No. 773,527. PATENTED OCT. 25, 1904.

C. E. SARGENT.

GATE.

APPLICATION FILED JUNE 10, 1904.

NO MODEL. 2 SHEETS—SHEET 1.

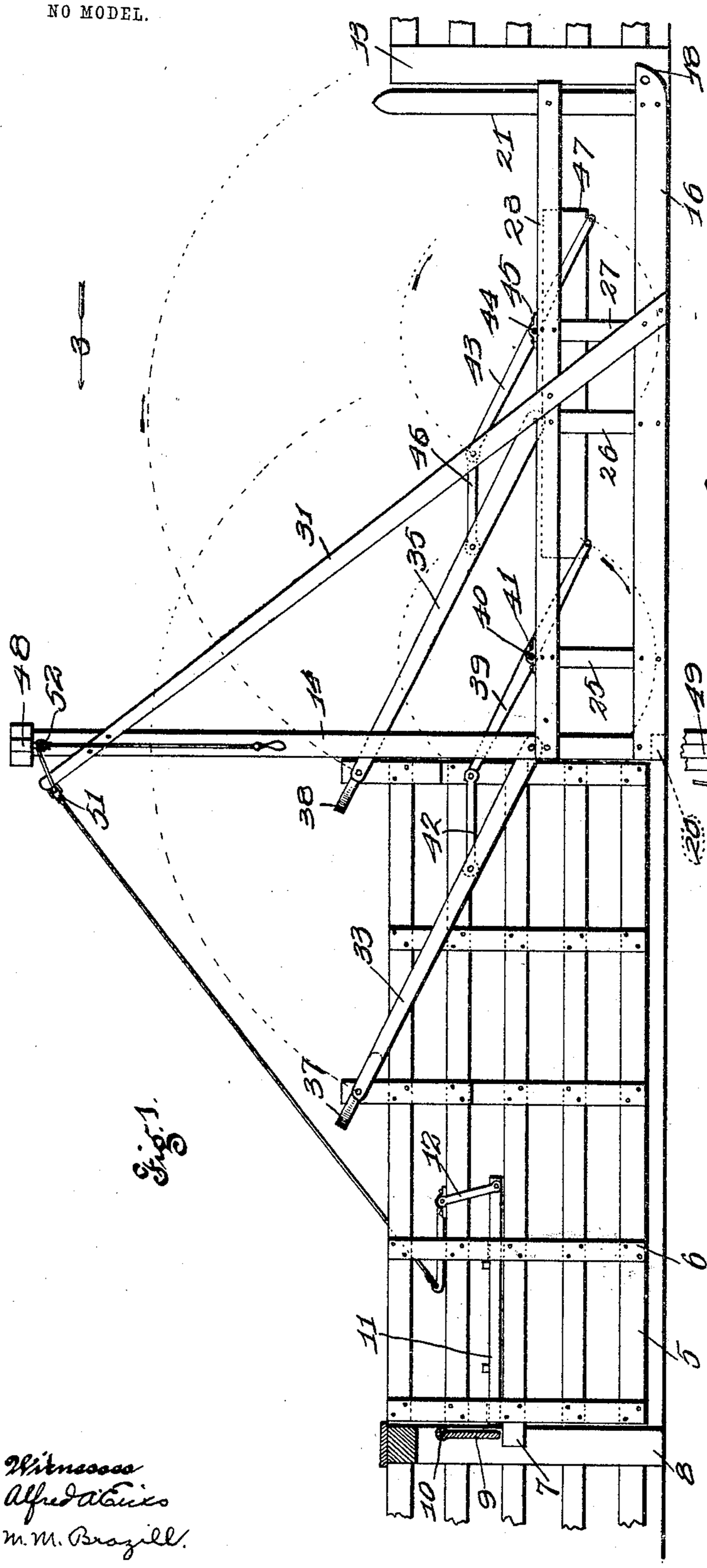

Fig. 1.

