

No. 721,059.

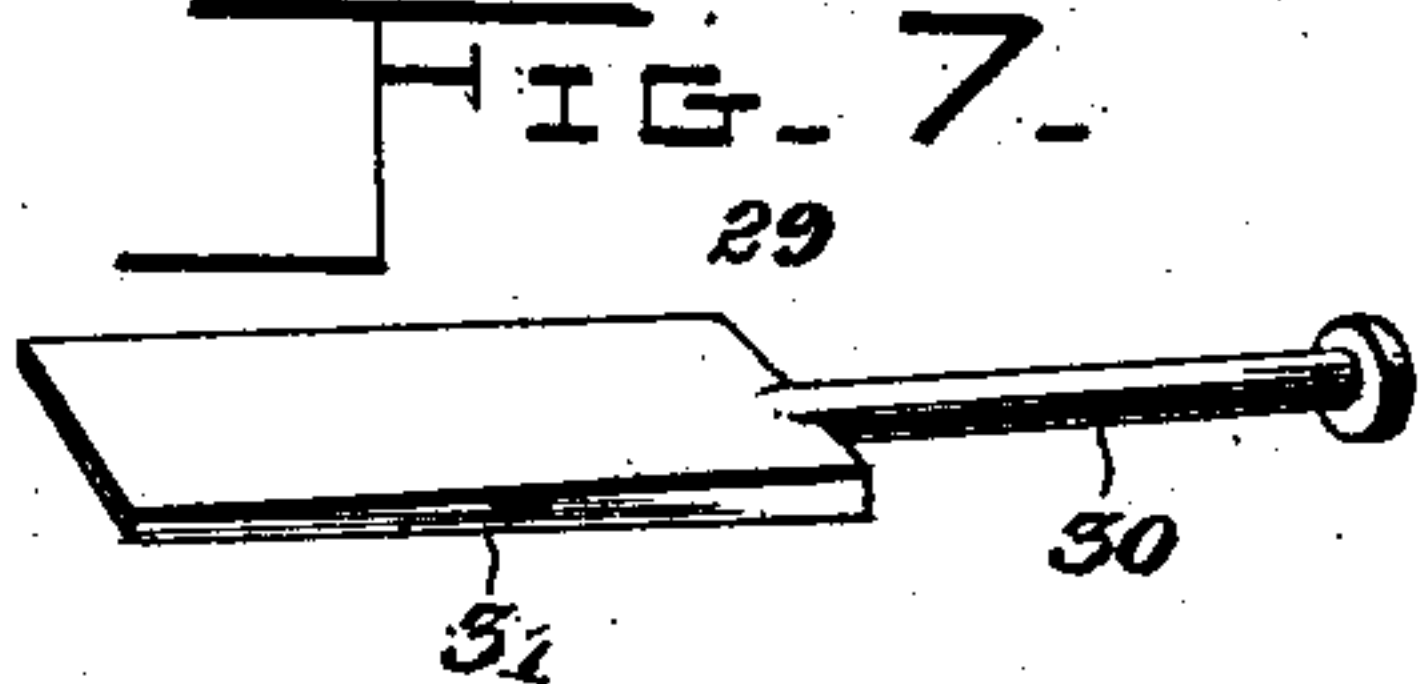
