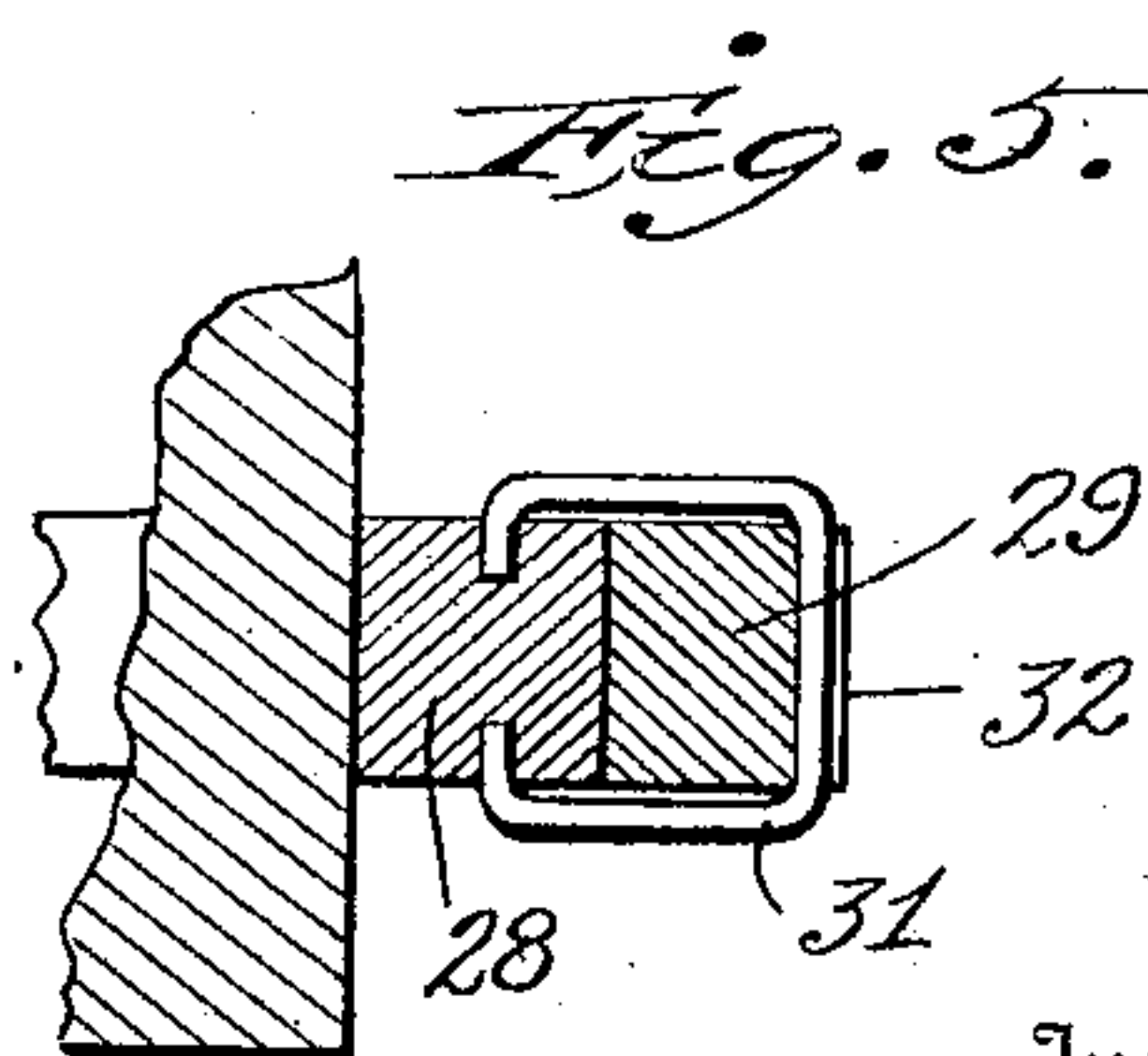