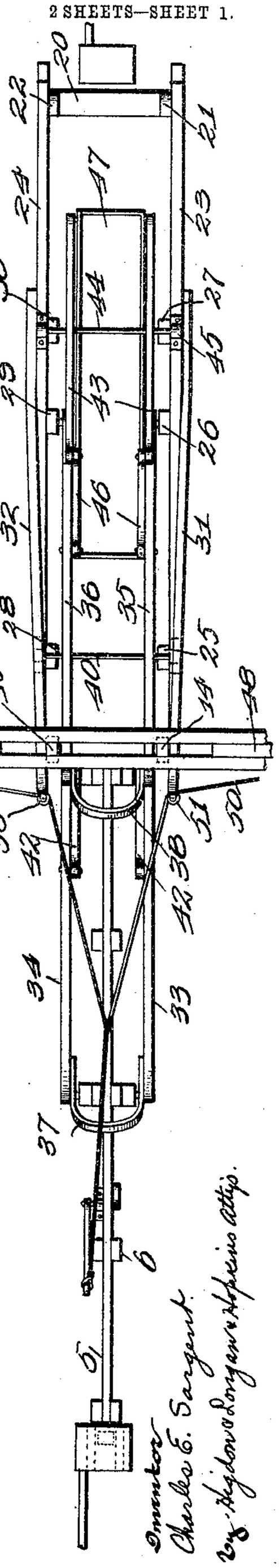

Fig. 2.

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NO MODEL. 2 SHEETS—SHEET 2.

Fig. 3.

