

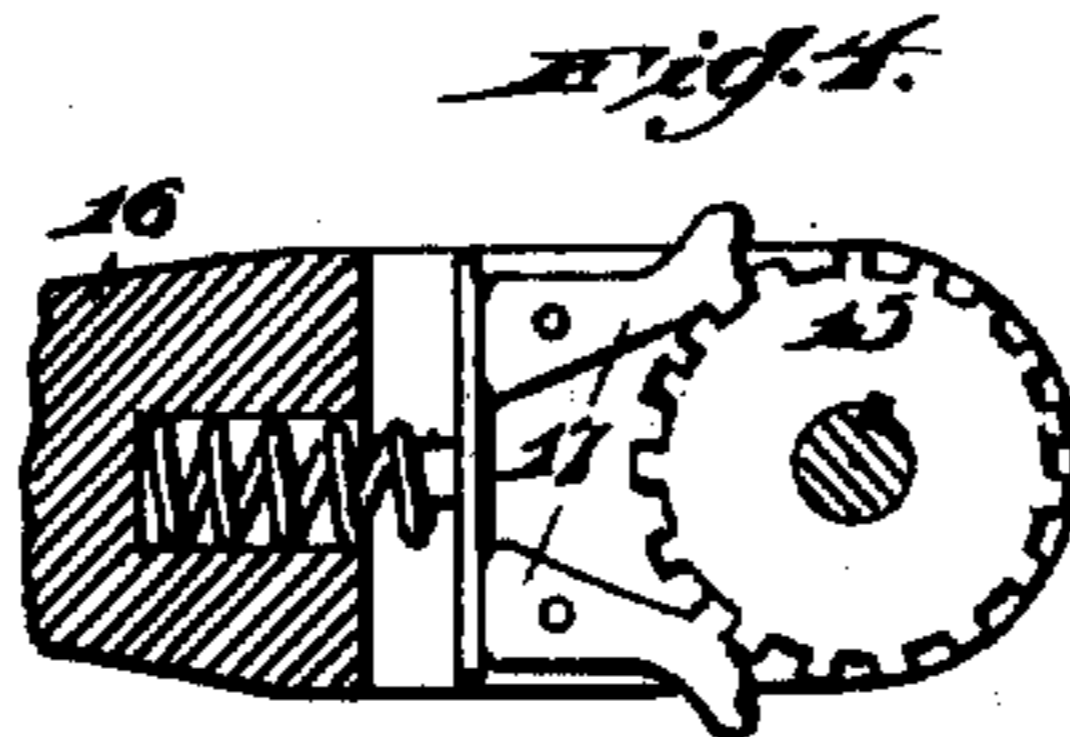
