways extending lengthwise the

bridge and a traveling trolley on each track- way, the intermediate trolley being in a lower plane than the other trolleys, of means for coupling the hoist mechanisms, and travel mechanisms of the two outer trolleys. 30

7. The combination with a bridge having six girders arranged in pairs, the inner pair of girders being connected to the inner girder of each outer pair, of a main trolley on each outer pair of girders and an auxiliary trolley 35 mounted on the intermediate pair.

8. The combination with a bridge, three parallel trackways extending lengthwise the bridge, a traveling trolley on each trackway and means for coupling the hoist mechan- 40 ism of two of said trolleys, of a hook or ladle beam carried by the hoist-chains of the two coupled trolleys.

In testimony whereof I have signed this specification in the presence of two subscrib- 45 ing witnesses.

CLARENCE L. TAYLOR.

Witnesses:

N. C. FETTERS,  
E. E. BROSIUS.