

No. 781,175.

PATENTED JAN. 31, 1905.

C. BARRETT.
DUMPING CAR.

APPLICATION FILED OCT. 29, 1904.

2 SHEETS—SHEET 1.

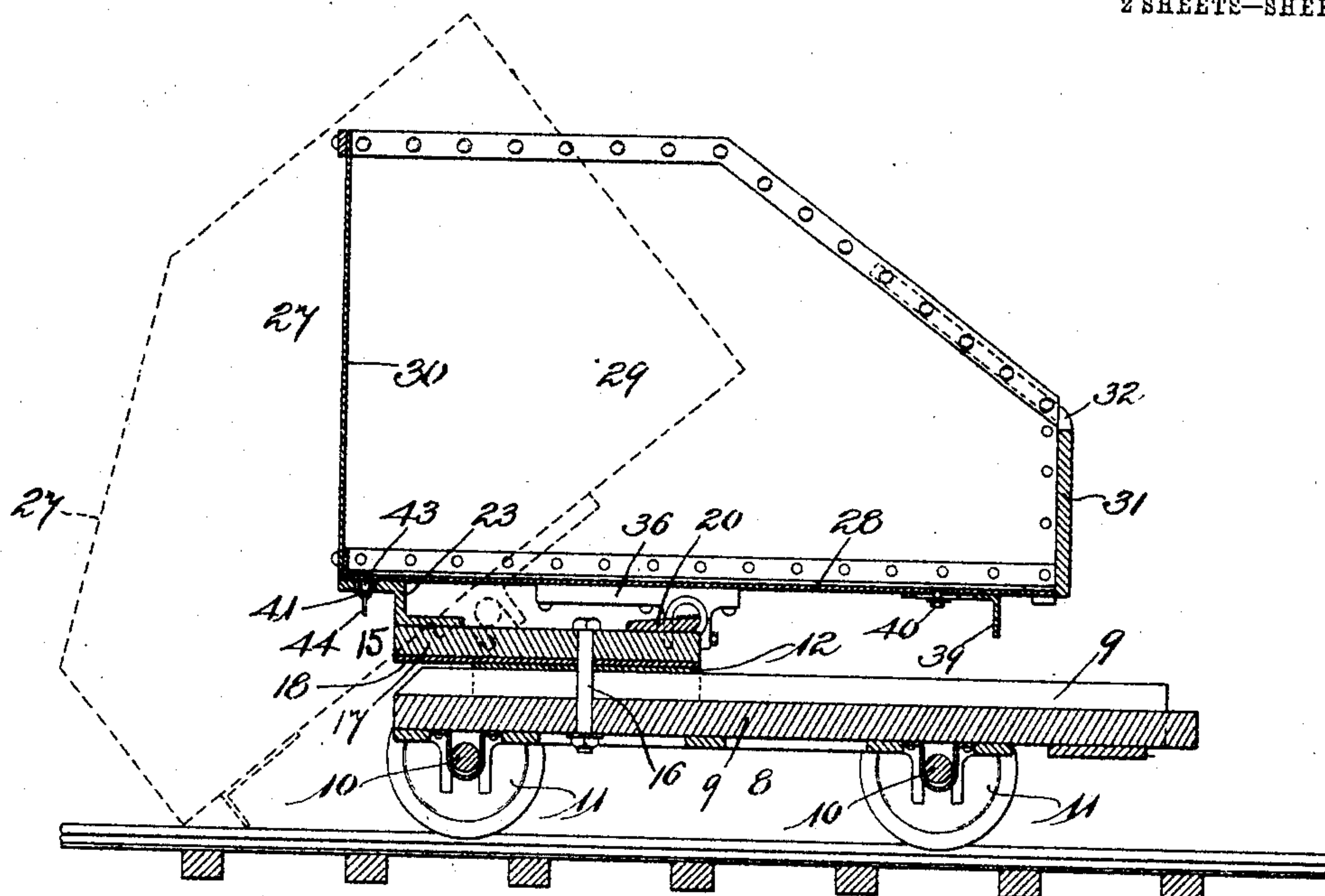


Fig. 1.