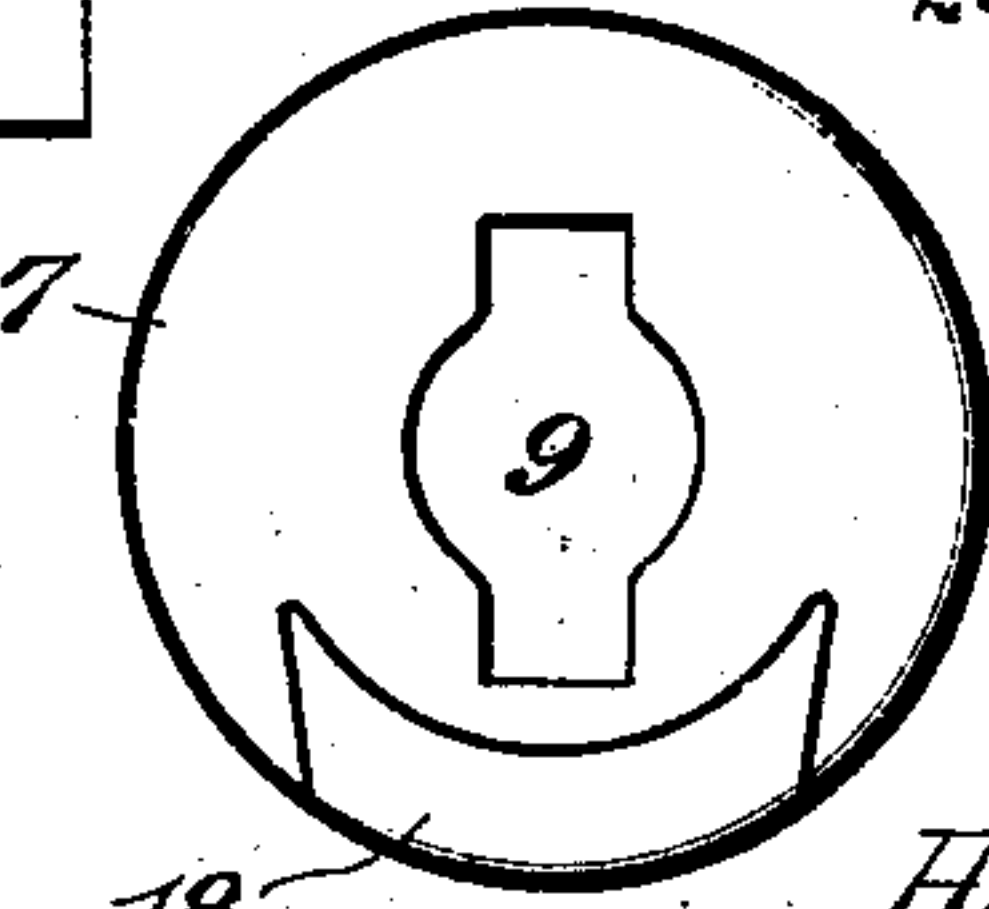
