

A. C. BAKER.
DUMP WAGON.

APPLICATION FILED OCT. 27, 1909.

967,154.

Patented Aug. 16, 1910.

Fig. 1

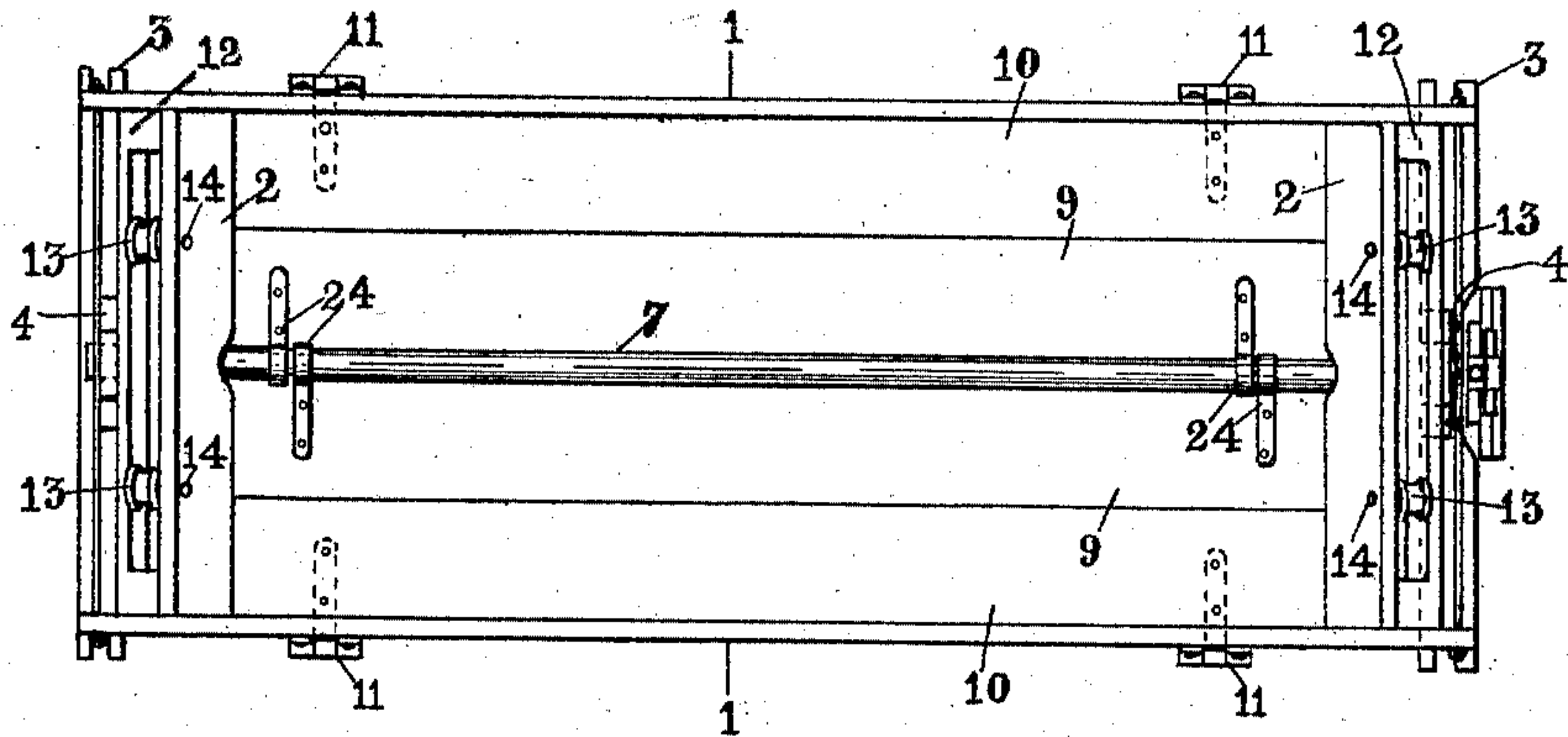


Fig. 2

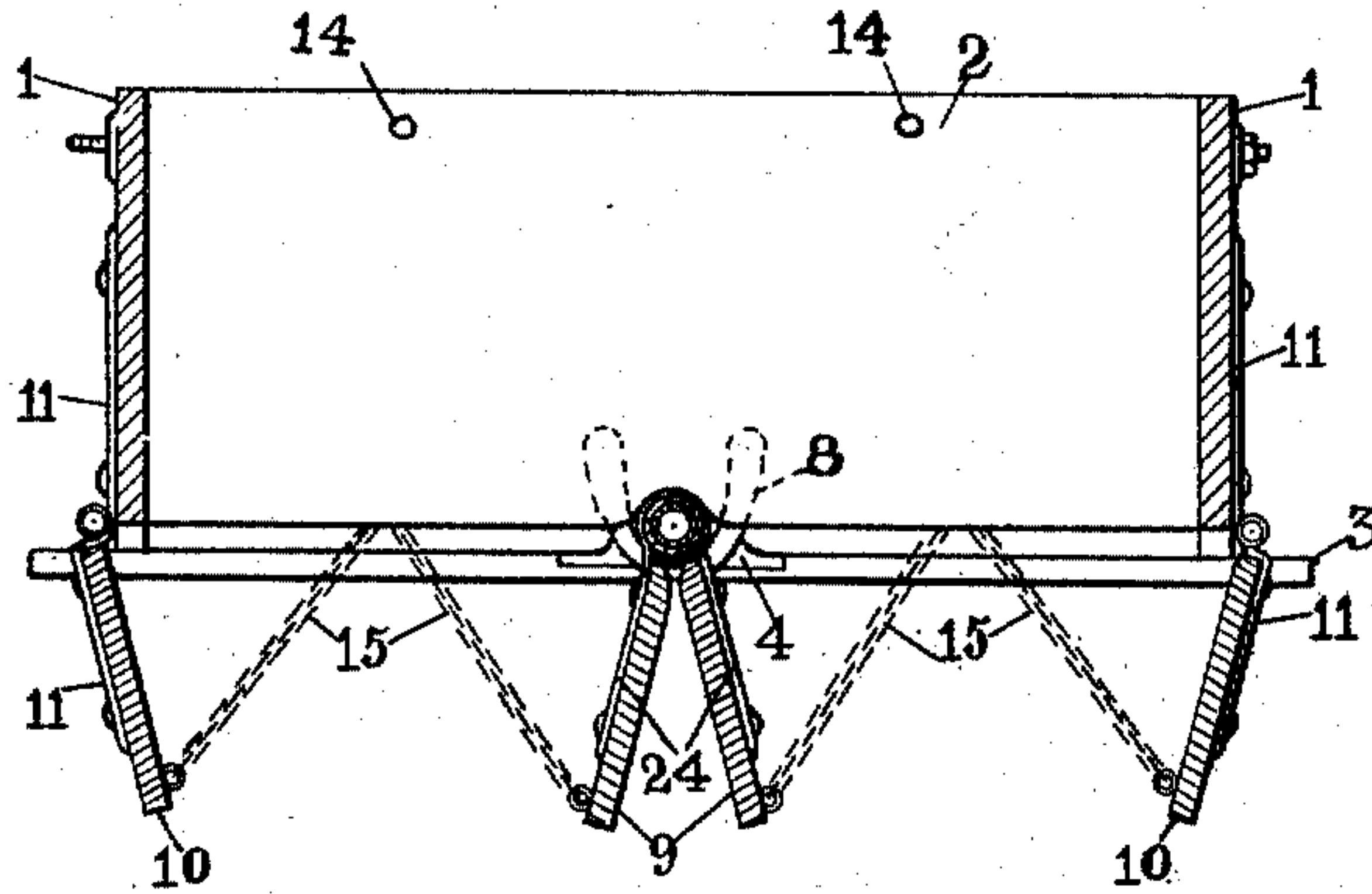