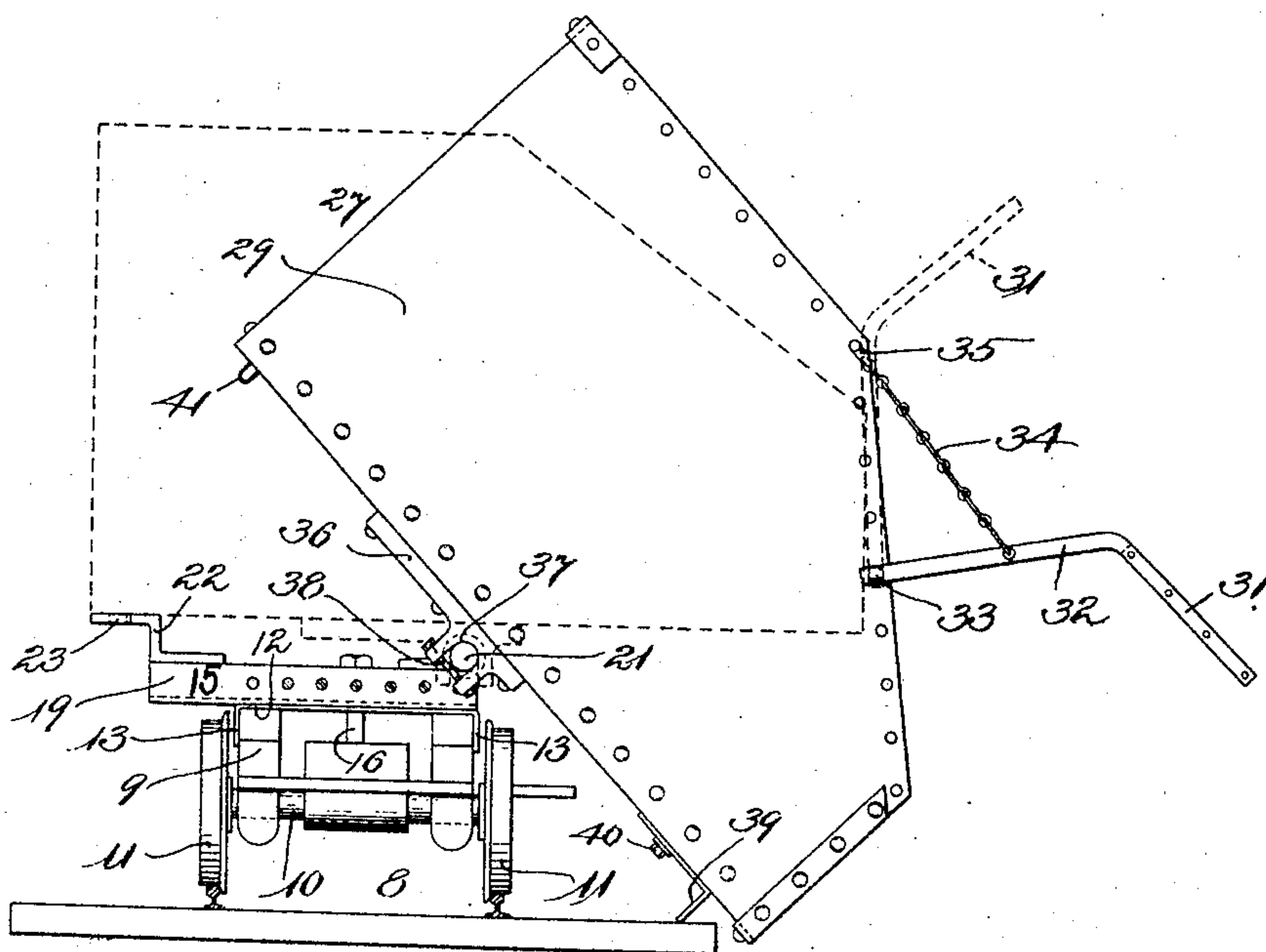


Fig. 2.

Witnesses:

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Inventor:

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2 SHEETS—SHEET 2.

Fig. 3.

