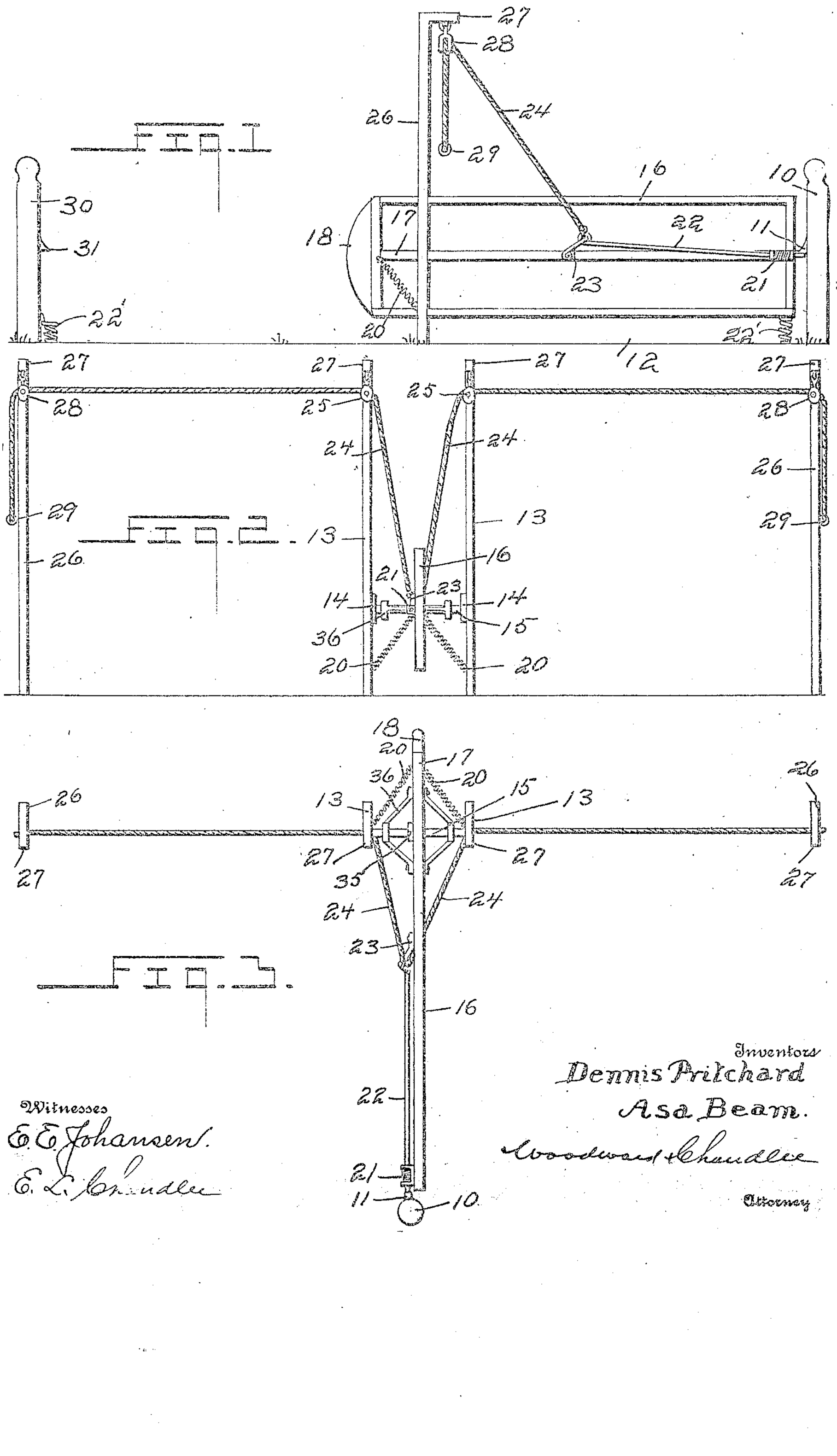
D. PRITCHARD & A. BEAM.

OSCILLATING GATE.

APPLICATION FILED JAN. 6, 1909.

920,492. Patented May 4, 1909.



UNITED STATES PATENT OFFICE.

DENNIS PRITCHARD AND ASA BEAM, OF SUMNER, NEBRASKA.

OSCILLATING GATE.

No. 920,492. Specification of Letters Patent. Patented May 4, 1909.