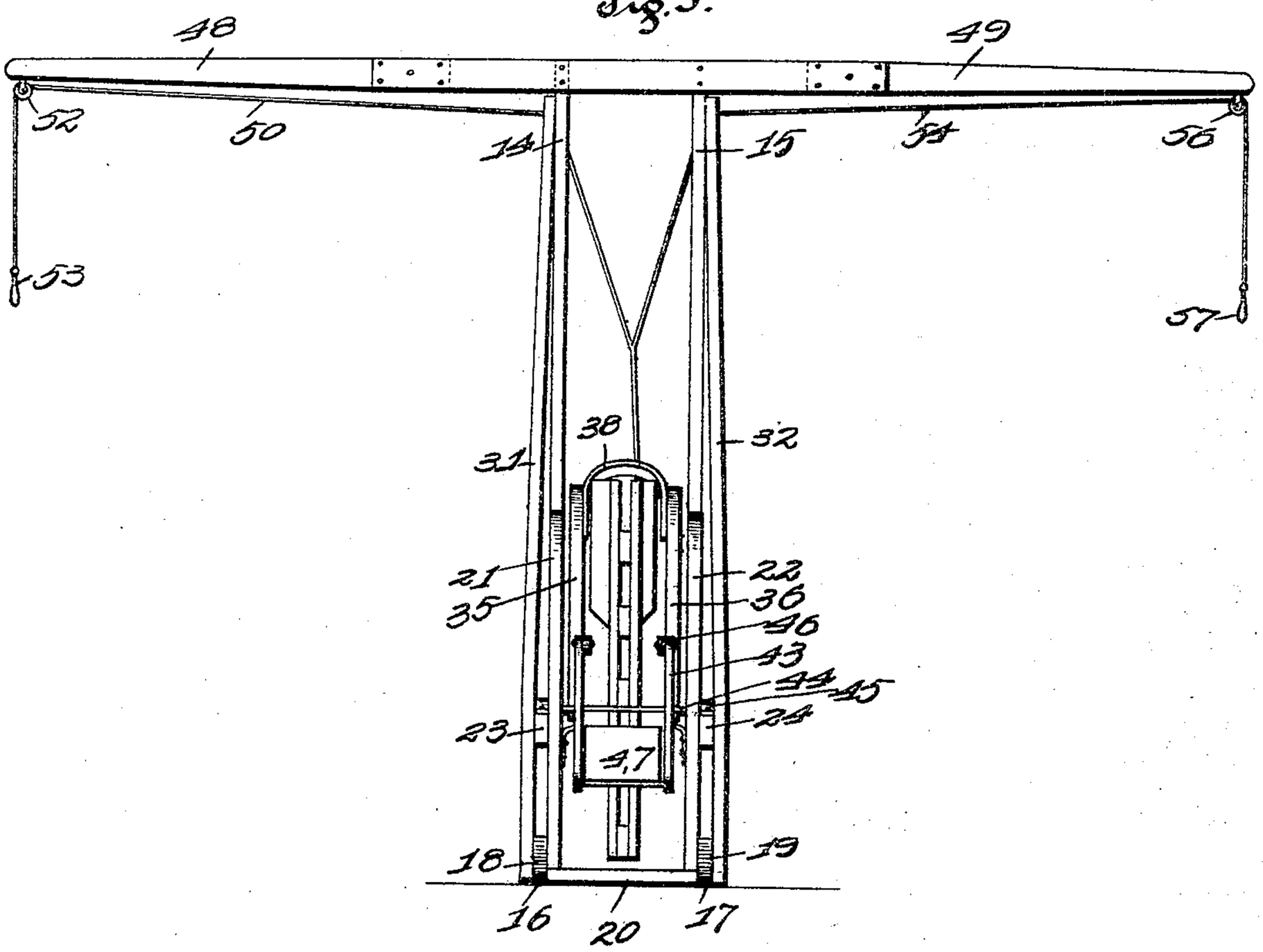
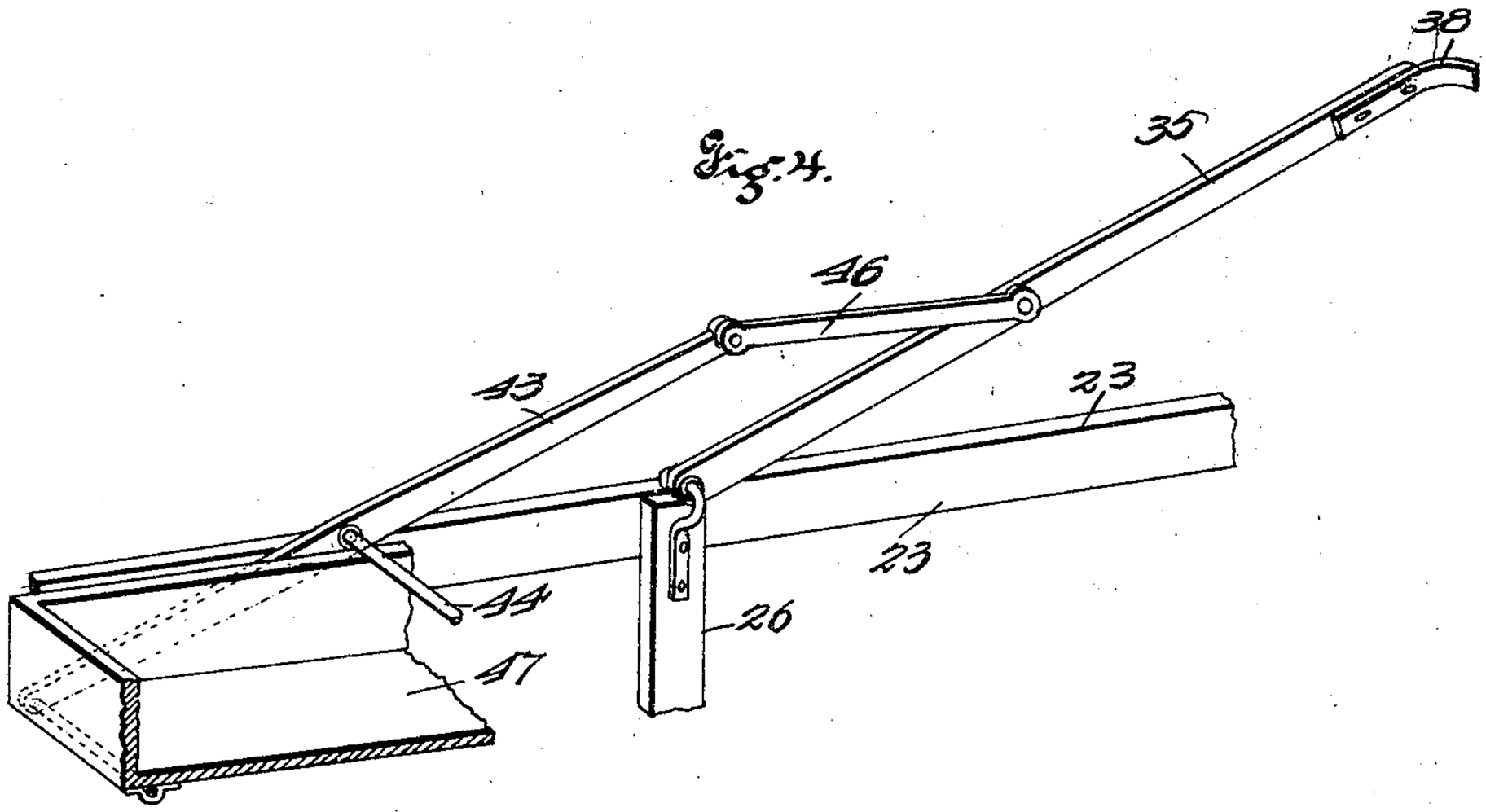