Fig. 4

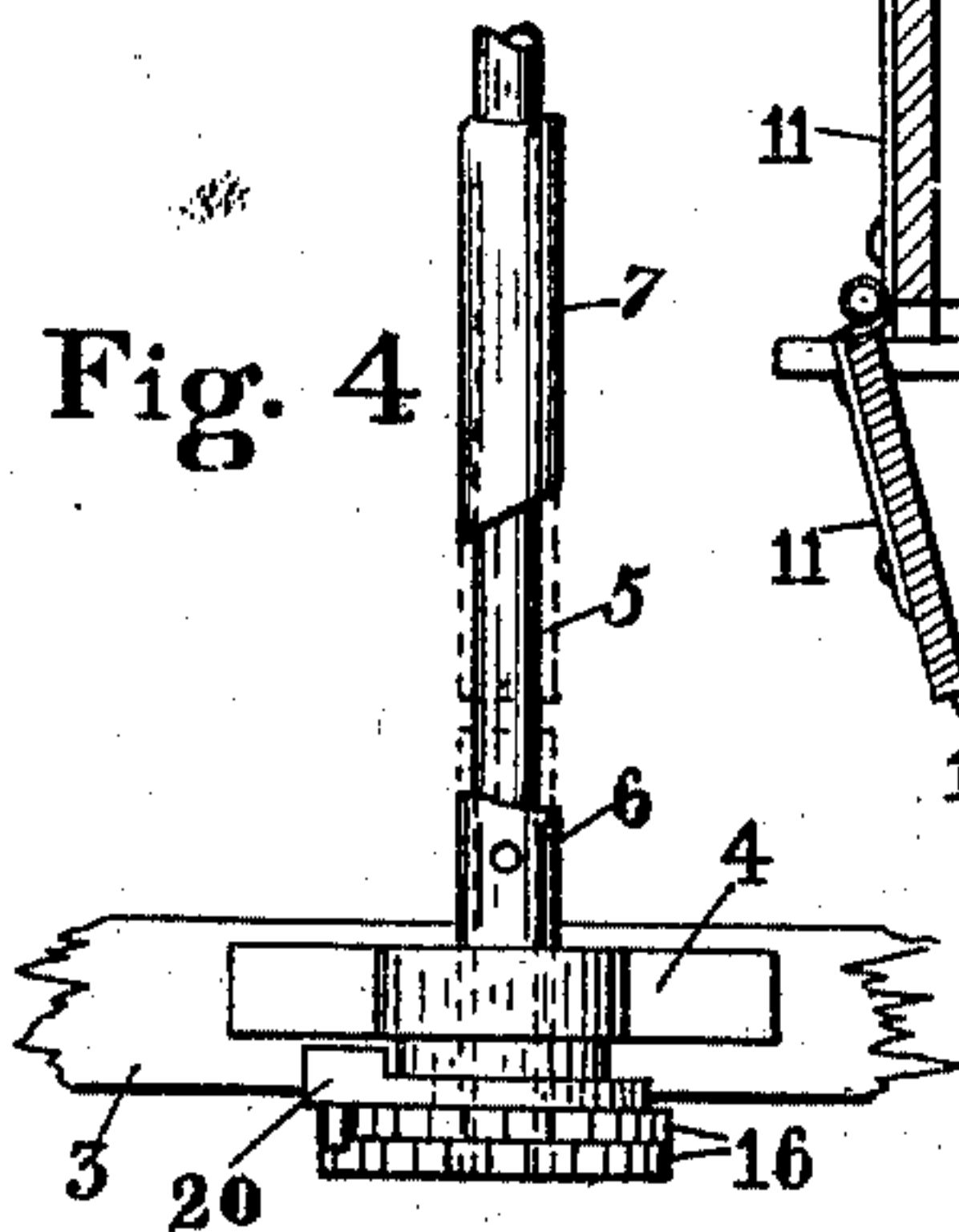
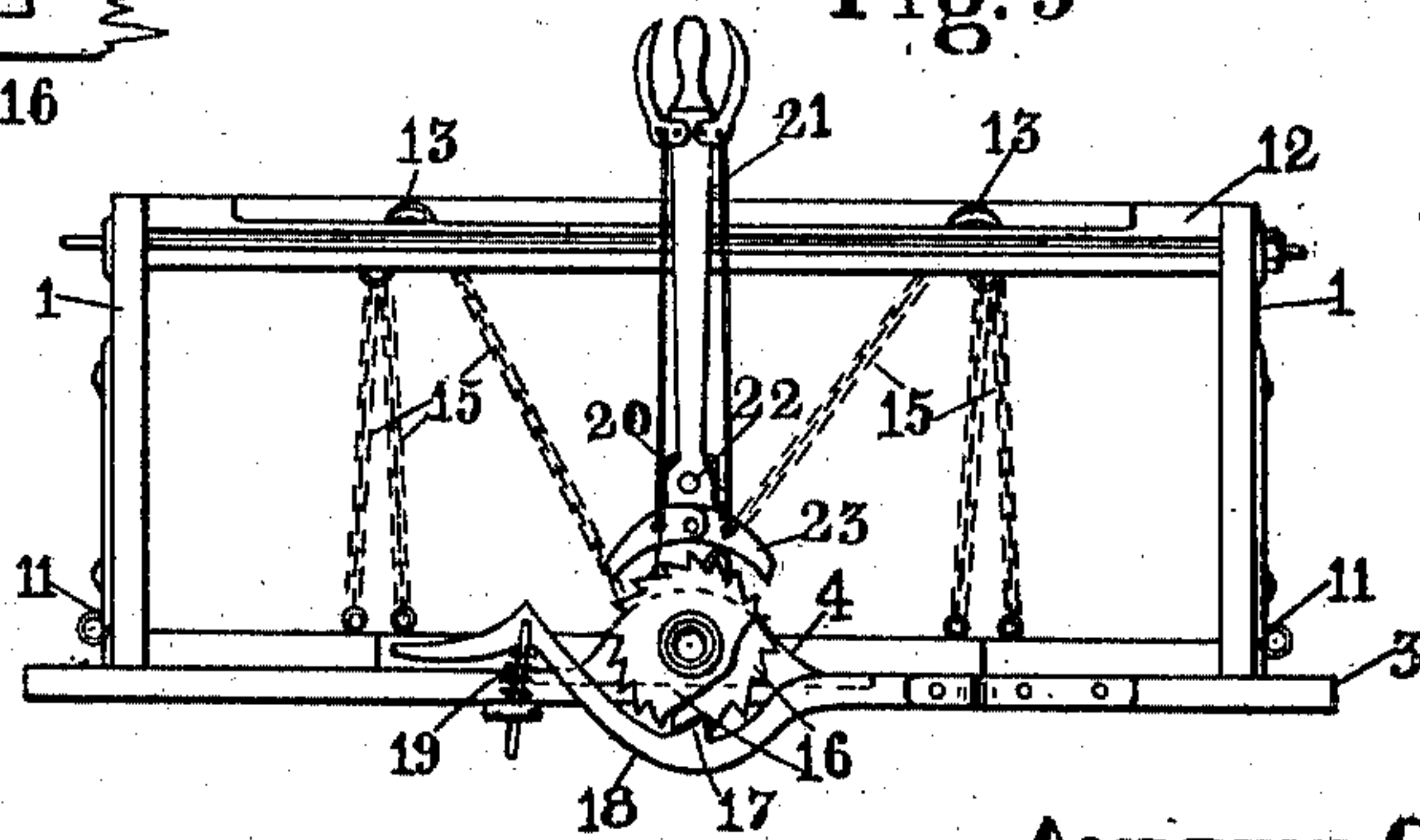