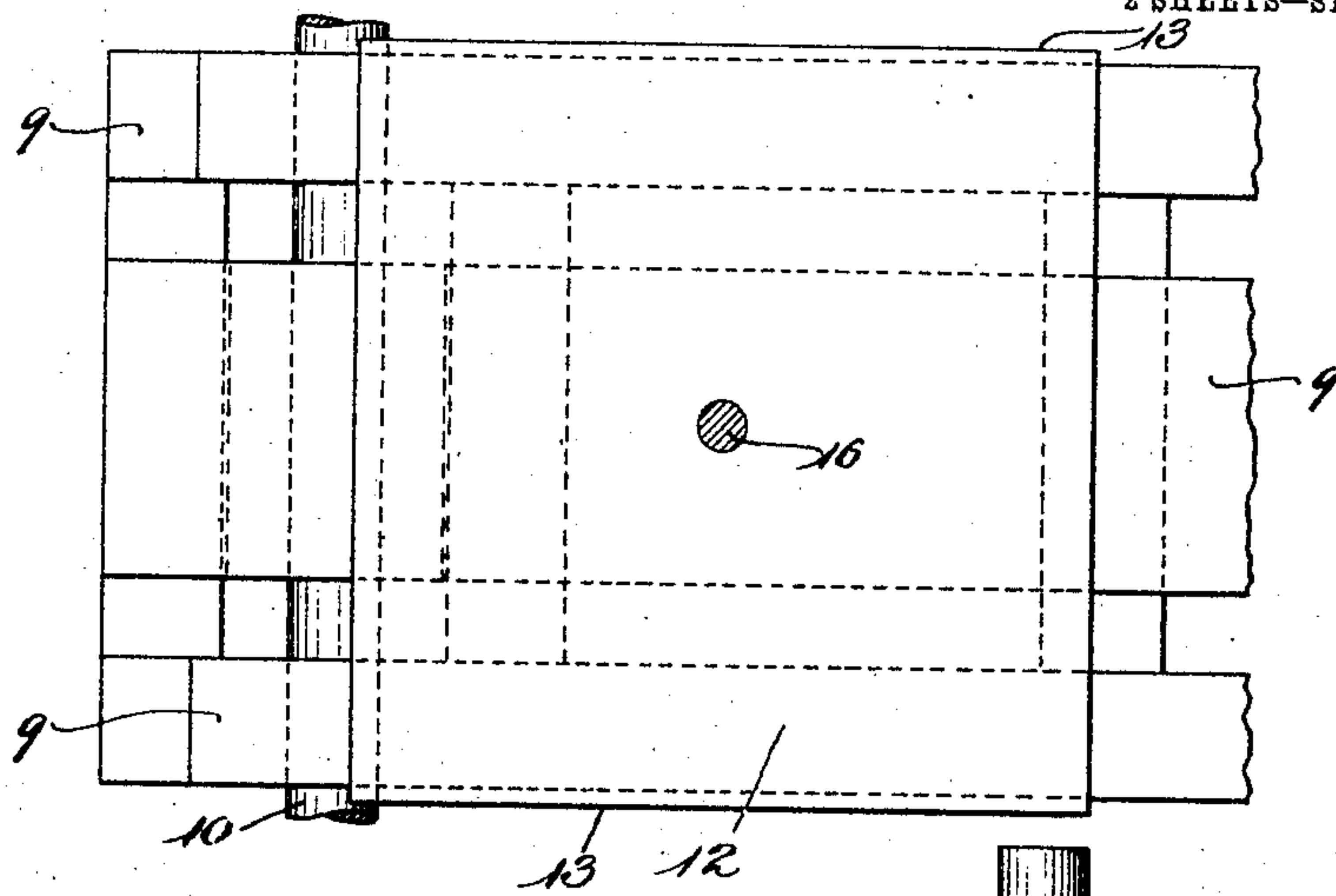


Fig. 4.