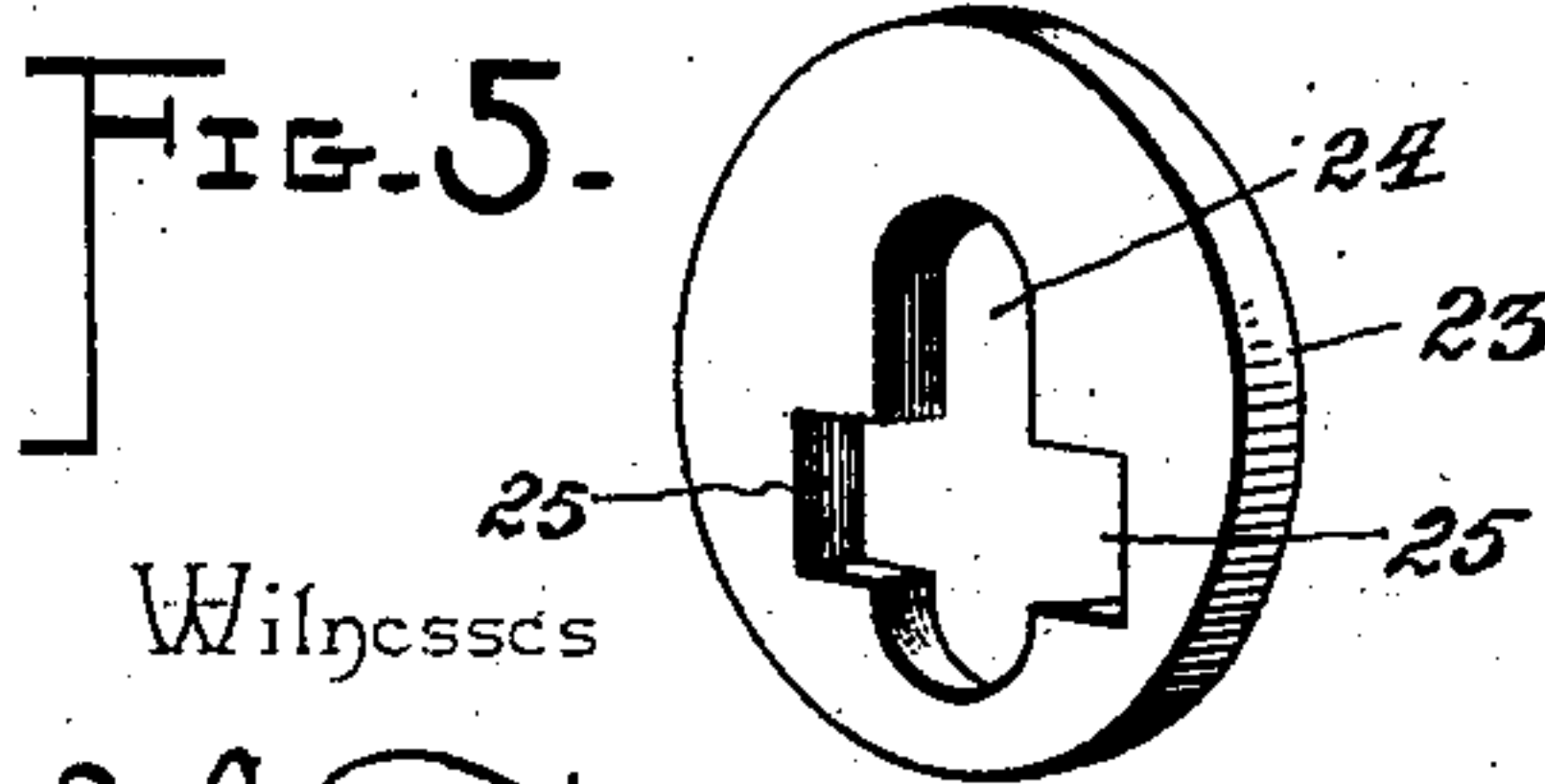
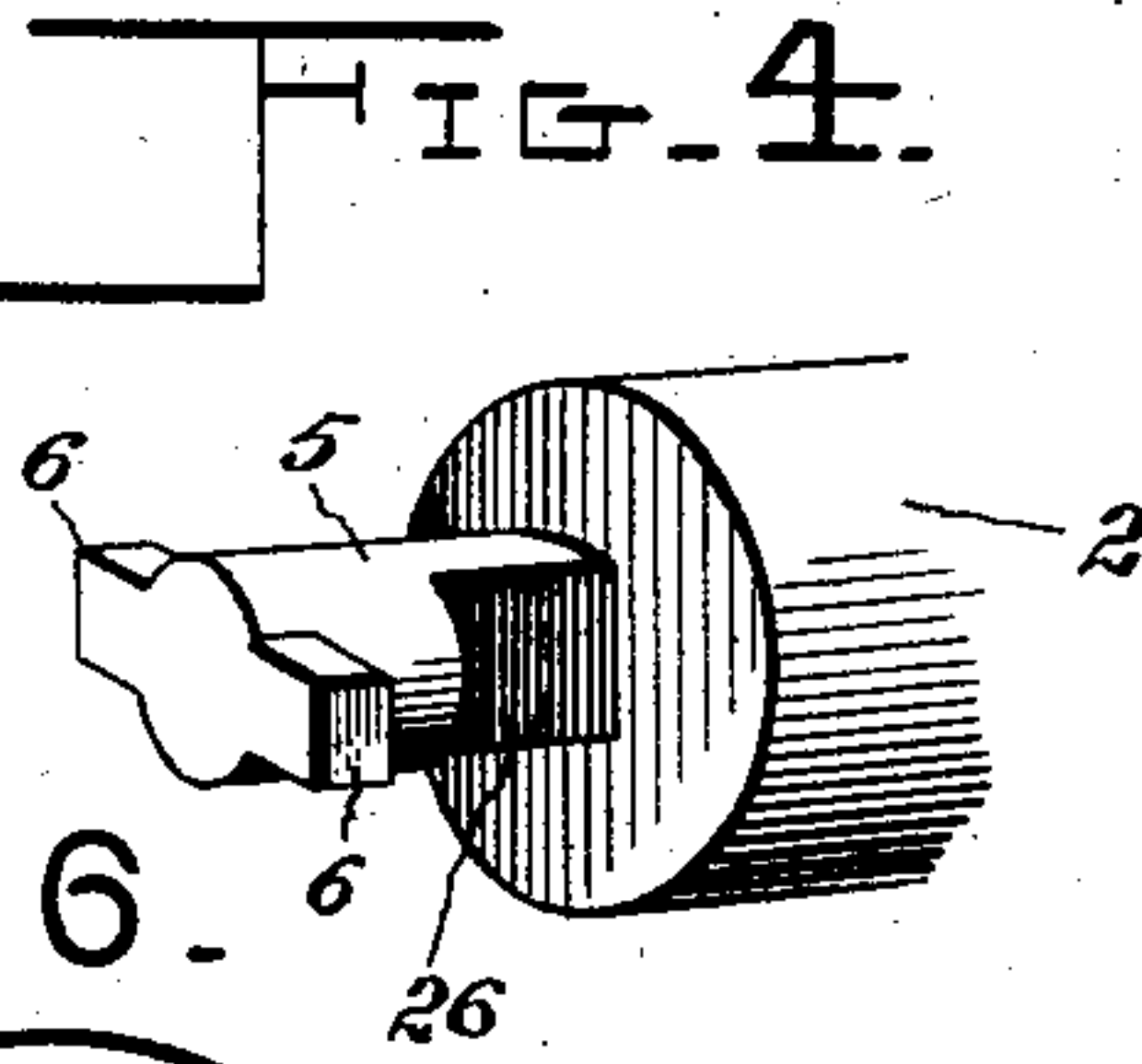
