

(No Model.)

C. TILDEN.

BUFFER AND DEVICE FOR SHIFTING FREIGHT ON CARS.

No. 467,065.

Patented Jan. 12, 1892.

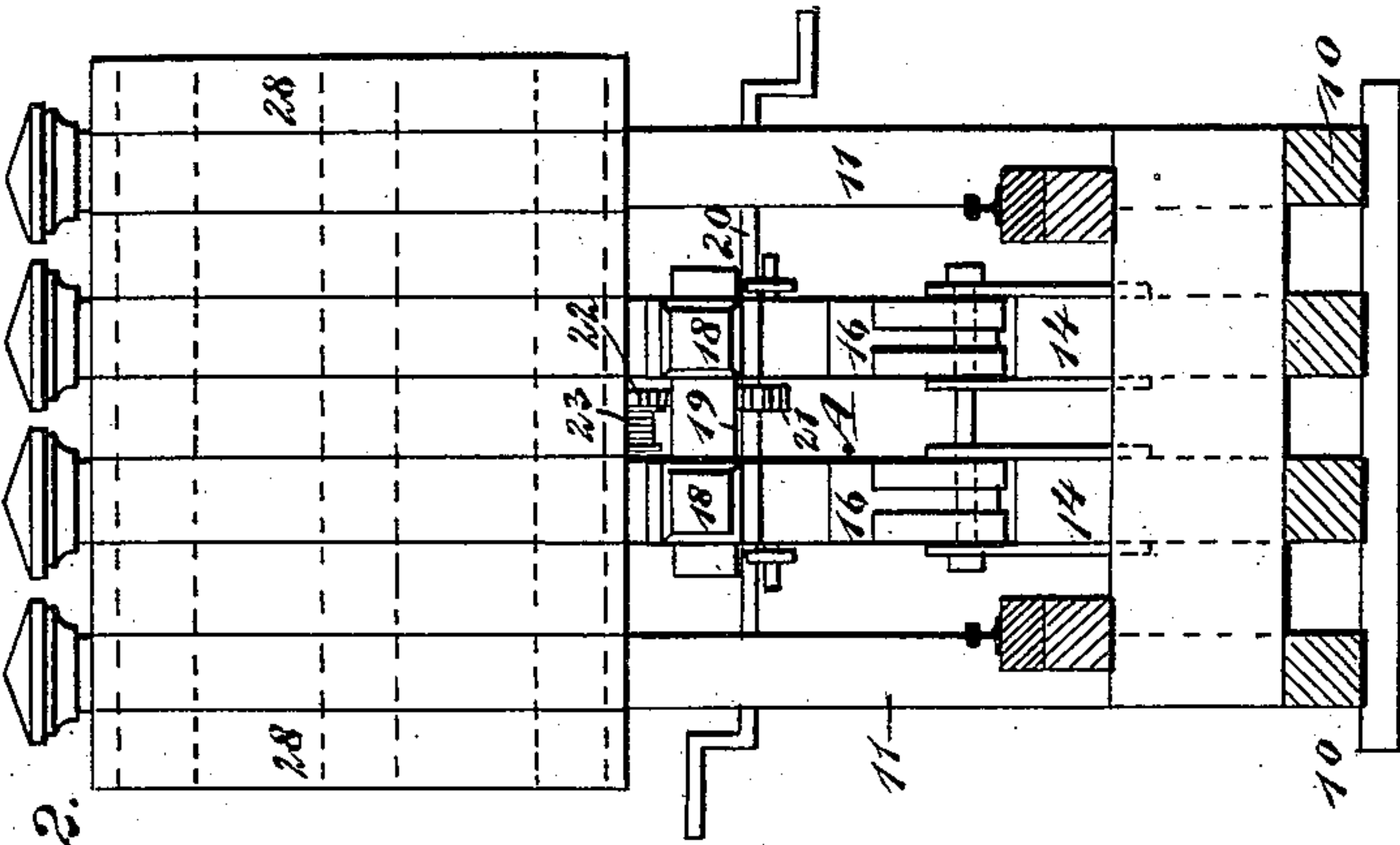


Fig. 2.