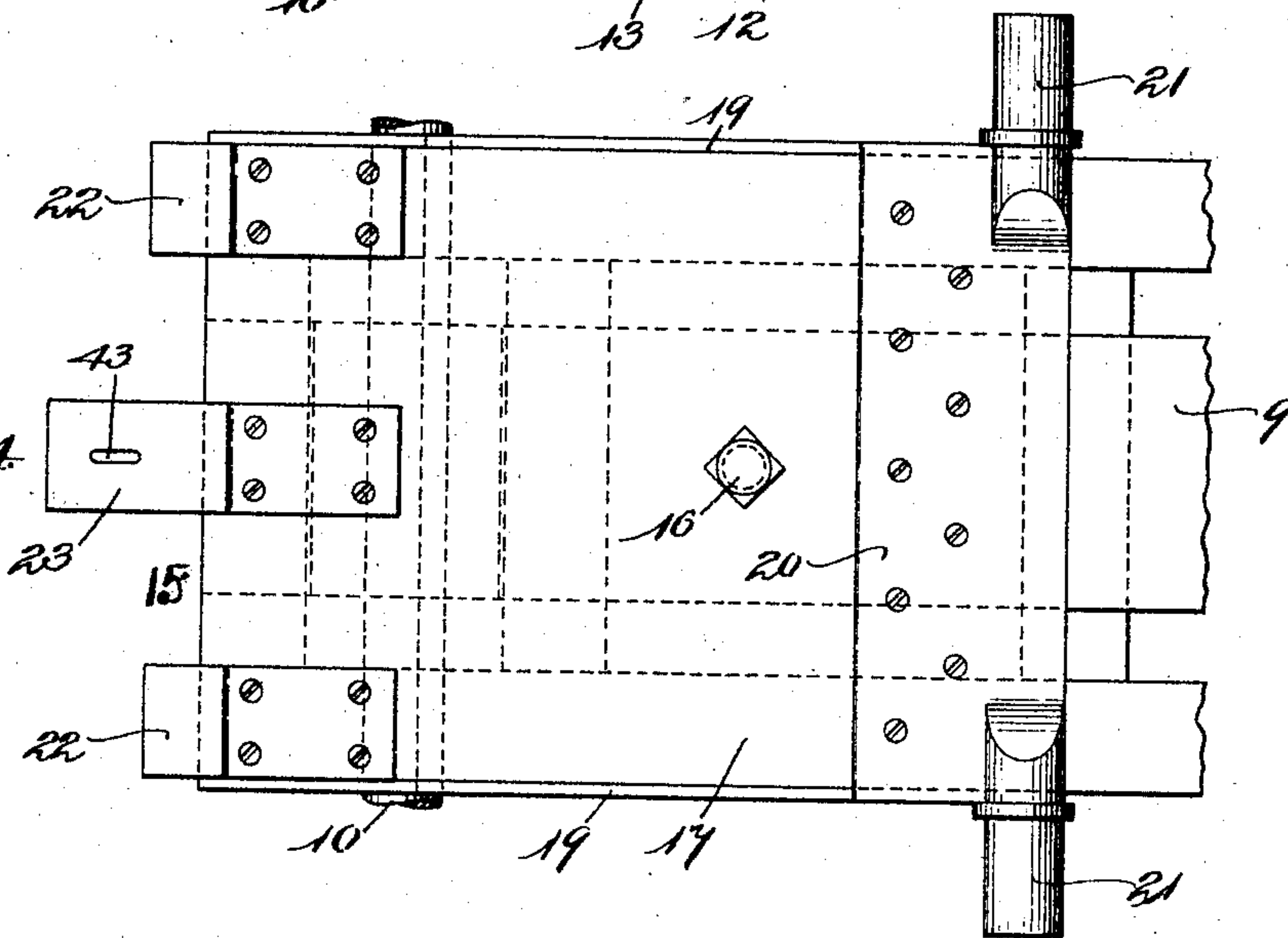


Fig. 5.