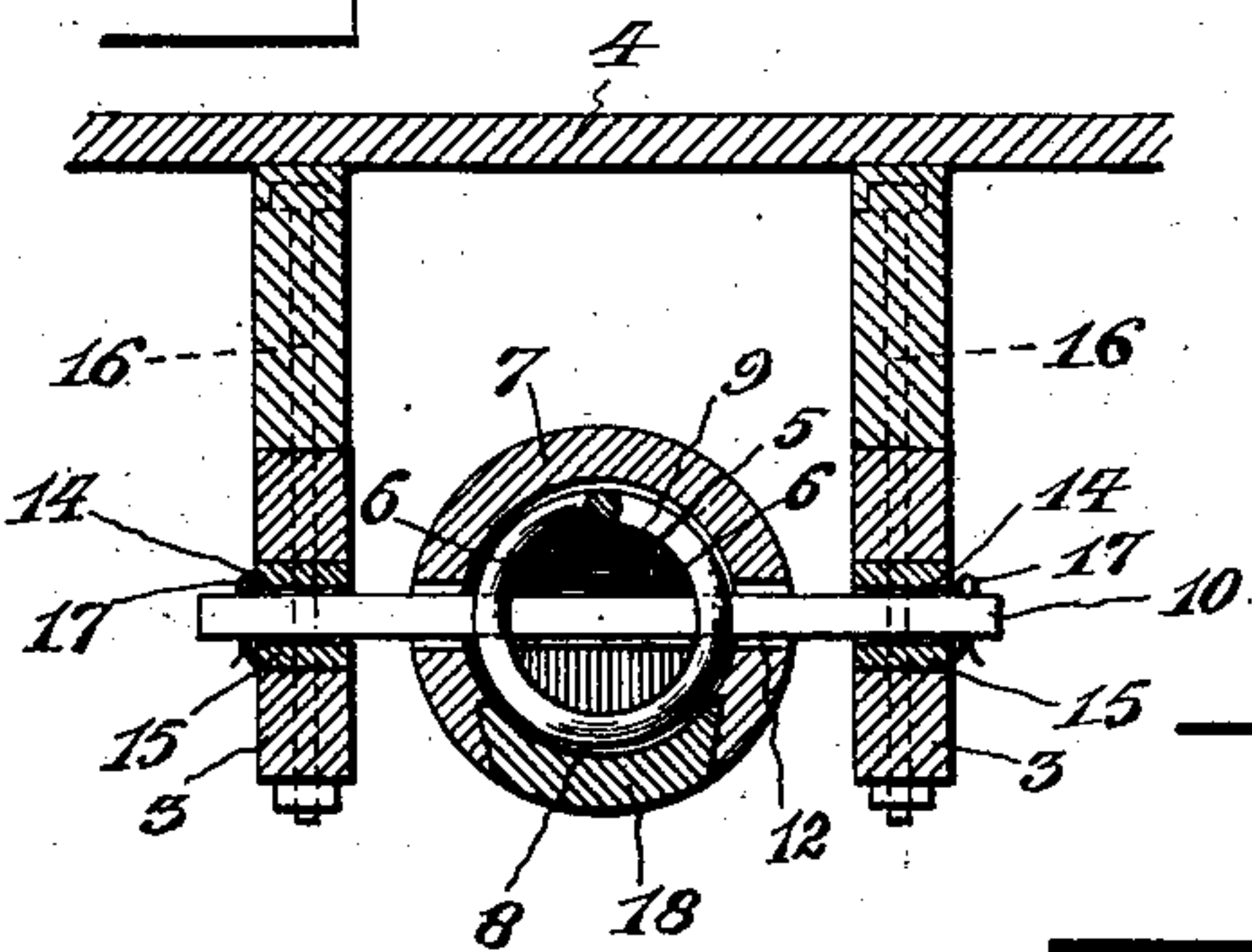