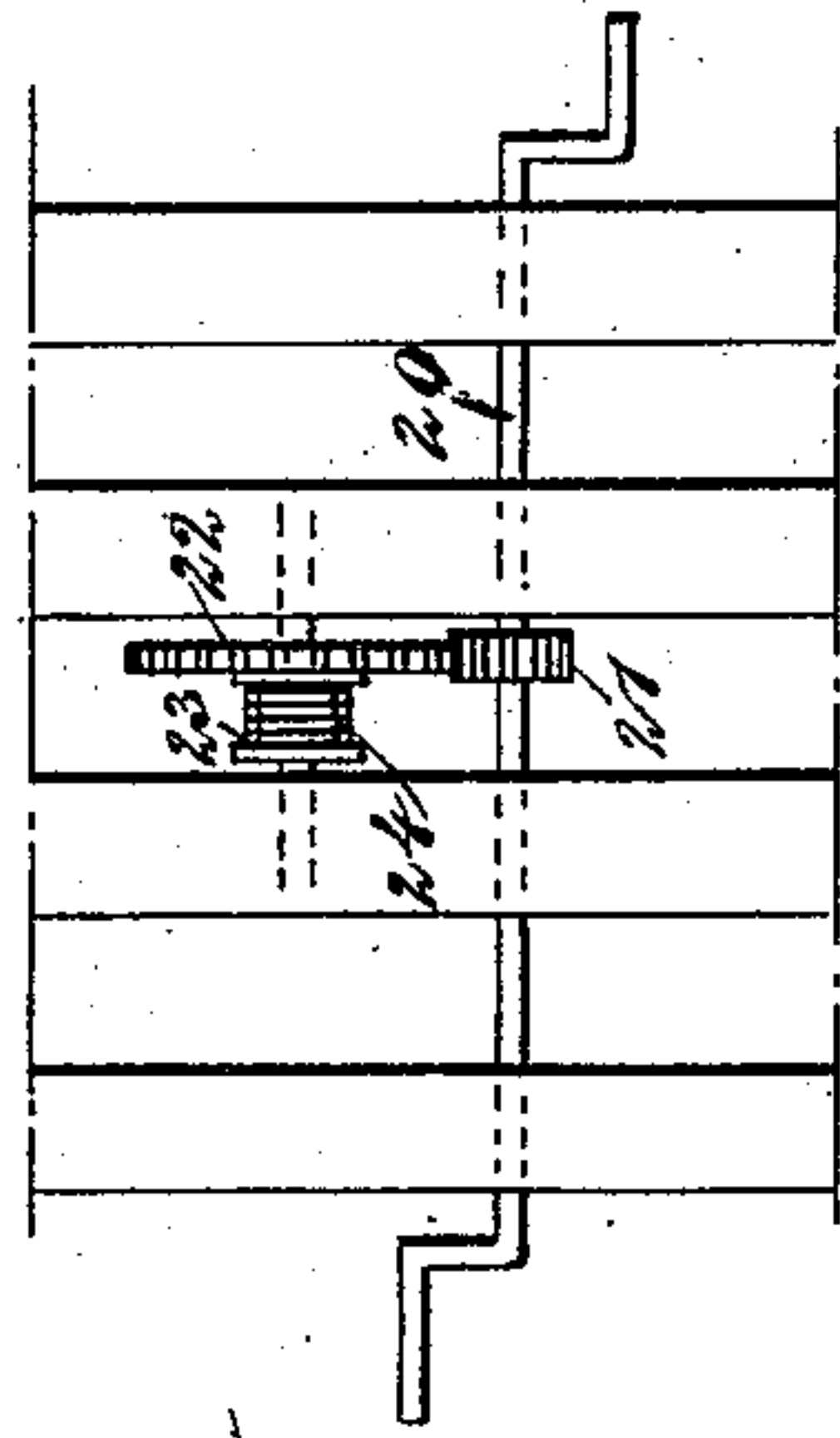


Fig. 4.