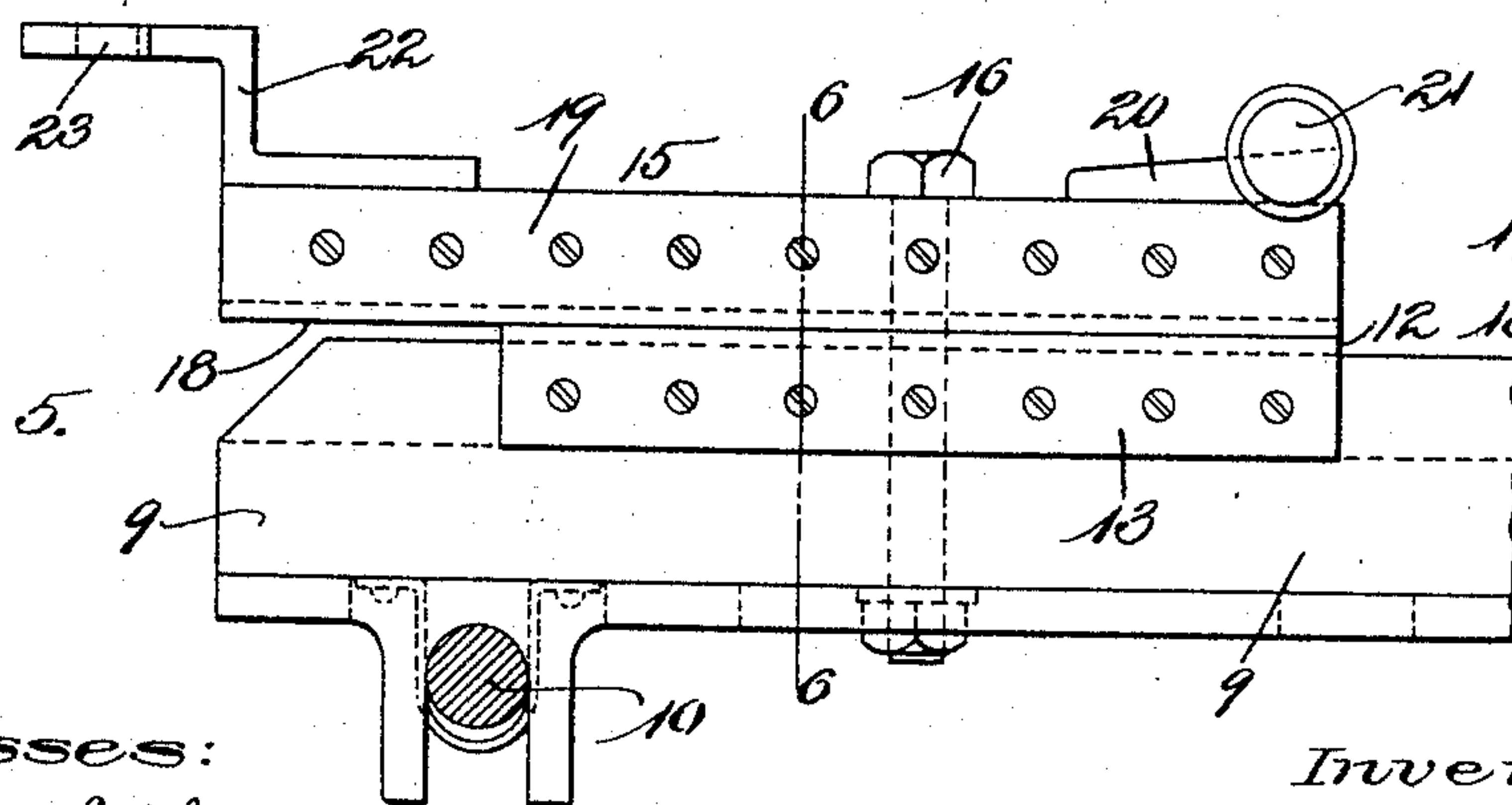
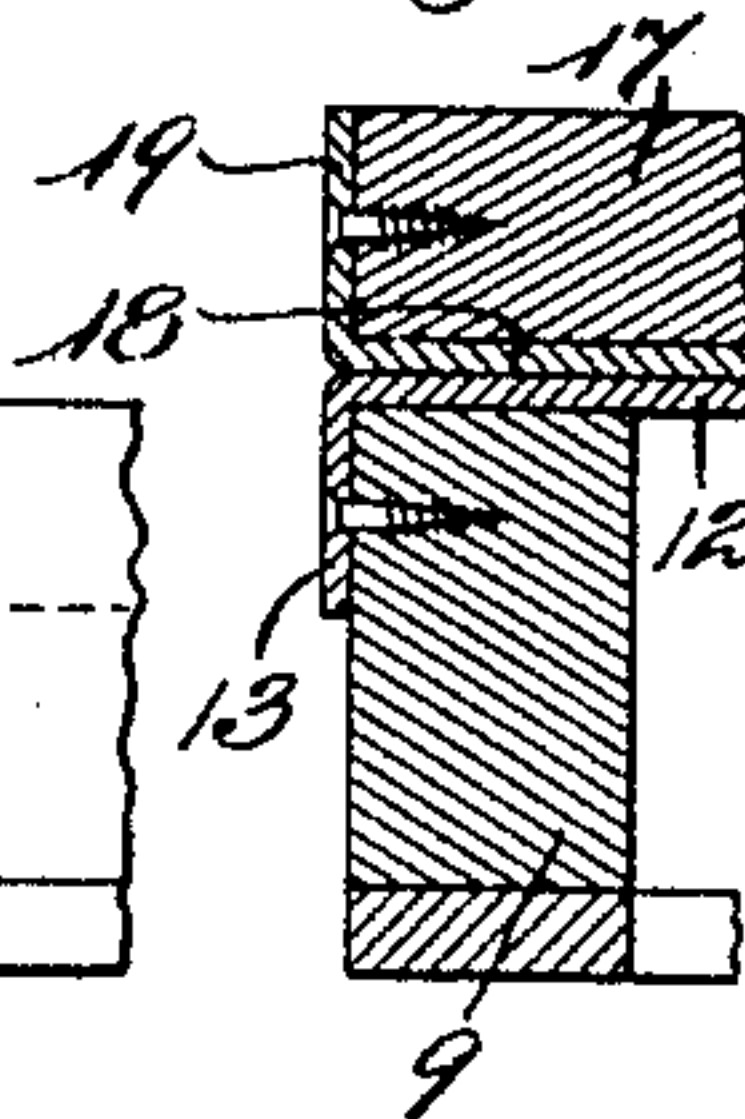