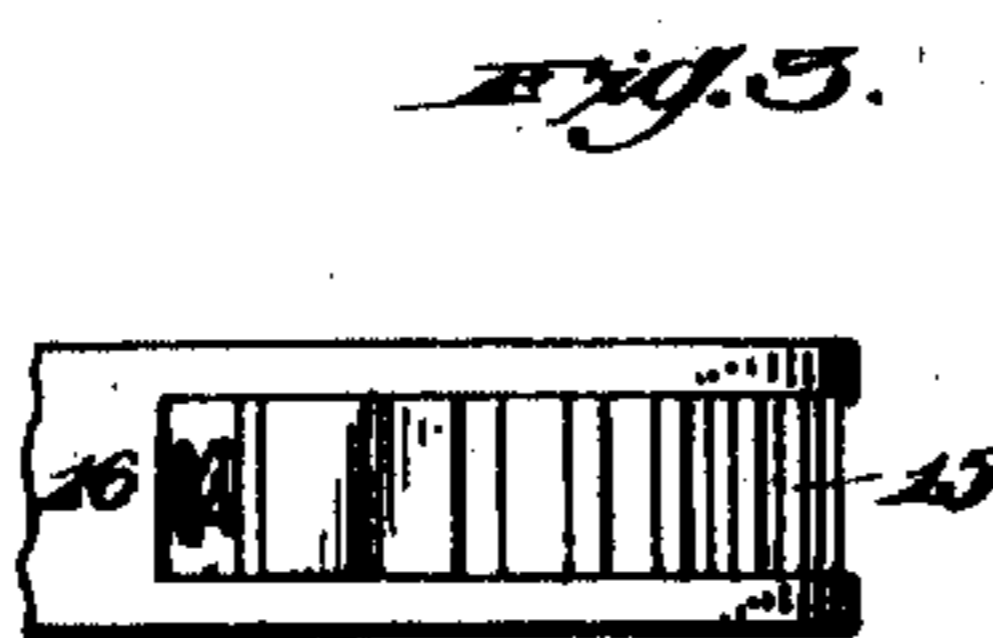
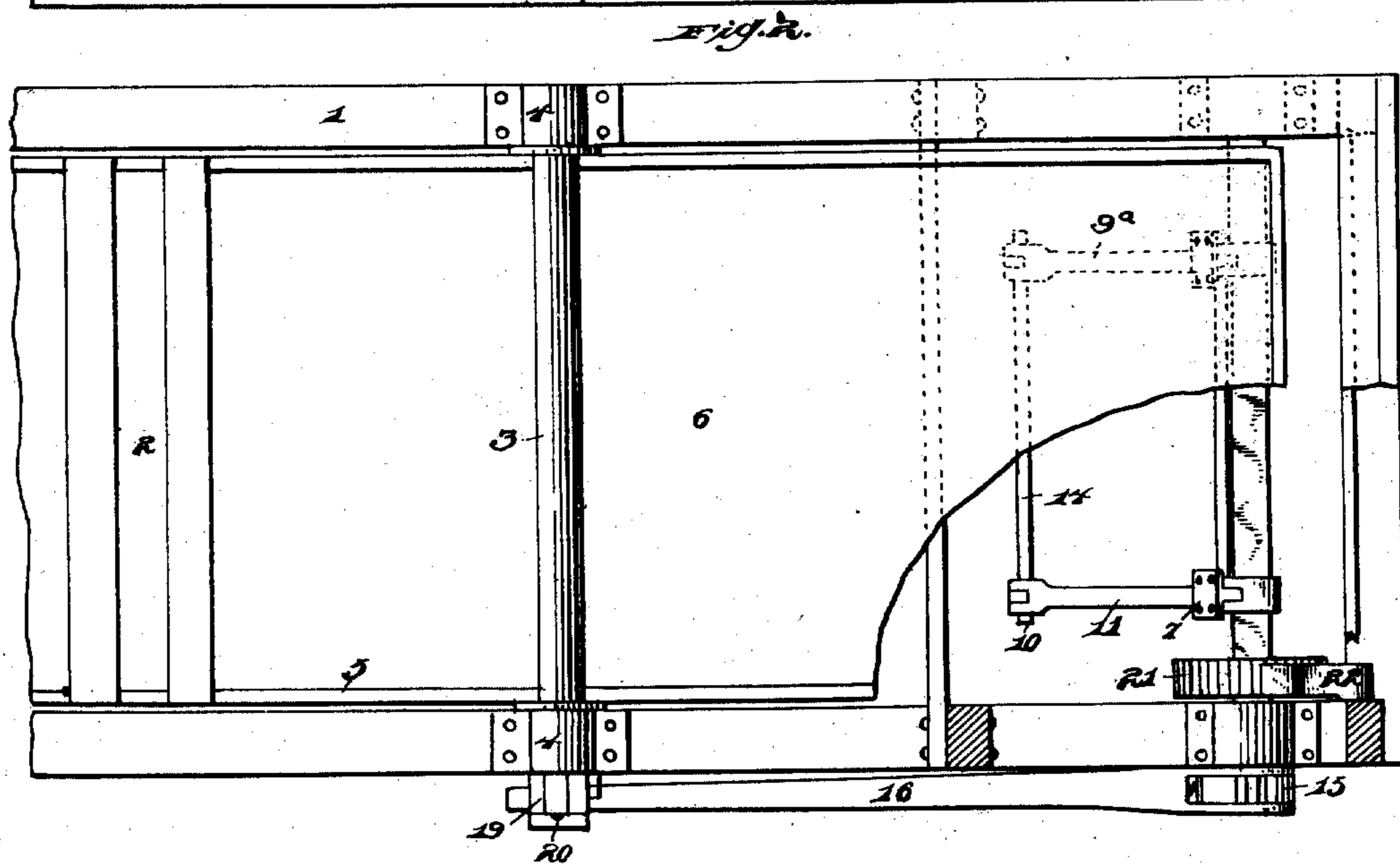