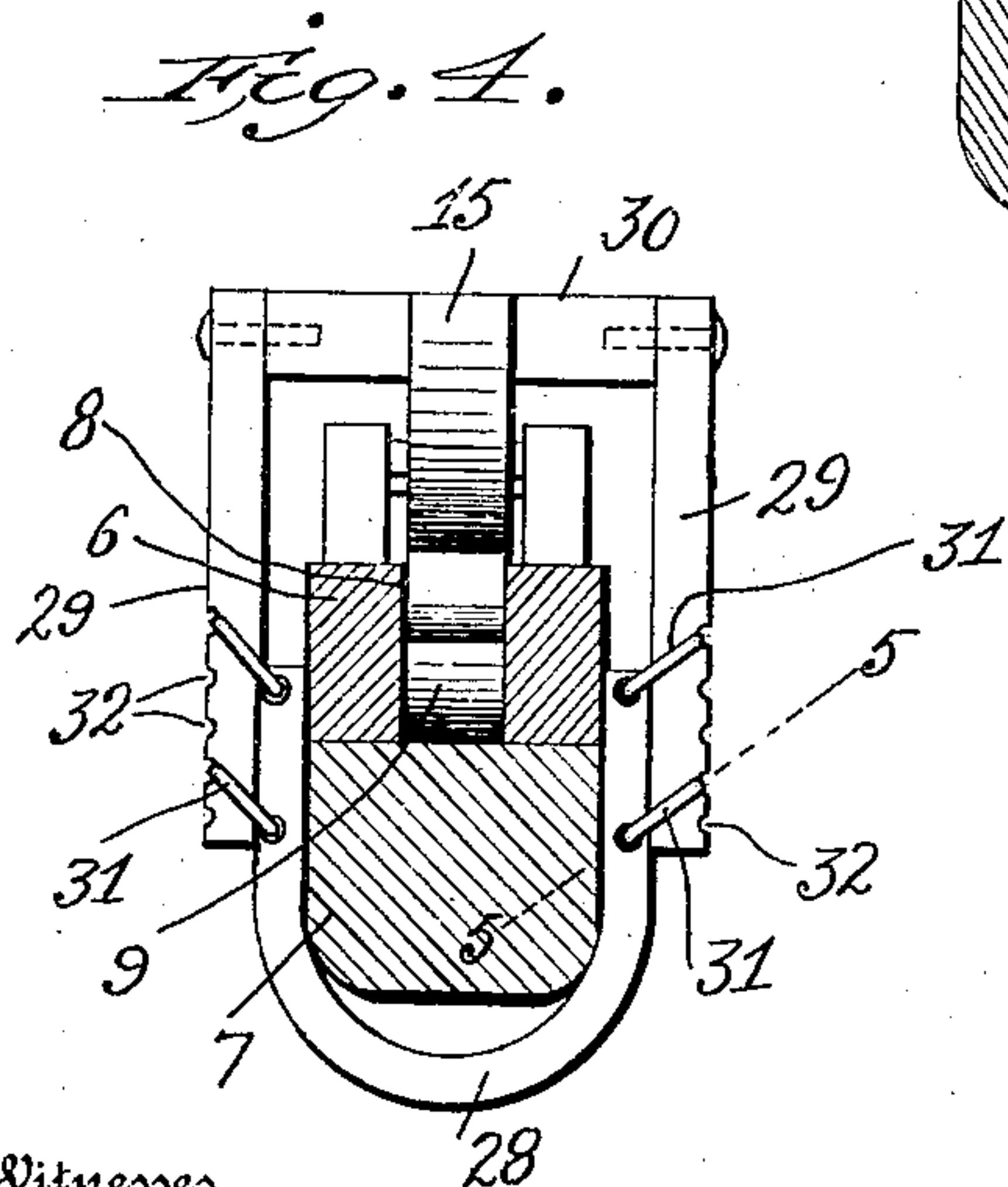