Fig. 6.



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UNITED STATES PATENT OFFICE.

CHARLES BARRETT, OF SOMERVILLE, MASSACHUSETTS.

DUMPING-CAR.

SPECIFICATION forming part of Letters Patent No. 781,175, dated January 31, 1905.

Application filed October 29, 1904. Serial No. 230,449.

To all whom it may concern:

Be it known that I, CHARLES BARRETT, a citizen of the United States, residing at Somerville, in the county of Middlesex and State of Massachusetts, have invented new and useful Improvements in Dumping-Cars, of which the following is a specification.

This invention relates to an improved dumping-car used for the construction of railroad embankments and also in mines and in any work where it is desired to transport gravel, ore, and the like from one point to another.

The object of the invention is to provide a cheap, durable, and convenient device for the purpose specified which may be easily operated to dump from either side of the car-truck or from one end thereof.

The object of the invention is still further to provide a dumping-car which may be easily loaded with gravel or ore, as may be desired, and, further, to provide a dumping-car the different parts of which may be easily disconnected one from the other for shipping or other purposes.

The invention consists in the combination and arrangement of parts set forth in the following specification, and particularly pointed out in the claims thereof.

Referring to the drawings, Figure 1 is a vertical central longitudinal section, partly in elevation, of my improved dumping-car. Fig. 2 is an end elevation of the same, illustrating the car-body rotated to dump from the side of the truck and tipped in dumping position in full lines, said car-body being shown in dotted lines in position ready to dump. Fig. 3 is a plan view of a portion of a truck-frame with a truck-frame plate fast thereto. Fig. 4 is a plan view of said truck-frame and truck-frame plate with an intermediate plate lying upon and connected to said truck-frame plate by a transom-bolt. Fig. 5 is a side elevation of the parts illustrated in Fig. 4, the truck-frame and axle in each of the Figs. 3 and 4 being broken away to save space in the drawings and the axle shown in section in Fig. 5. Fig. 6 is a detail section taken on line 6 6 of Fig. 5 looking toward the left in said figure.

Like numerals refer to like parts throughout the several views of the drawings.