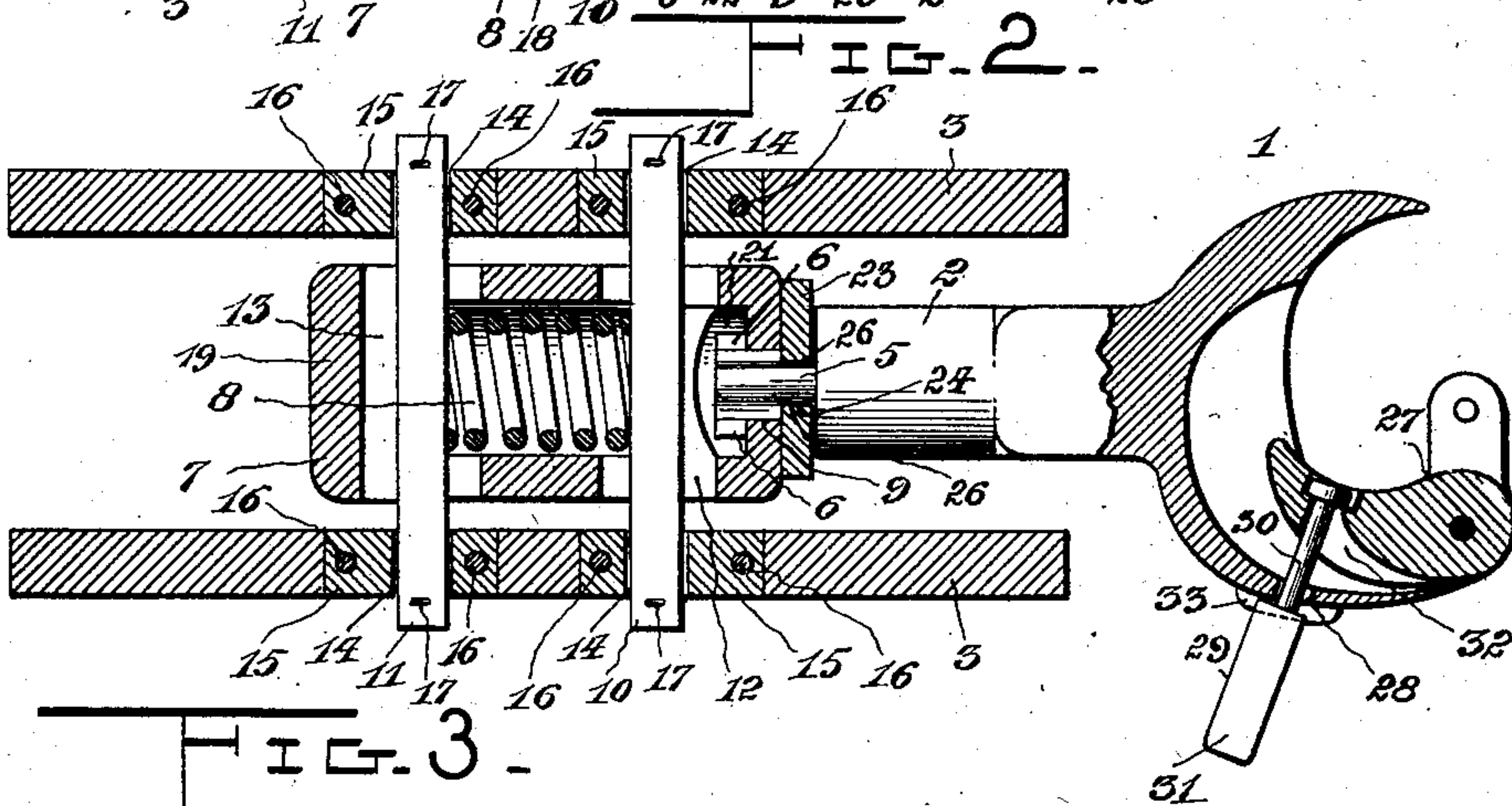
