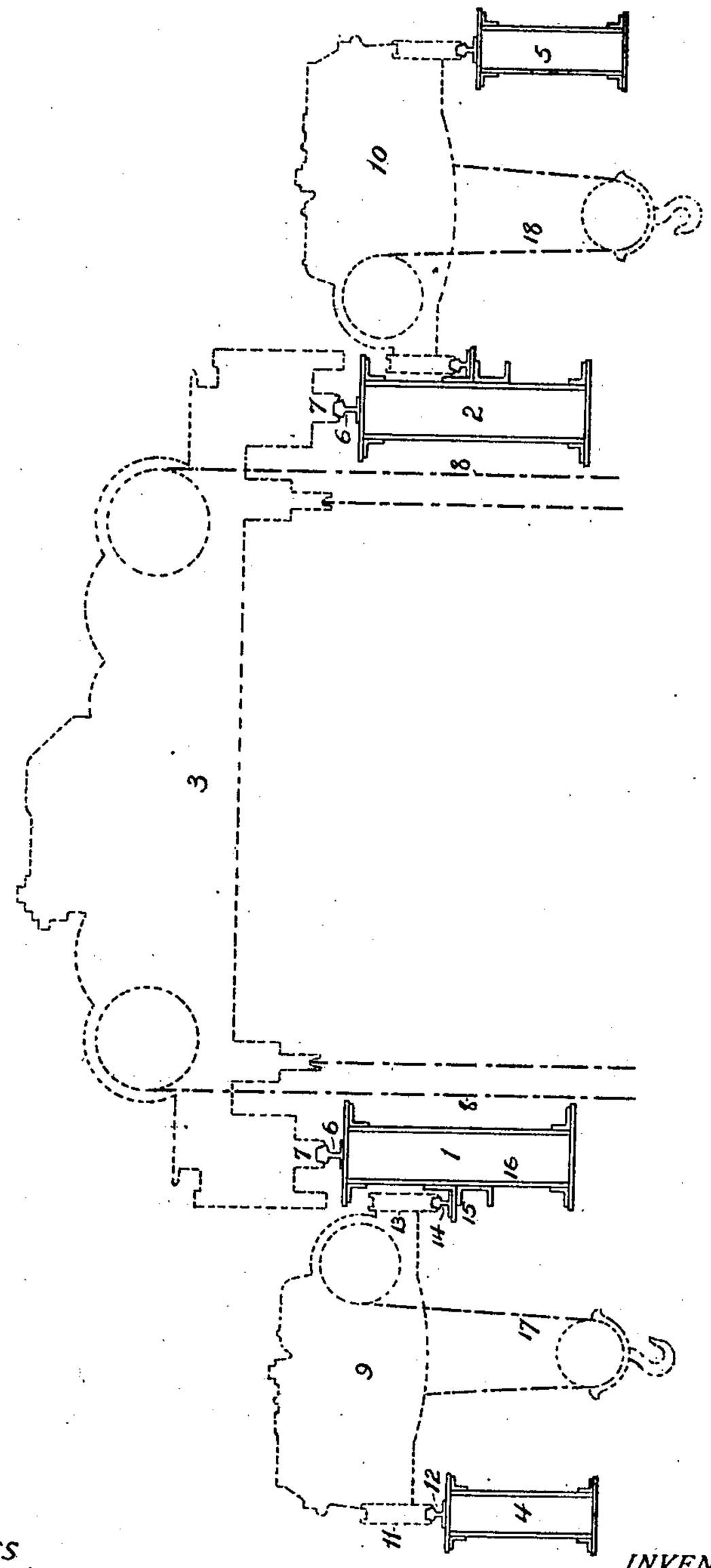
W. H. MORGAN.

TRAVELING CRANE.

APPLICATION FILED FEB. 21, 1908

913,031.

Patented Feb. 23, 1909.



WITNESSES

E. L. Nottingham

G. F. Downing.

INVENTOR

W. H. Morgan

By S. A. Seymour

Attorney

UNITED STATES PATENT OFFICE.

WILLIAM HENRY MORGAN, OF ALLIANCE, OHIO, ASSIGNOR TO THE MORGAN ENGINEERING COMPANY, OF ALLIANCE, OHIO.

TRAVELING CRANE.

No. 913,031. Specification of Letters Patent. Patented Feb. 23, 1909.

Application filed February 21, 1908. Serial No. 417,175.

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 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 traveling cranes, and more especially to that type of traveling cranes known as ladle cranes.

The object of the invention is to provide a simple and efficient construction of crane comprising a main trolley and two independent auxiliary trolleys, and with this object in view my invention consists in certain features of construction and combinations of parts as will be hereinafter described and pointed out in the claim.

The accompanying drawing is a diagrammatic view illustrating one embodiment of my improvement.

1, 2, represent the main girders and 4, 5, the auxiliary girders of the traveling bridge on which the trolleys are operated. All of these girders are of the box girder type to insure to each sufficient lateral rigidity and stiffness to effectually resist any spreading or overturning tendency due to the weight of the trolleys and loads carried thereby which may be transmitted to such girders.

Upon the main girders 1, 2, are mounted rails 6 upon which travel the double flanged wheels 7 of the main trolley 3. The main hoisting ropes 8 of the main trolley pass downwardly between the main girders, as shown, and hence in the event of breakage of either one of the main hoisting ropes there will be no tendency to overturn the main trolley. The auxiliary trolleys 9 and 10 are located respectively on the opposite sides of the main trolley, the outer supporting wheels 11 of trolley 9, being supported on the rail 12 mounted on the auxiliary box girder 4, while the inner supporting wheels 13 of this trolley travels upon the rail 14 supported on a flange 15 firmly secured to the outer web 16 of the box girder 1. The auxiliary trolley 10 is supported in the same manner. The hoisting chains or ropes 17, 18, of the auxiliary trolleys pass downwardly between the main and auxiliary girders and hence there is no tendency of either trolley to overturn by reason of the breaking of one of its hoisting chains.

From the foregoing it will be observed that I provide a four girder crane which will accommodate three trolleys in such manner that each may be independently operated; each is readily accessible for renewal, repairs or replacement; each is effectually prevented from overturning in the event of the breakage of one of the hoisting ropes, and the construction and arrangement is such as to insure maximum strength and efficiency with a minimum expenditure of material.

It is evident that changes in the construction and relative arrangement of the several parts might be made without avoiding my invention and hence I would have it understood that I do not restrict myself to the particular 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,—

In a traveling crane, the combination of a main trolley and two auxiliary trolleys, of two main girders for supporting the main trolley and the inner ends of the auxiliary trolleys, and two auxiliary girders for supporting the outer ends of the auxiliary trolleys.

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

WILLIAM HENRY MORGAN.

Witnesses:
CLARENCE L. TAYLOR,
EDGAR E. BROSIUS.