In the drawings, 8 is a truck consisting of a suitable frame 9, supported upon axles 10, fast to wheels 11. A truck-plate 12, preferably formed of sheet metal and having flanges 13 13 at opposite ends thereof, extends transversely across the truck-frame 9, said flanges projecting downwardly outside and being fastened to the opposite sides, respectively, of said truck-frame. An intermediate plate 15 is pivoted to the truck-frame 9 by means of a transom-bolt 16. Said intermediate plate consists of a body portion 17, preferably formed of wood. A sheet-metal plate 18, having a flange 19 at each end thereof, extends across and beneath said body portion, said flanges projecting upwardly outside and fastened to the opposite sides, respectively, of said body portion. A plate 20 is fastened to the top of the body portion 17, at one end thereof, said plate having two trunnions 21 integral therewith and upon opposite sides, respectively, thereof. At the opposite end of said body portion and fastened also to the top thereof are angle-brackets 22 22 and 23. It will be understood that the trunnion-plate 20, body portion 17, sheet-metal plate 18, and angle-brackets 22 and 23 form, in operation and effect, a single piece.

The car-body 27 is preferably constructed of sheet metal, consisting of a bottom 28, sides 29, and end 30, rigidly fastened together, and a gate or end 31, said gate being rigidly fastened to arms 32, one at each end thereof, each of said arms pivoted at 33, respectively, to opposite sides of said car-body. A chain 34, preferably upon each side of said car, is connected at one end thereof to an arm 32 and at the other end thereof to a hook 35, fast to the side of said car-body. The car-body 27 is pivotally connected to the trunnion-shaft 21 by brackets 36, fast to the bottom of the car-body, each provided with a vertical slot 37, opening through the under side of said bracket. Pins or bolts 38 extend across the slot 37 beneath the trunnion-shaft 21 to prevent the car from leaving the trunnions when said car is dumped into the position shown in Fig. 2.

An adjustable stop-plate 39, formed of angle-iron, extends transversely across the car-

body upon the under side thereof, and is adjustably fastened to said car-body by bolts 40, having engagement with the bottom of the car-body and projecting through a slot in said angle-iron stop-plate.

The car-body is held in a horizontal position, as illustrated in Fig. 1, by a staple 41, fast to the bottom of the car-body and projecting through a slot 43, provided in the angle-bracket 23 and locked thereto by a seal 44, inserted in said staple beneath said angle-bracket. It will be noted that the right-angle-projecting brackets 22 form supports for the bottom of the car-body, as well as the angle-bracket 23, when said car-body is in the position illustrated in Fig. 1.

The advantages derived from my improved construction of car-body hereinbefore described are that the same is very cheap and easily constructed and operated, the truck-plate 12 forming a cheap and very strong means for tying and strengthening the different parts of the frame, as well as a plate upon which the intermediate plate located thereabove may swivel, and the sheet-metal plate upon the bottom of the intermediate plate also forms a very practical means for strengthening the wooden body portion of said intermediate plate, while the wooden body portion forms a cheap and convenient means to which to attach the trunnion-plate 20 and angle-brackets 22 to form a single structure or intermediate plate.

The general operation of my improved dumping-car is as follows: Assuming that it is desired to dump material between the rails, said car is tipped from the position shown in full lines to that shown in dotted lines, Fig. 1, the gate 31 being previously thrown into the position illustrated in full lines, Fig. 2. Assuming that it is desired to dump the material upon either side of the truck, the car-body is rotated to the position shown in dotted lines, Fig. 2, from the position shown in full lines, Fig. 1, and is then tipped to the position shown in full lines, Fig. 2, dumping the gravel at one side of the track or truck. In this position of the car-body the usefulness of the adjustable plate 39 becomes apparent, said stop-plate being adjusted to strike against the ties, and if it is desired to increase or diminish the angle of the bottom of the car-body when in the position illustrated in full lines, Fig. 2, said stop-plate is moved toward the left or right, respectively, in Fig. 1 and locked in position by means of the bolts 40. The advantage of being able to lock the gate 31 in a position midway between the position indicated in dotted lines, Fig. 2, and that in which it is shown in full lines, Fig. 1, consists in the fact that a greater space is obtained between the main portion of the gate 31 and the bottom of the car-body, so that in loading or in unloading material upon or from said car-body a greater space is obtained than when the gate

is thrown back into the position shown in dotted lines, Fig. 2.

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

1. A dumping-car comprising in its construction a truck, a truck-plate fast to said truck, an intermediate plate swiveled to said truck-plate, trunnions fast to said intermediate plate upon opposite sides thereof, respectively, a dumping car-body, and brackets fast to the under side of said body, each of said brackets provided, respectively, with a vertical slot opening through the under side thereof and adapted to receive one of said trunnions, whereby said body is removably attached to said intermediate plate.