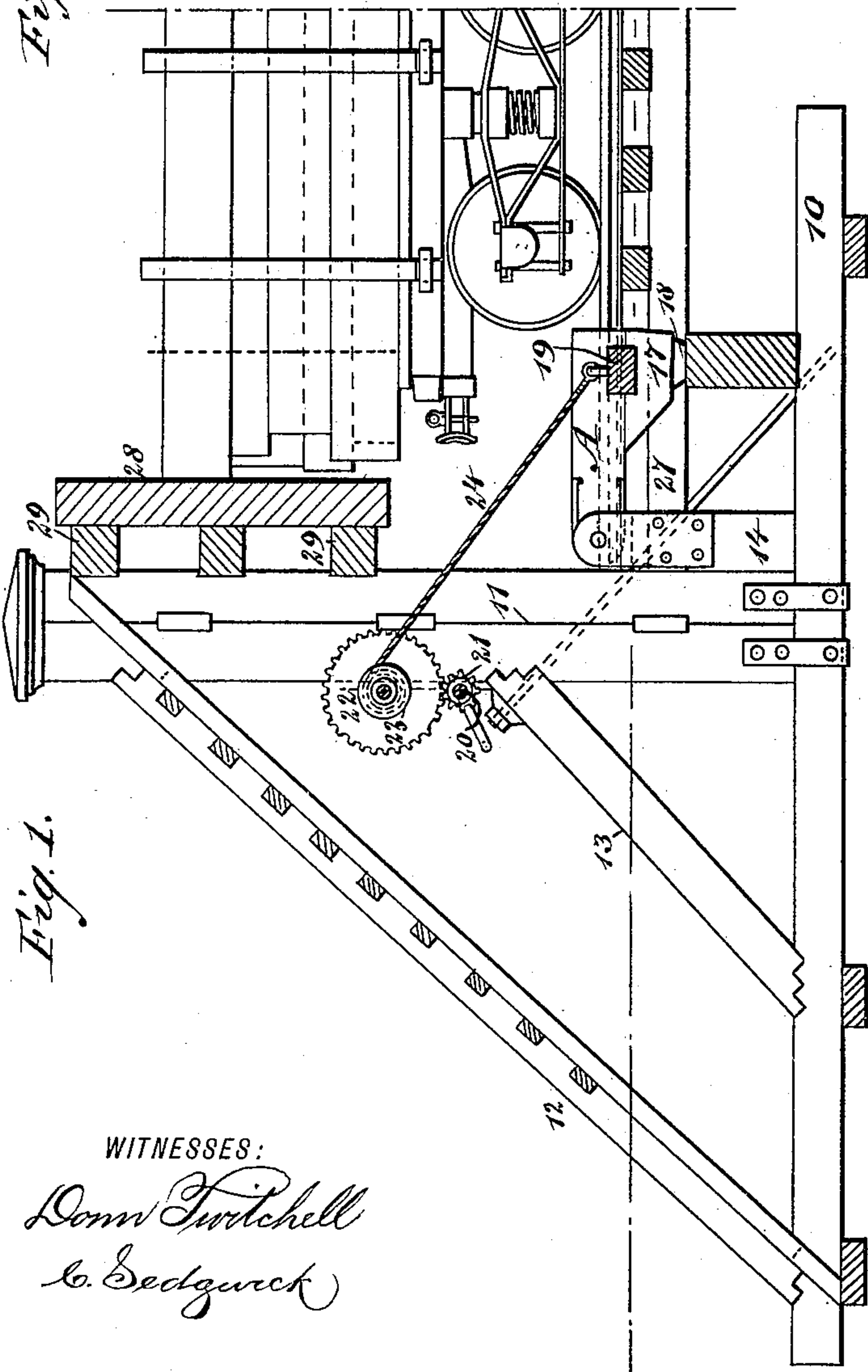


Fig. 1.