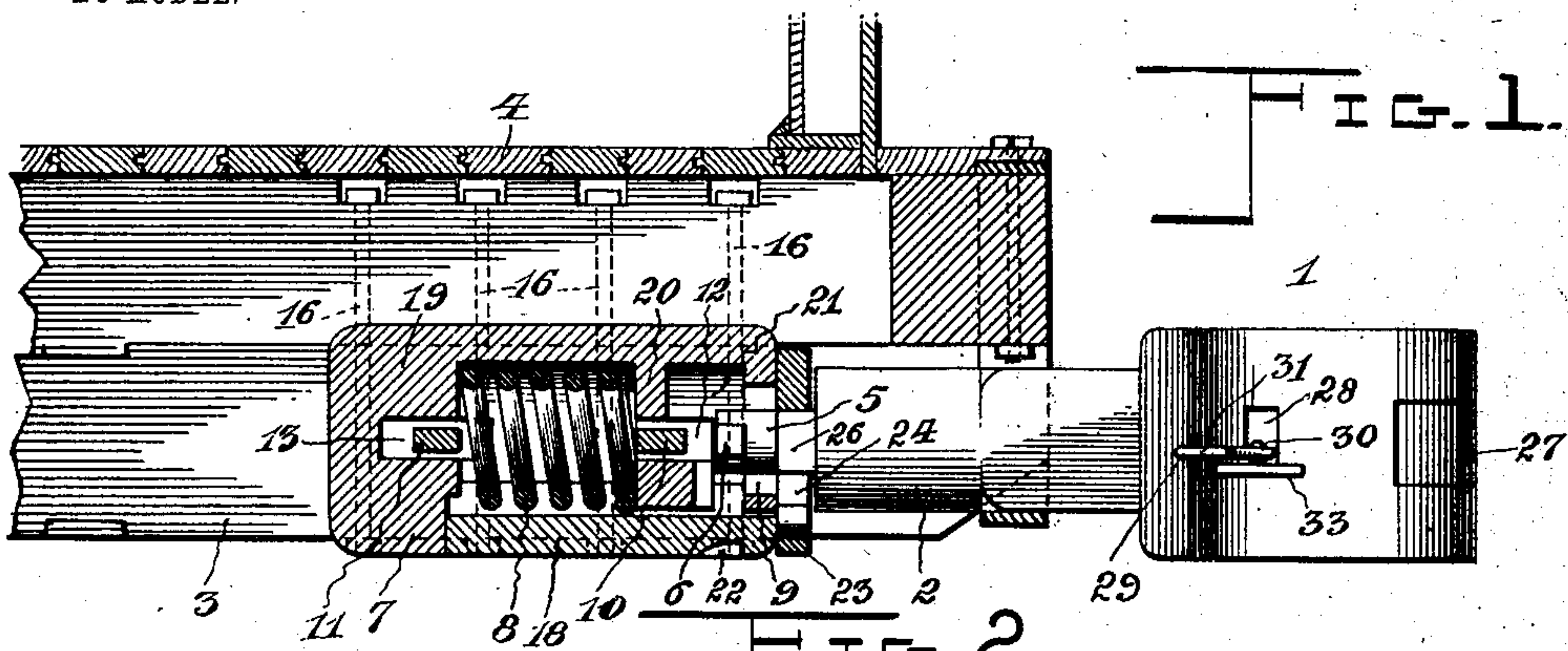
PATENTED FEB. 17, 1903.