Fig. 4.



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No. 773,527. Patented October 25, 1904.

UNITED STATES PATENT OFFICE.

CHARLES E. SARGENT, OF GREENVILLE, ILLINOIS.

GATE.

SPECIFICATION forming part of Letters Patent No. 773,527, dated October 25, 1904.

Application filed June 10, 1904. Serial No. 211,918. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. SARGENT, a citizen of the United States, residing at Greenville, Bond county, State of Illinois, have invented certain new and useful Improvements in Gates, of which the following is a specification containing a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to improvements in gates; and it consists of the novel features herein shown, described, and claimed.

In the drawings, Figure 1 is a side elevation of a gate mounted in position for operation and embodying the principles of my invention, the fence being broken away to economize space. Fig. 2 is a top plan view of the parts shown in Fig. 1. Fig. 3 is an end elevation as seen looking in the direction indicated by the arrow 3 in Fig. 1. Fig. 4 is a detail perspective of one of the connections and means of swinging the gate.

Referring to the drawings in detail, the gate comprises the horizontal bars 5 and the vertical bars 6, nailed or bolted together. The central horizontal bar extends beyond the end vertical bar to form the latch member 7. The gate-post 8 forms one end of the fence, and said gate-post is bifurcated to form a housing for the swinging latch 9, said latch being pivoted to the gate-post by a pin 10, extending through the two parts of the gate-post and through the upper part of the latch, so that the latch swings downwardly and engages the latch member 7 to hold the gate from swinging upwardly while the latch 9 is in position. The latch-operating bar 11 is slidingly mounted on top of the central horizontal bar 5 in position to engage the lower part of the latch 9 and swing the latch out of engagement with the latch member 7. A bell-crank lever 12 is mounted upon one of the horizontal bars 5 above the latch-operating bar 11 and is pivotally connected to said latch-operating bar.

The gate-post 13 forms the end of the fence at the opposite side of the gate from the post 8. The distance between the posts 8 and 13 is substantially twice the length of the gate. The masts 14 and 15 are mounted half-way between the gate-posts 8 and 13, one on each side of the gate. The space between the gate-post 8 and said masts is the passage-way through the fence for vehicles and the like, and the space between the masts and the gate-post 13 is occupied by the gate-operating mechanism, said mechanism being constructed to cause the gate to step over from one side of the masts to the other and back again, as required to open and close the vehicle-passage. Sills 16 and 17 extend from the lower ends of the masts 14 and 15 to positions on each side of the gate-post 13, the outer ends 18 and 19 of said sills being rounded to form runners. A cross-piece 20 connects the outer ends of the sills 16 and 17, and posts 21 and 22 extend upwardly from said cross-piece. Braces 23 and 24 connect the masts 14 and 15 to the posts 21 and 22, said braces being parallel with the sills 16 and 17. Intermediate posts 25, 26, and 27 connect the brace 23 to the sill 16, and similar posts 28, 29, and 30 connect the brace 24 to the sill 17. The mast-braces 31 and 32 connect the masts 14 and 15 to the braces 23 and 24 and to the sills 16 and 17, respectively. The step-over levers 33 and 34 connect the upper end of the central vertical bar 6 to the masts 14 and 15 at points substantially on a level with the braces 23 and 24, and similar step-over levers 35 and 36 connect the upper end of the end vertical bar 6 to the center of the braces 23 and 24 and the upper ends of the intermediate posts 26 and 29, so that when the levers 33, 34, 35, and 36 are operated the gate will step over from the vehicle-passage to the other side of the masts. Braces 37 and 38 connect the upper ends of the step-over levers 33 and 34 and 35 and 36, respectively. Counterbalancing-levers 39 are pivotally mounted upon the shaft 40, extending through bearings 41, mounted upon the braces 23 and 24 at the upper ends of the intermediate posts 25 and 28, and links 42 connect the upper ends of said levers 39 to the intermediate parts of the step-over levers 33 and 34. Similar counterbalancing-levers 43 are mounted upon a shaft 44, said shaft extending through bearings 45, mounted upon the braces 23 and 24 at the upper ends of the intermediate posts 27 and 30, and links 46 connect the upper ends of said levers 43 to the step-over levers 35