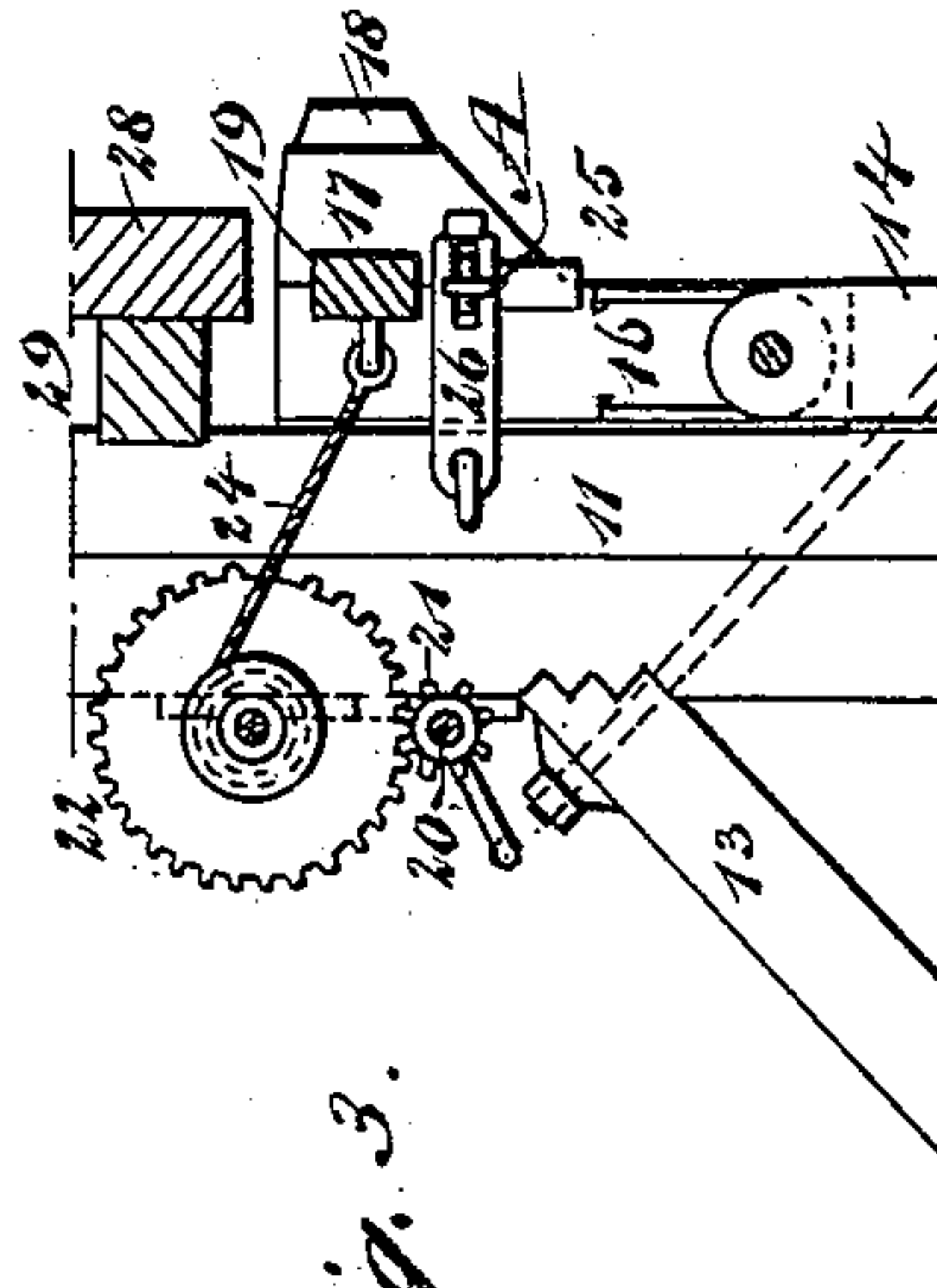


Fig. 3.

WITNESSES:

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# UNITED STATES PATENT OFFICE.

CLAYLAND TILDEN, OF JERSEY CITY, NEW JERSEY.

## BUFFER AND DEVICE FOR SHIFTING FREIGHT ON CARS.

SPECIFICATION forming part of Letters Patent No. 467,065, dated January 12, 1892.

Application filed September 15, 1891. Serial No. 405,796. (No model.)

*To all whom it may concern:*

Be it known that I, CLAYLAND TILDEN, of Jersey City, in the county of Hudson and State of New Jersey, have invented a new and Improved Device for Shifting Freight on Gondola and Flat Cars, of which the following is a full, clear, and exact description.

My invention relates to an improvement in devices for shifting freight upon gondola and flat cars, and has for its object to so construct the butting-blocks of railroad-tracks that a car may be propelled in a manner to provide an engagement between its load and the block and the load be instantly trued up or brought in proper alignment at its ends.

A further object of the invention is to so construct a butting-block that it may be employed for shifting the loads of cars without interfering in the least with its ordinary functions, and whereby the necessary attachments may be added at a minimum of cost.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures and letters of reference indicate corresponding parts in all the views.

Figure 1 is a vertical section through a butting-block having the improvements applied, a car being also shown in side elevation. Fig. 2 is a front elevation of the butting-block and a transverse section through the rails of a track. Fig. 3 is a partial vertical section through the butting-block, illustrating the buffing-head in its operative position; and Fig. 4 is a partial rear elevation of the block.