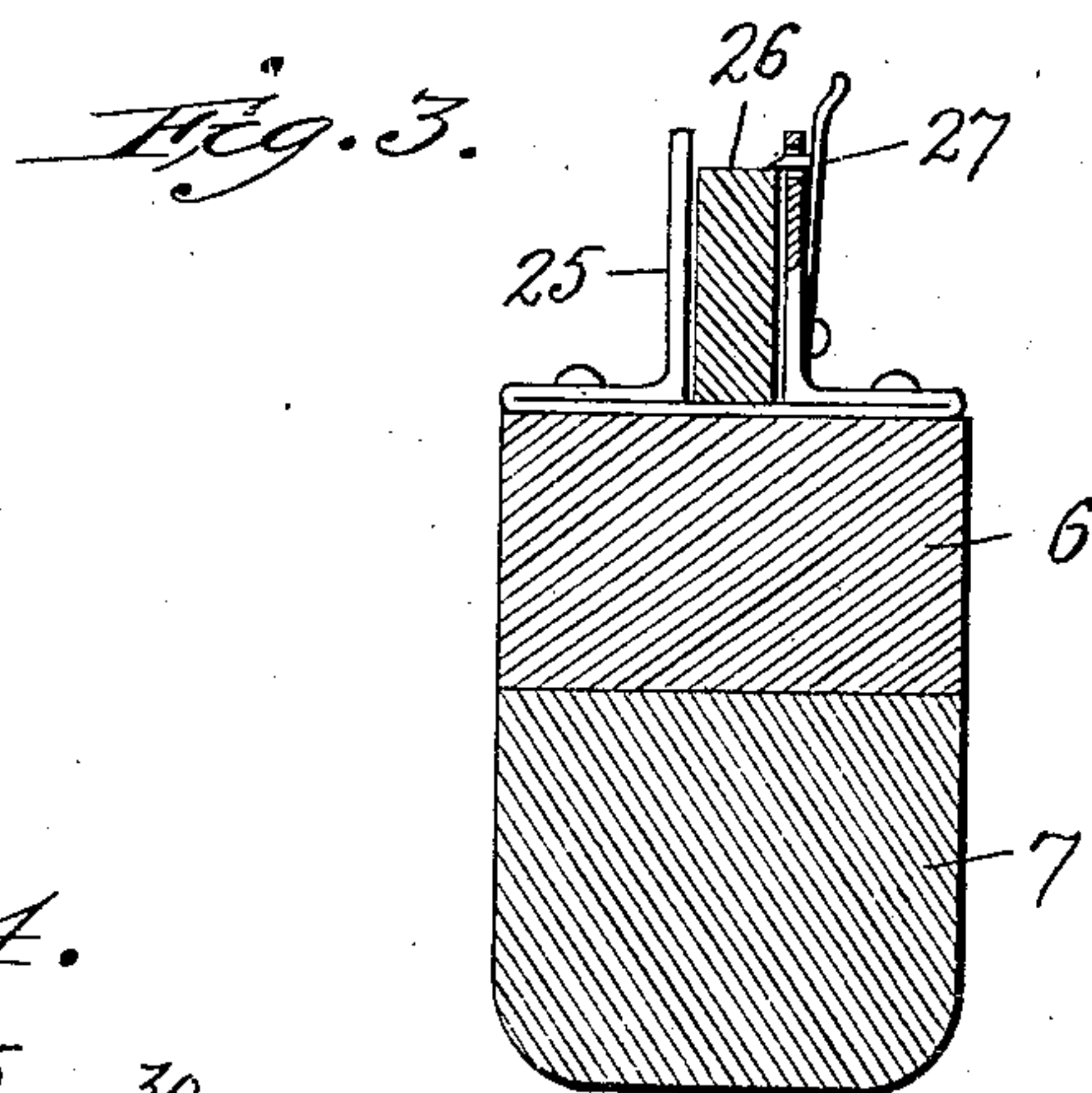