H. MARTIN.

DRAFT ATTACHMENT FOR CARS.

APPLICATION FILED MAY 1, 1902.

NO MODEL.



Witnesses
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UNITED STATES PATENT OFFICE.

HENRY MARTIN, OF COLUMBUS, GEORGIA, ASSIGNOR OF ONE-HALF TO
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DRAFT ATTACHMENT FOR CARS.

SPECIFICATION forming part of Letters Patent No. 721,059, dated February 17, 1903.

Application filed May 1, 1902. Serial No. 105,522. (No model.)

To all whom it may concern:

Be it known that I, HENRY MARTIN, a citizen of the United States, residing at Columbus, in the county of Muscogee and State of Georgia, have invented a new and useful Draft Attachment for Cars, of which the following is a specification.

The invention relates to improvements in draft attachments for cars.

The objects of the present invention are to improve the construction of the draft-rigging of cars and to provide a simple and efficient draft attachment for connecting a draw-head with a car, adapted to lessen the cost of construction and capable of enabling the draw-head to be readily attached and removed.

A further object of the invention is to house the cushioning-spring and to enable access to be readily had to the same when desired.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a longitudinal sectional view of a draft attachment constructed in accordance with this invention. Fig. 2 is a horizontal sectional view of the same. Fig. 3 is a transverse sectional view. Fig. 4 is a detail perspective view of the rear end of the draw-bar or shank of the draw-head. Fig. 5 is a detail perspective view of the locking-plate. Fig. 6 is an elevation of the outer end of the casing. Fig. 7 is a detail view of the catch for locking the knuckle in its closed position.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates a draw-head having its shank or draw-bar 2 arranged between draft-timbers 3, which are bolted to the center sills of a car 4, as clearly illustrated in Figs. 1 and 3 of the accompanying drawings. The draw-bar or shank 2 is provided at its rear end with a stem 5, having oppositely-disposed lugs 6, and engaging the outer end of a casing 7, which forms a housing for the cushioning-spring 8. The engaging portion of the stem 5 is rounded, as clearly illustrated in

Fig. 4 of the accompanying drawings, and the outer end of the casing is provided with a vertical slot or opening 9, having a circular central portion and rectangular end portions to conform to the configuration of the engaging end of the stem. The lugs 6 extend horizontally from opposite sides of the stem, which is introduced into the slot or opening of the casing when the lugs are in a vertical position, and by rotating the draw-head a quarter of a revolution the lugs are returned to their horizontal position and extend transversely of the slot or opening 9, whereby the draw-head is securely and detachably interlocked with the casing. The casing is mounted between the draft-timbers on transverse bars 10 and 11, extending through slots 12 and 13 of the said casing, and through slots or openings 14 of the draft-timbers, which are reinforced at such points by metal plates 15, secured to the draft-timbers in suitable slots or openings thereof by the vertical bolts 16, which fasten the draft-timbers to the center sills of the car. The slots 12 and 13, which extend transversely through the casing, are located adjacent to the ends thereof, and the coiled cushioning-spring 8, which is located at the center of the casing, is interposed between the transverse bars, as clearly illustrated in Figs. 1 and 2 of the accompanying drawings, whereby the draw-head will be cushioned in its inward and outward movement. The transverse bars are removably secured to the draft-timbers by keys 17 or other suitable fastening devices, which enable the casing to be readily detached when desired.