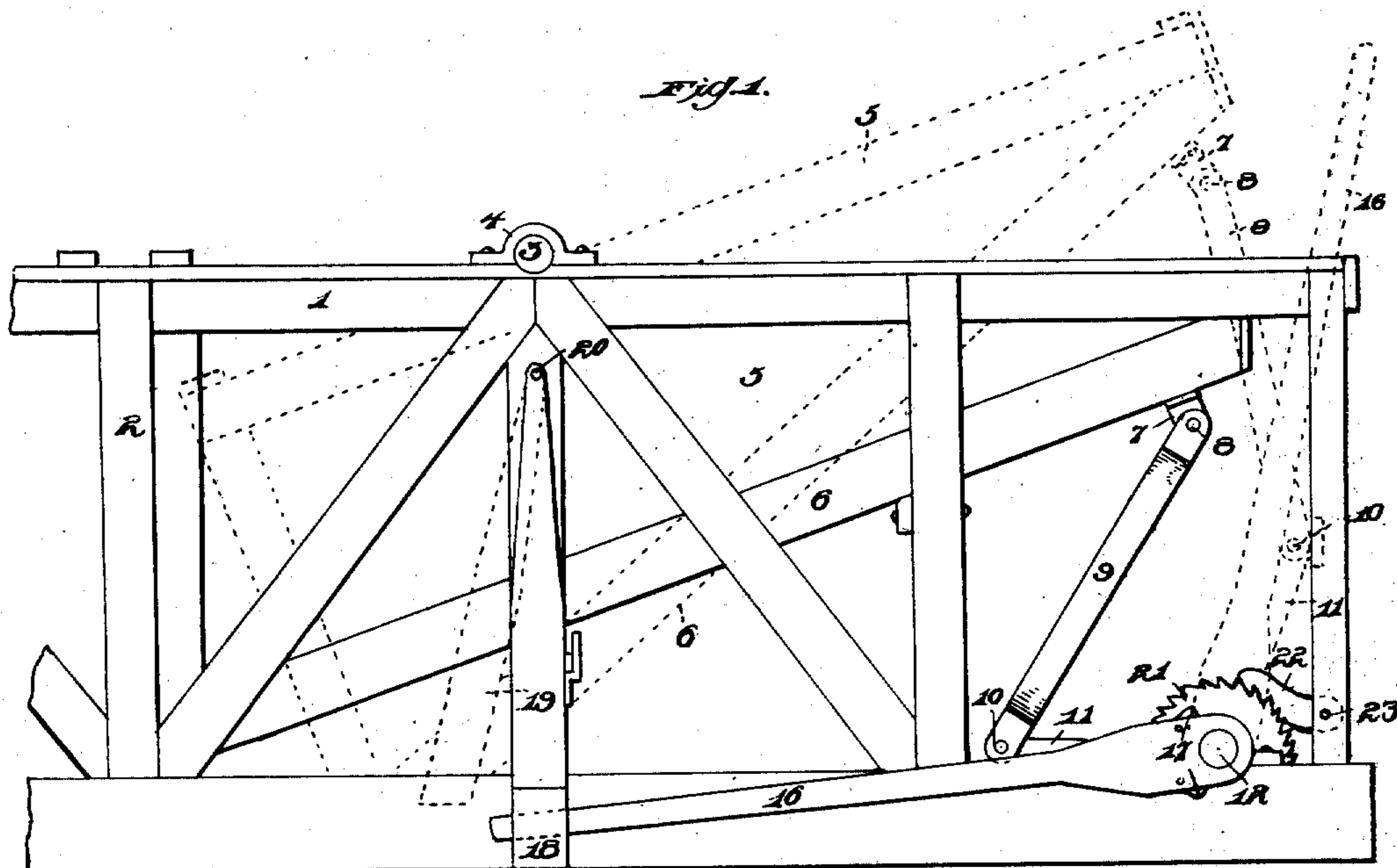
**No. 689,197.**