Application filed January 6, 1909. Serial No. 470,994.

To all whom it may concern:

Be it known that we, DENNIS PRITCHARD, and ASA BEAM, citizens of the United States, residing at Sumner, in the county of Dawson and State of Nebraska, have invented certain new and useful Improvements in Oscillating Gates, of which the following is a specification.

This invention relates to gates, and more particularly to gates adapted to be operated by a person seated in a vehicle at a distance therefrom.

It has for its object to provide a gate which will require a minimum of exertion to operate, and may be easily manipulated by persons not having great physical strength.

Another object is to provide a gate normally under tension to operate for opening action, and being held in closed position by a latch member having an operative connection adapted to operate the latch and apply motive force for the actuation of the gate.

Another object is to provide a gate which will not tend to frighten nervous animals.

Other objects and advantages will be apparent from the following description, and it will be understood that changes in the specific structure shown and described may be made within the scope of the claim, without departing from the spirit of the invention.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a side view of the device in closed position, Fig. 2 is an end view of the device, Fig. 3 is a top view of the device.

Referring to the drawings, there is shown a gate comprising a latch post 10 having an engaging lug 11 on its side adjacent the roadway 12, the outer face of the lug 11 being beveled inwardly and upwardly as shown and its under face extending horizontally. On the opposite side of the roadway 12, there are spaced standards 13, provided with registering journals 14, carrying a shaft 15 revolubly therein. Secured rigidly upon the shaft 15, there is a gate 16 of any suitable type, having an extension 17 inwardly of the axle 15, provided with a suitable ballast 18. The ballast is adjusted so as to approximately balance the closure portion of the gate, and secured to the extension 17 outwardly of the axle 15, there are spring members 20 extending downwardly and engaged to the uprights 13, under tension normally to move the gate to lift the closure end from the roadway 12. The gate is provided with a sliding latch member 21 engaged by a suitable spring under tension to force it outwardly for engagement beneath the lug 11 carried by the post 10.

Connected to the latch 21, there is a connecting rod 22 extending toward the center of the gate and engaged upon a pivoted arm 23. It will be noted that the arm extends outwardly when the latch is in engaged position, and connected to its outer end, are flexible members 24 extending upwardly and over pulleys 25 carried at the upper ends of the uprights 13.

Spaced from the uprights 13 longitudinally of the roadway 12, there are posts 26 having arms 27 carrying pulleys 28, over which the flexible members 24 extend and depend, there being a handle 29 secured to the lower end of the pendent portion of the members 24 for operation as will be understood. A suitable weight may be attached to the handle if desired.

Spaced inwardly of the uprights 13 from the roadway 12, there is a post 30 having a lug 31 similar to that 11 carried by the post 10. It will thus be apparent that the gate may be rotated to engage the latch 21 with either the lug 31 or 11.

When it is desired to operate the gate, one of the handles 29 is pulled, the flexible member 24 thus being actuated to oscillate the member 23 and release the latch 21. Immediately upon release of the latch 21, the spring 20 engages the gate tending to lift it upwardly. A slight application of force upon the handle 29 after the disengagement of the latch will give the gate sufficient momentum to carry it into engagement with the lug 31 upon the inner post 30. When it is desired to close the gate, the handle 29 is pulled in the same way, with a similar result in a reverse direction. It will be noted that spring members 22′ are disposed adjacent the bases of the posts 10 and 30 and adapted to engage beneath the gate 16 against downward movement to prevent severe strain thereon incident to sudden stoppage.

It should be noted that the method of mounting the gate is very simple. The gate is provided with an upright 35 adjacent its

inner end, through which the shaft 15 extends; diagonal tie rods 36 being secured to the outer ends of the shaft and connected to the gate concentrically of the shaft to hold the gate rigidly in a constant plane.

What is claimed is:

A gate comprising a support, a frame pivoted thereon intermediately of its length, and adapted for rotation over an arc of 180°, latch means for securing the gate detachably at each end of the arc of its movement, means for operating the latch for release of the gate, said means being adapted also for operation of the gate, and a spring engaged with the gate outwardly of its pivot point under tension to lift the gate from the horizontal at both ends of the arc of its movement.

In testimony whereof we affix our signatures, in presence of two witnesses.

DENNIS PRITCHARD.
ASA BEAM.

Witnesses:
R. W. JOHNSON,
W. R. SCOVILLE.