Fig. 3



Witnesses
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UNITED STATES PATENT OFFICE.

ANDREW C. BAKER, OF ALBION, MICHIGAN.

DUMP-WAGON.

967,154.

Specification of Letters Patent.

Patented Aug. 16, 1910.

Application filed October 27, 1909. Serial No. 524,788.

To all whom it may concern:

Be it known that I, ANDREW C. BAKER, a citizen of the United States of America, residing at Albion, in the county of Calhoun and State of Michigan, have invented certain new and useful Improvements in Dump-Wagons, of which the following is a specification, reference being had therein to the accompanying drawings.

10 In the usual construction of dump wagons, the arrangement of the box necessitates the use of specially designed running gear so that the wagon is only available for a special purpose.

15 The invention relates to a dump box for a wagon which may be used interchangeably with a standard box on conventional running gear, one object being likewise to discharge the load so as to clear the running gear.

The invention consists in the matters hereinafter set forth, and more particularly pointed out in the appended claims.

25 Referring to the drawings, Figure 1 is a plan view of a box embodying features of the invention, with parts of the operating mechanism omitted; Fig. 2 is a view in transverse section of the box in open position; Fig. 3 is a view in elevation of the front end of the box and controlling means; and Fig. 4 is a view in detail of the supporting members of a center board hinge.