**Patented Dec. 17, 1901.**

**B. KELLY & W. F. MURPHEY.**  
**DUMPING CAR.**

(Application filed Sept. 20, 1901.)

(No Model.)



*Witnesses:*

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# UNITED STATES PATENT OFFICE.

BERT KELLY AND WILLIAM F. MURPHEY, OF DUQUESNE, PENNSYLVANIA.

## DUMPING-CAR.

SPECIFICATION forming part of Letters Patent No. 689,197, dated December 17, 1901.

Application filed September 20, 1901. Serial No. 75,761. (No model.)

*To all whom it may concern:*

Be it known that we, BERT KELLY and WILLIAM F. MURPHEY, citizens of the United States of America, residing at Duquesne, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Dumping-Cars, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in dumping-cars, and relates more particularly to railway-cars, pit-cars, and the like.

The invention has for its object the provision of novel means whereby the body portion of a car may be tilted to any desired incline, thereby discharging the contents of the car and automatically unloading the same.

Another object of the present invention is to provide novel means that will retain the body portion of the car in a tilted position and to form a substantial support for the same.

Our invention still further contemplates to construct a car of the above-described character that will be extremely simple in construction, strong, durable, and comparatively inexpensive to manufacture.

The present invention also aims to provide an attachment and to construct a leverage that may be easily operated from the side of the car.

With the above and other objects in view the invention consists in the novel combination and arrangement of parts to be hereinafter more fully described, and specifically pointed out in the claims.

In describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification, and wherein like numerals of reference indicate corresponding parts throughout the several views, in which—

Figure 1 is a side elevation showing one-half of a car-frame with our improvements attached thereto. Fig. 2 is a top plan view thereof. Fig. 3 is a top plan view of the end of the operating-lever. Fig. 4 is a longitudinal vertical sectional view thereof.

In the drawings the reference-numeral 1 indicates a car-frame, and 2 represents a par-

tion which is formed centrally in said car-frame.

The reference-numeral 3 represents a shaft arranged upon the frame of the car, said shaft being suitably journaled in keepers 44. Upon this shaft is swingingly mounted the body portion of the car 5, having an inclined bottom 6 graduating to the end of the car. To the under face of said graduated bottom 6 is secured a hanger 7, to which is pivotally secured at 8 an arm 9, the lower end of said arm being pivotally secured at 10 to an arm 11, secured to the operating-shaft 12. The shaft 14 extends from the pivotal connection 8 to the opposite arm 9<sup>a</sup> and a like arm 11<sup>a</sup>, which is also fixed to the shaft 12. To the one end of the shaft 12 is secured a toothed wheel 15, and an operating-lever 16 is movably secured upon the shaft 12. This operating-lever is provided with spring-pressed dogs 17, adapted to operate in the toothed wheel 15. The end of the operating-lever 16 when not in use is secured in a keeper 18, a swinging arm 19 being pivoted at 20 to the frame of the car, which serves to securely fasten the operating-lever in the keeper 18 and prevent the latter from being raised. Upon the shaft 12 is also secured a ratchet-wheel 21, and a gravity-pawl 22 is pivotally secured at 23 to the end of the frame, said pawl engaging the ratchet-wheel 21.

The operation of our improved device is as follows: The normal position of the body portion of the car being as shown in full lines of Fig. 1 of the drawings, the partition 2 serves to form the inner end of the body portion of the car and when operated to its maximum height will assume the position as shown in dotted lines in Fig. 1 of the drawings. It will be noted that when the arms 9 and 11 are raised to the position as shown in dotted lines of Fig. 1 of the drawings the pivotal point 10 will be out of alinement and will form an additional brace or seat against the end of the car-frame.

The many advantages obtained by the use of our improved dumping-car will be readily apparent from the foregoing description, taken in connection with the accompanying drawings.

It will be noted that various changes may be made in the details of construction with-

out departing from the general spirit of our invention.

Having fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a dumping-car, the combination of a frame having a central partition therein, a pivoted body portion having an inclined bottom, levers connected to said body portion, an operating-shaft connected to said levers, means for operating said shaft, means for locking said means, and means carried by the shaft to prevent backward movement of the same when the body portion is tilted, substantially as described.

2. In a dumping-car, the combination of a frame, a central partition arranged in said frame, a pivoted body portion, an inclined bottom arranged in said body portion, a series of levers pivotally connected to the bottom of said body portion, an operating-shaft connecting two of said levers, a ratchet-wheel secured on said operating-shaft, a gravity-pawl engaging said ratchet-wheel, an operating-lever connected to said operating-shaft, and means whereby said operating-handle is placed in a locked position.

3. In a dumping-car, a frame having a partition, a shaft carried by the frame, a body

portion having a bottom pivotally mounted on said shaft, levers carried by the bottom of the body portion, an operating-shaft connected to said levers, a pawl-and-ratchet mechanism on said shaft and frame, a lever connected to said operating-shaft for actuating the same, a keeper carried by the frame, and a swinging arm pivoted to the frame between the end of which and said keeper the said lever is locked, substantially as described.

4. In a dumping-car, the combination of a frame having a partition, a body portion carrying a bottom pivoted to said frame, an operating-shaft, levers pivoted to one another and to the body portion and connected to said operating-shaft, a lever connected to the shaft for operating the same, the pivotal point of connection of said first-named levers adapted to engage said frame when the body portion is in its raised position, substantially as set forth.

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

BERT KELLY.

WILLIAM F. MURPHEY.

Witnesses:

JOHN NOLAND,  
E. E. POTTER.