and 36. A counterbalancing-weight box 47 is connected to the lower ends of the levers 39 and 43, and rocks, sand, or other suitable weights or ballasts are to be placed in the box 47 to counterbalance the gate. Mast-arms 48 and 49 extend from the upper ends of the masts 14 and 15 up and down the road. A cord 50 extends from the free end of the bell-crank lever 12 upwardly over the pulleys 51 and 52 and downwardly, and a handle 53 is attached to the lower end of said cord. A similar cord 54 extends from the free end of the bell-crank lever 12 over the pulleys 55 and 56 and downwardly, and a handle 57 is attached to the lower end of this cord. Said cords 50 and 54 may or may not be united between the pulleys 51 and 55 and the bell-crank lever.

A person desiring to pass the gate from the front side will grasp the handle 53 and pull downwardly, thus elevating the free end of the bell-crank lever 12, moving the latch-operating bar 11, swinging the latch 9 out of engagement with the latch member 7, causing the gate to step over to the opposite side of the masts, and after passing through the gate the handle 57 will be engaged and pulled downwardly, thus causing the gate to step back to its closed position. A very slight pull upon either of the handles 53 or 57 will operate the gate when it is properly balanced.

Especial attention is called to the fact that the gate and means of operating the gate are self-contained and independent of the fence and that the entire structure is supported upon the sills 16 and 17, which are in the form of runners, and that the structure may be drawn upon the sills from one place to another.

I claim—

1. In a gate: a pair of masts; a gate mounted to step from one side of the masts to the other; a swinging latch to engage the gate and hold it in its closed position; a sliding bar to swing the latch out of engagement with the gate; a bell-crank lever for operating the sliding bar; and cords extending from the free end of the bell-crank lever upwardly over pulleys and downwardly in position to be manually engaged; substantially as specified.

2. In a gate: a suitable support; a gate mounted to step over from one side of the support to the other; one of the gate-bars being extended to form a latch member; a swinging latch to engage the latch member and hold the gate in its closed position; a sliding bar to swing the latch out of engagement with the latch member; a bell-crank lever for operating the sliding bar; and means extending up and down the road for operating the bell-crank lever; substantially as specified.

3. In a gate: the sills 16 and 17 mounted side by side and spaced apart, and having the rounded outer ends 18 and 19; posts 21 and 22 extending upwardly from the sills; masts 14 and 15 extending upwardly from the sills at the opposite ends from the posts; intermediate posts extending upwardly from the sills between the outer posts and the masts; braces connecting the upper ends of the intermediate posts and the masts; braces connecting the upper ends of the masts to the sills, thus producing a portable frame; step-over levers pivotally connected to the frame; counterbalancing-weight levers pivotally connected to the frame and to the step-over levers; counterbalancing-weights for operating the counterbalancing-weight levers; and a gate connected to the step-over levers to step back and forth between the masts; substantially as specified.

In testimony whereof I have signed my name to this specification in presence of two subscribing witnesses.

CHARLES E. SARGENT.

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