30 In the drawings, a rectangular box having side boards 1 and inset, slightly inclined end boards 2 is provided with cross end sills 3 which are adapted to rest upon the bolsters of a conventional wagon gear, their ends being notched or slotted to engage the bolster posts. On each of the end sills 3 is a bearing 4, at about the center thereof. A shaft 5 which is preferably tubular is journaled in these bearings its ends being enlarged by sleeves 6 secured thereon. The shaft is shielded from dirt by a pipe 7 that is independently supported at its ends by suitable straps or clips 8 on the end boards 2. The pipe forms a hinge engaged by pairs of hinge straps 24 by which center bottom boards 9 are supported. Outer bottom boards 10 corresponding with the center boards 9 are secured as by suitable hinges 11 to the side boards 1 of the box.

55 A cross brace 12 reinforces the upper margin of each end board 2, its inner edge being cut away for a portion of its length and a pair of sheaves 13 being journaled

therein on suitable pins 14. Chains 15 lead from the meeting edges of the bottom boards 9 and 10 around the sheaves 13 to the sleeves 6 on the shaft ends to which they are fastened.

A pair of oppositely disposed ratchet wheels 16 are secured on the front end of the shaft and are normally locked against rotation by the tooth 17 of a latch lever 18. The latter is secured to the forward cross sill 3 in such position as to be readily depressed by the foot of the operator, a suitably arranged spring 19 normally holding it in engagement with one of the ratchet wheels to prevent a load on the bottom boards turning the shaft. The ratchets may be rotated by any preferred form of hand lever. As herein indicated a yoke 20 is loosely journaled on the shaft adjacent the ratchets, and a lever 21 is pivoted on a pin 22 secured on an extension of the yoke. Oppositely disposed pawl arms 23 adapted to engage the ratchets are secured to or formed on the lower end of the lever 21 so that when the operator moves the lever in one way and it breaks on the pin 22, one of the pawls engages a ratchet and moves the shaft; when broken in the other direction, the other pawl engages the other ratchet.

By this arrangement a dump box is obtained which may be mounted on a standard running gear of a wagon and may be readily discharged by releasing the shaft. The shaft is protected from dirt and the center boards when they fall hang in such position as to divert the contents of the box from the reach of the running gear and therefore the load is discharged without lodging anywhere.

Obviously, changes in details of construction may be made without departing from the spirit of the invention and I do not care to limit myself to any particular form or arrangement of parts, except as set forth in the appended claims.

What I claim as my invention is:—

1. A wagon box having a central tubular hinge member supported near its ends on the end boards of the box, a pair of center bottom boards swinging on the hinge member, a pair of side bottom boards swinging from the box sides, end sills outside the end boards of the box, shaft bearings thereon alined with the hinge member, a shaft rotatable in the bearings extending through the hinge member, flexible supporting connections be-

tween the free margins of the bottom boards and the shaft, and means for rotating the shaft.

2. A wagon box having a central tubular
5 hinge member supported near its ends on the end boards of the box, a pair of center bottom boards swinging on the hinge member, a pair of side bottom boards swinging from the box sides, end sills outside the end
10 boards of the box adapted to rest on the bolsters of a conventional wagon box, shaft bearings on the end sills alined with the hinge member, a shaft journaled in the bearings and housed by the hinge member, guide
15 pulleys on the end boards, flexible connections between the shaft and free margins of the bottom boards passing over the guide pulleys, means for rotating the shaft in either direction, and means for locking the
20 shaft against rotation.

3. In a wagon box, parallel side boards, inwardly inclined end boards, a central tubular hinge member secured near its ends to the lower margins of the end boards, a
25 pair of center bottom boards swinging on the hinge member, a pair of side bottom boards swinging from the box sides, end

sills outside the end boards of the box adapted to rest on the bolsters of a conventional wagon gear, shaft bearings on the 30 end sills in axial alinement with the hinge member, a shaft housed by the hinge member and journaled near each end in the bearings, guide pulleys on each end board, flexible connections passing from the free margins of 35 the bottom boards over the guide pulleys to the shaft, oppositely disposed ratchet wheels on one end of the shaft, a latch lever on the end sill adapted to detachably engage a ratchet wheel, a yoke journaled on the shaft 40 adjacent the ratchet wheels, a hand lever fulcrumed on the yoke, and pawls on the lever one of which is adapted to engage one ratchet wheel when the lever is moved in one direction and the other of which is 45 adapted to engage the other ratchet wheel when the lever is moved in the opposite direction.

In testimony whereof I affix my signature in presence of two witnesses.

ANDREW C. BAKER.

Witnesses:

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