The base of the butting-block consists of a series of beams 10, and upon these beams a series of standards 11 is erected, the said standards being vertical and of much greater strength and of much greater height than those employed in the construction of ordinary butting-blocks. The standards are maintained in their vertical position and are effectually braced by a number of beams arranged in two diagonal rows, the said beams being designated, respectively, as 12 and 13. The row of shorter beams 13 are immediately below the longer beams and engage at their

lower ends with the base-beams and at their upper ends are tenoned into or otherwise secured to the rear faces of the standards. Two short vertical beams 14 are secured to the base-beams immediately in front of the two central standards, and upon these short beams the buffing-block A of the butting-block is pivoted. The buffing-block consists of two vertical sections 16, which are pivoted at their lower ends and provided at their upper ends upon their outer faces with projections 17, each projection having secured thereto a facing 18, of elastic material. The two vertical sections of the buffing-block are connected by a cross-bar 19.

At the rear of the standards of the butting-block a transverse shaft 20 is journaled, terminating at its extremities in crank-arms, through the medium of which the shaft is revolved. This shaft carries a pinion 21, meshing with a gear 22, journaled in suitable bearings above the shaft and between the two central standards, as is best shown in Fig. 4. A drum 23 is connected with the gear 22, and upon the drum a cable or chain 24 is wound, one end being secured to the drum and the other to the cross-bar 19 of the buffing-block.

To avoid confusion I prefer to designate the buffing-block a "buffing-head," as it acts in that capacity. The buffing-head is maintained in an upper vertical position when required for use by means of any approved form of locking device, that shown in the drawings consisting of a staple 25, attached to the head, which is engaged by a hasp 26, pivoted to the butting-block. In connection with the staple and hasp an ordinary lock is employed, as shown in Fig. 3. When the buffing-head is not required for use, the fastening device is removed therefrom, and by gravity the head drops down, assuming a horizontal position in a pit 27, located between the end of the track and the butting-block, as shown in positive lines in Fig. 1.

Immediately above the buffing-head A, when the latter is in its upper vertical position, a buffing-surface is formed upon the front faces of the standards 11, the said buffing-surface consisting of a series of vertically-arranged heavy beams 28, the said beams being attached to heavy cross-timbers



29, the latter being secured in any suitable or approved manner to the standards. The distance between the track and the lower edge of the buffing-surface just described is equivalent to the distance between the track and the upper face or bed of a flat or gondola car, so that if a car is without a load and is pushed forward in direction of the butting-block the body of the car at its end would just pass below the upper buffing-surface.

It frequently happens when gondola and flat cars are loaded with beams of wood or iron or equivalent freight that the freight shifts edgewise, and if beams are carried they extend some distance beyond the ends of the car, and it is necessary that they be trued up before the flat or gondola cars can be coupled with box-cars. This operation has heretofore been performed through the medium of laborers, and frequently with the assistance of derricks and other like structures.

It is the prime object of this invention to avoid the handling of the freight and provide a means whereby the material on the car may be trued up and may be brought in perfect alignment at the ends. I accomplish this by first allowing the buffing-head A to drop down into its pit, as shown in Fig. 1. The car is then pushed, preferably by means of an engine, in direction of the butting-block, and the end of the load carried by the car will be brought in gradual engagement with the upper buffing-surface of the block, and as that surface is perfectly true the end of the load will be shaped likewise. The car may, if it is necessary, be carried to a turntable and the other end of the load treated in the manner above set forth.

When the device is to be employed as an

ordinary butting-block, the buffing-head A, through the medium of the shaft 24, is carried to its elevated position (shown in Figs. 2 and 3) and locked in such position to receive the buffing-surfaces of the couplers.

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

1. A buffer and freight-shifter comprising the frame-work, an upper buffing-face thereon above the level of the floor of a gondola or flat car to engage and even up the freight thereon, and a movable buffing-head below the buffing-face projecting in advance thereof when in use to engage a car-buffer and adapted to be moved out of the path of the car-buffers when the upper buffing-face is to be used, substantially as set forth.

2. The combination, with a butting-block, of a buffing-head having pivotal connection with the block, and a mechanism for raising the head from a horizontal to a vertical position, substantially as described.

3. The combination, with a butting-block, of a buffing-head having a hinge or pivotal connection therewith, means for elevating the buffing-head, and a fixed buffing-surface attached to the block above the head, as and for the purpose set forth.

4. A buffing-block having a buffing-head hinged thereto, a fixed buffing-surface above the buffing-head, and an elevating mechanism connected with the buffing-head, substantially as described.

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Witnesses:

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