2. A dumping-car comprising in its construction a truck, a truck-plate fast to said truck, an intermediate plate swiveled to said truck-plate, trunnions fast to said intermediate plate upon opposite sides thereof, respectively, a dumping car-body, brackets fast to the under side of said body, each of said brackets provided, respectively, with a vertical slot opening through the under side thereof and adapted to receive one of said trunnions, and pins in said brackets extending across said slots, whereby said body is removably attached to said intermediate plate.

3. A dumping-car comprising in its construction a truck, a truck-plate fast to said truck, an intermediate plate swiveled to said truck-plate, trunnions fast to said intermediate plate upon opposite sides thereof, respectively, a dumping car-body, brackets fast to the under side of said body, each of said brackets provided, respectively, with a vertical slot opening through the under side thereof and adapted to receive one of said trunnions, whereby said body is removably attached to said intermediate plate, and an angle-plate fast to and extending transversely across the bottom of said car-body adjacent to the rear end thereof.

4. A dumping-car comprising in its construction a truck, a truck-plate fast to said truck, an intermediate plate swiveled to said truck-plate, trunnions fast to said intermediate plate upon opposite sides thereof, respectively, a dumping car-body, brackets fast to the under side of said body, each of said brackets provided, respectively, with a vertical slot opening through the under side thereof and adapted to receive one of said trunnions, an angle-plate fast to and extending transversely across the bottom of said car-body adjacent to the rear end thereof, and means to adjust said angle-plate longitudinally of said car-body.

5. A dumping-car comprising in its construction a truck, a truck-plate fast thereto, an intermediate plate swiveled to said truck-plate, a car-body pivoted to rotate in a vertical plane upon said intermediate plate, a gate,

arms fast to said gate at opposite ends thereof, respectively, said arms pivoted to opposite sides of said car-body, and means to lock said arms to said body.

5 6. A dumping-car comprising in its construction a truck-frame, a truck-plate having a flange at each end thereof, said plate extending transversely across said frame, and said flanges projecting downwardly outside
10 and fast to the opposite sides, respectively, of said truck-frame.

7. A dumping-car comprising in its construction a truck, a truck-plate fast to said truck, an intermediate plate swiveled to said
15 truck-plate, said intermediate plate comprising a body portion, and a sheet-metal plate having a flange at each end thereof, said plate extending transversely across beneath said body portion and said flanges projecting upwardly outside and fast to the opposite sides,
20 respectively, of said body portion.

8. A dumping-car comprising in its construction a truck, a truck-plate fast to said truck, an intermediate plate swiveled to said
25 truck-plate, said intermediate plate comprising a body portion, and a sheet-metal plate having a flange at each end thereof, said plate extending transversely across beneath said body portion and said flanges projecting upwardly outside and fast to the opposite sides,
30 respectively, of said body portion, a plate with two trunnions integral therewith and upon opposite sides thereof, said plate fast to the upper face of said body portion, at one end of said body portion, and angle-brackets
35

fast to the upper face of said body portion and at the opposite end of said body portion to that at which said trunnion-plate is fastened.

9. A dumping-car comprising in its construction a truck, a truck-plate fast to said
40 truck, an intermediate plate swiveled to said truck-plate, said intermediate plate comprising a body portion, and a sheet-metal plate having a flange at each end thereof, said plate extending transversely across beneath said
45 body portion and said flanges projecting upwardly outside and fast to the opposite sides, respectively, of said body portion, a plate with two trunnions integral therewith and upon opposite sides thereof, said plate fast to the upper
50 face of said body portion, at one end of said body portion, and angle-brackets fast to the upper face of said body portion and at the opposite end of said body portion to that at which said trunnion-plate is fastened, a dump-
55 ing car-body, and brackets fast to the under side of said body, each of said brackets provided, respectively, with a vertical slot opening through the under side thereof and adapted to receive one of said trunnions, whereby
60 said body is removably attached to said intermediate plate.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

CHARLES BARRETT.

Witnesses:

CHARLES S. GOODING,
ANNIE J. DAILEY.