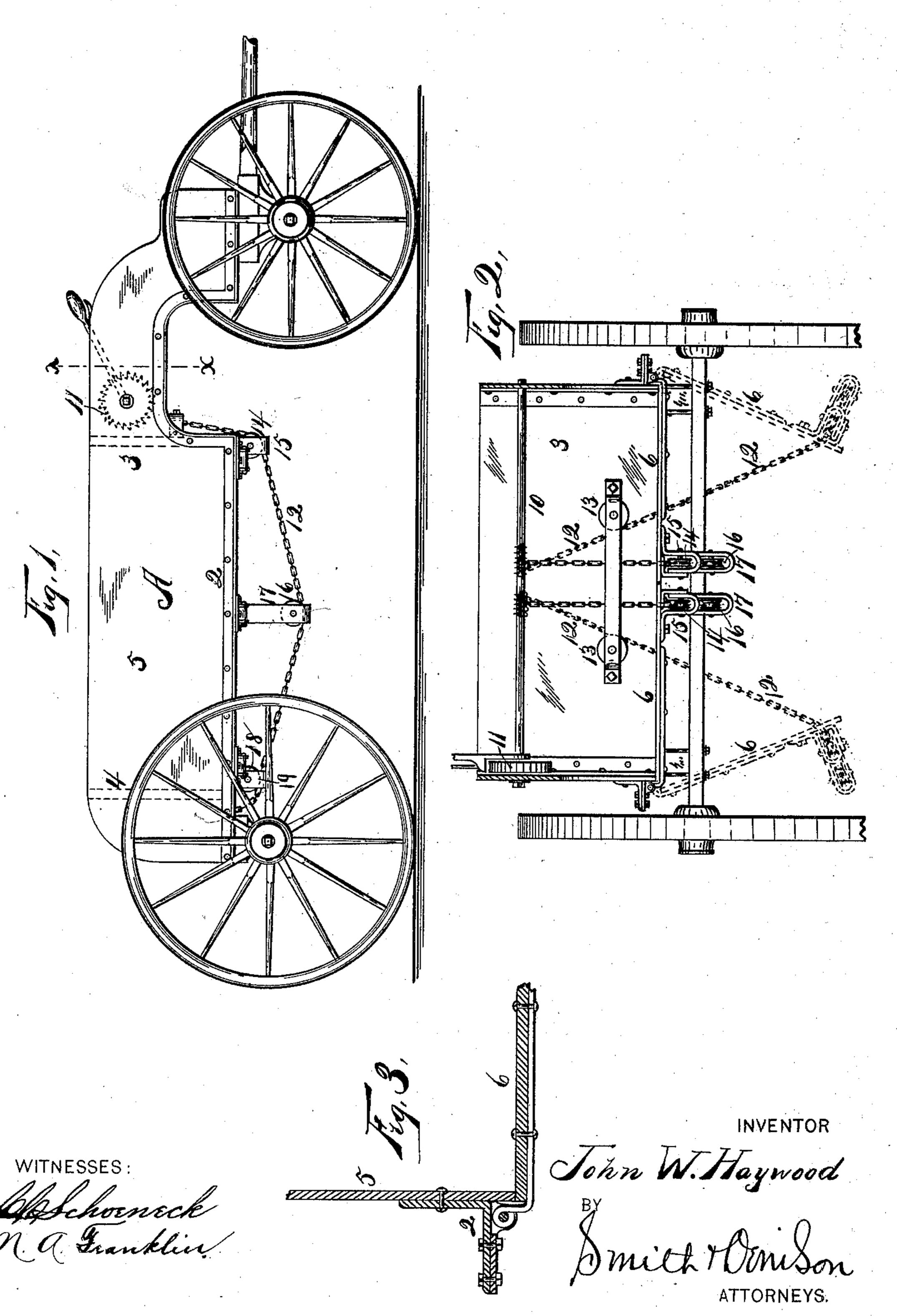
J. W. HAYWOOD. DUMP WAGON.

Application filed Dec. 16, 1898.)

(No Model.)



United States Patent Office.

JOHN W. HAYWOOD, OF SYRACUSE, NEW YORK.

DUMP-WAGON.

SPECIFICATION forming part of Letters Patent No. 654,453, dated July 24, 1900.

Application filed December 16, 1898. Serial No. 699,417. (No model.)

To all whom it may concern:

Be it known that I, John W. Haywood, of Syracuse, in the county of Onondaga, in the State of New York, have invented new and useful Improvements in Dump-Wagons, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

My invention relates to dump-wagons, and particularly to means and appliances for mounting and operating the drop-bottoms

thereof.

My object is to produce a dump-wagon in which the drop-bottoms, whether solid or sectional, are operated by chains which are arranged to perform the operation of trusses,

of which said bottom is the chord, in closing and supporting the bottom or a section thereof and in which the sides of the box extend below the frame-bars, creating an angle in which the hinge-joint is mounted, so as to be protected from the material dumped when the bottom is dropped. It is constructed as follows, reference being had to the accompa-

Figure 1 is a side elevation of a wagon complete. Fig. 2 is a vertical section thereof on line x x looking rearward. Fig. 3 is an enlarged sectional detail of the joint connecting the bottom to the frame.

A is the box, 2 2 being the side bars of the frame; 3, the stationary front end-board; 4, the stationary rear end-board, and 5 the stationary sides, while 6 is the dumping-bottom or a section thereof, it usually being sectional.

The sides 5 extend below the frame-bars 2, creating an exterior angle in which the joint 7, connecting the hinge-leaves 8 9, is placed, said leaves being suitably secured to the

frame-bars and to the bottom, the leaf 9 being bent substantially as shown. A winding-shaft 10, with an ordinary ratchet-wheel and lever 11, is suitably mounted in said box sides, and the chains 12 are suitably con- 45 nected thereto and pass thence in engagement with the idlers 13 to the pulleys 14 in the brackets 15 and over the pulleys 16 in the brackets 17 and to the pulleys 18 in the brackets 19, and their rear ends are suitably 50 secured to the box-frame. All of said brackets are suitably secured upon said bottom. It will be seen that the hinge-joints in said exterior angle are fully protected from rain by the frame-bars and from becoming clogged 55 by the material dumped from the box. It will be further seen that when said chains are wound up they operate like trusses both to close the bottom and to support it and its load, the bottom itself being the chord of each 60 truss and each chain the sides thereof, with a pulley 16 as the apex thereof.

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

A dump-wagon comprising a box-frame, side-boards projecting below the frame, a dumping-bottom, a chain passing over pulleys at the forward end of said bottom, a central pulley in a different plane, whereby the 70 chain forms a truss of which the dumping-bottom is the chord, the chain, the sides and the central pulley the apex, and means for winding the chain.

In witness whereof I have hereunto set my 75 hand this 13th day of December, 1898.

JOHN W. HAYWOOD.

Witnesses:

M. A. FRANKLIN, HOWARD P. DENISON,