In order to enable access to be had to the cushioning-spring without removing the casing from the car, the said casing is provided at its bottom with a longitudinal slide or cover 18, extending rearward from the front or outer end of the casing and mounted in suitable ways preferably formed by dovetailing the side walls of the opening provided for the said slide or cover, and the latter has its edges correspondingly beveled or dovetailed, as clearly shown in Fig. 3. The spring which engages the transverse bar is located within a central compartment of the casing and bears against the rear end 19 thereof and against a transverse wall 20 at the front portion of the

casing, which is provided with a chamber or recess 21 for the reception of the engaging portion of the stem of the shank or draw-bar. The transverse wall or partition 20, which
 5 separates the central compartment from the outer chamber or cavity, is divided by the front or outer slot 12. The slide or cover is provided at its outer face with a suitable recess 22 to form a handhold, and it is locked
 10 in position by a plate or disk 23, provided with a slot or opening 24, having transverse branches 25. One end of the slot or opening conforms to the configuration of the engaging portion of the stem to enable the plate to
 15 be placed thereon and to be passed over the lugs, and the other portion of the slot or opening is adapted to engage a flattened portion 26 of the stem, as illustrated in Figs. 1 and 2 of the drawings. When the locking-plate is
 20 arranged as illustrated in Fig. 1 of the drawings, its lower portion extends downward and lies in the same plane as the slide or cover, whereby the same is locked in its closed position. The plate 23 is adapted to be raised
 25 to lift its lower portion out of engagement with the slide or cover when it is desired to open the casing. The locking plate or disk remains in its engaging position through gravity, so that there is no liability of its be-
 30 coming accidentally disengaged from the slide or cover.

The draw-head, which has a knuckle 27 pivoted to it, is provided at one side with an opening 28, through which extends a catch
 35 29, consisting of an inner rod or stem 30 and an outer enlarged or weighted portion 31. The stem is swiveled to the knuckle, which is provided with an opening 32, and the outer enlarged or weighted portion is adapted to
 40 be arranged transversely of the slot or opening 28, as clearly illustrated in Fig. 1 of the drawings. The slot or opening 28 is vertical, and the draw-head is provided on its exterior with a flange 33, forming a ledge for support-
 45 ing the outer portion of the catch. One side of the outer enlarged portion 31 is heavier than the opposite portion, so that when the knuckle closes the catch will be partially rotated to arrange it transversely of the slot or
 50 opening 28.

It will be seen that the draft attachment is simple and comparatively inexpensive in construction, that it is adapted to reduce the cost of connecting a draw-head with a car, and
 55 that it will permit the former to be readily detached when required. The spring, which is housed within the casing, is protected by the same, and it may be readily removed and replaced without detaching the casing. The
 60 disk or plate, which retains the slide or cover in its closed position, forms a gravity-lock and is adapted to be readily operated to release the said slide or cover.

Changes in the form, proportion, size, and

the minor details of construction within the 65 scope of the appended claims may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

What is claimed is— 70

1. In a device of the class described, the combination of a casing designed to be mounted between the draft-timbers of a car and having a sliding door or cover, a spring arranged within the casing for cushioning the device, 75 a draw-head connected with the front of the casing, and a locking-plate mounted on the draw-head and engaging the sliding door or cover, substantially as described.

2. In a device of the class described, the combination of a hollow casing provided at opposite sides with slots and having a slot at its front end, a draw-head provided with a stem extending through the front slot of the casing and detachably interlocked with the lat- 85 ter, transverse bars passing through the side slots, and a cushioning-spring housed within the casing and interposed between the transverse bars, substantially as described.

3. In a device of the class described, the combination of a casing provided at its front with a slot, a draw-head provided with a stem adapted to extend through the said slot and provided with lugs arranged transversely of the slot when the draw-head is in an upright 95 position, a cushioning-spring housed within the casing, and means for connecting the casing with a car, substantially as described.

4. In a device of the class described, the combination of a casing having transverse slots 100 and provided with a slide or cover, a spring housed within the casing, transverse bars extending through the slots of the casing and designed to be secured to the draft-timbers of a car, a draw-head having a stem detach- 105 ably interlocked with the casing, and a locking-plate mounted on the stem and engaging the slide or cover, substantially as described.

5. In a device of the class described, the combination of a casing provided at its front with 110 a slot, a draw-head provided with a stem engaging the casing and having laterally-extending lugs, said stem being provided with a flattened portion, a locking-plate having a slot conforming to the configuration of the 115 engaging portion of the stem and interlocking with the flattened portion of the same and engaging the slide or cover, and a cushioning device housed within the casing, substantially as described. 120

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

HENRY MARTIN.

Witnesses:

R. C. LIVINGSTON,
 W. O. JOHNSON.