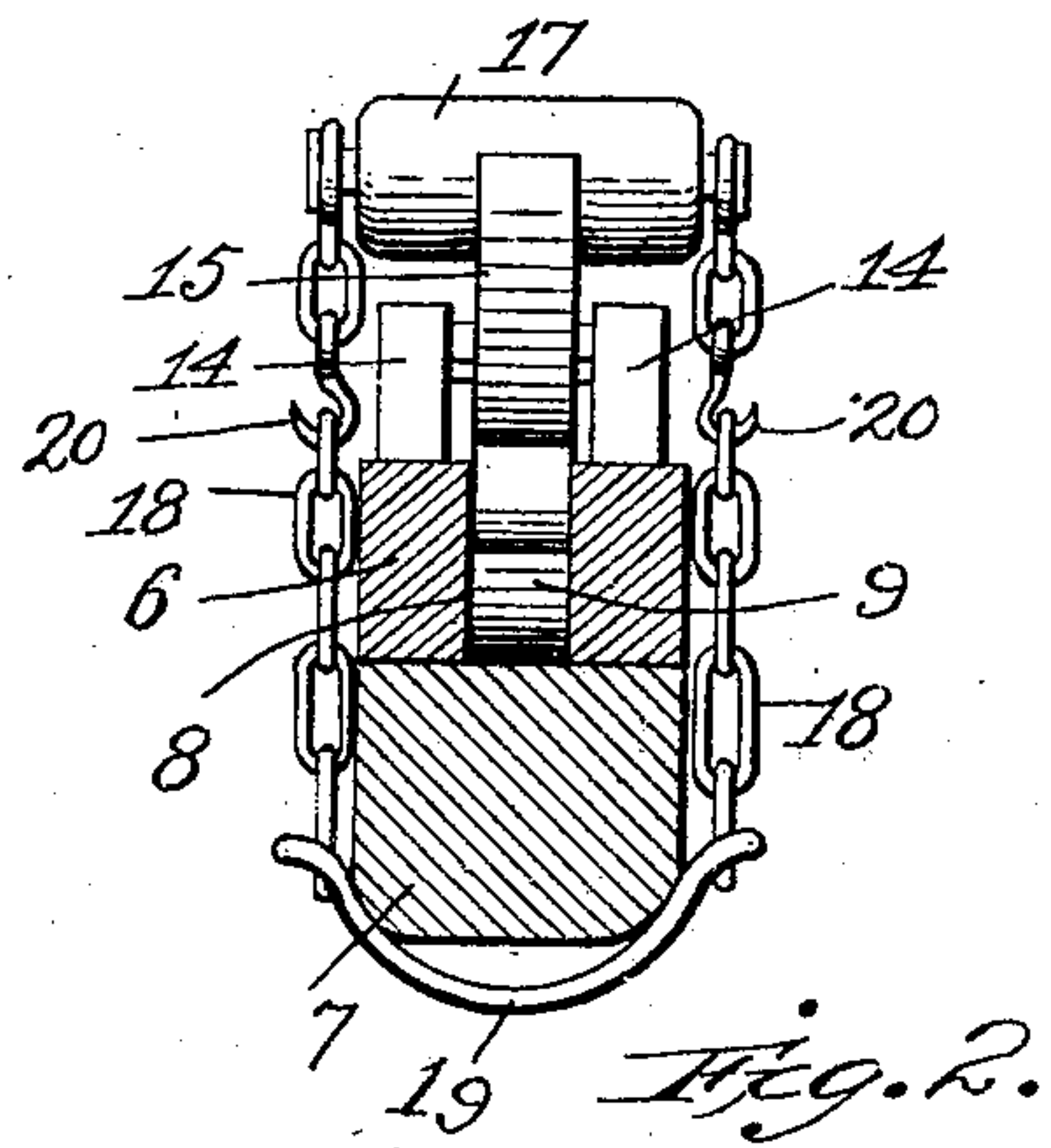
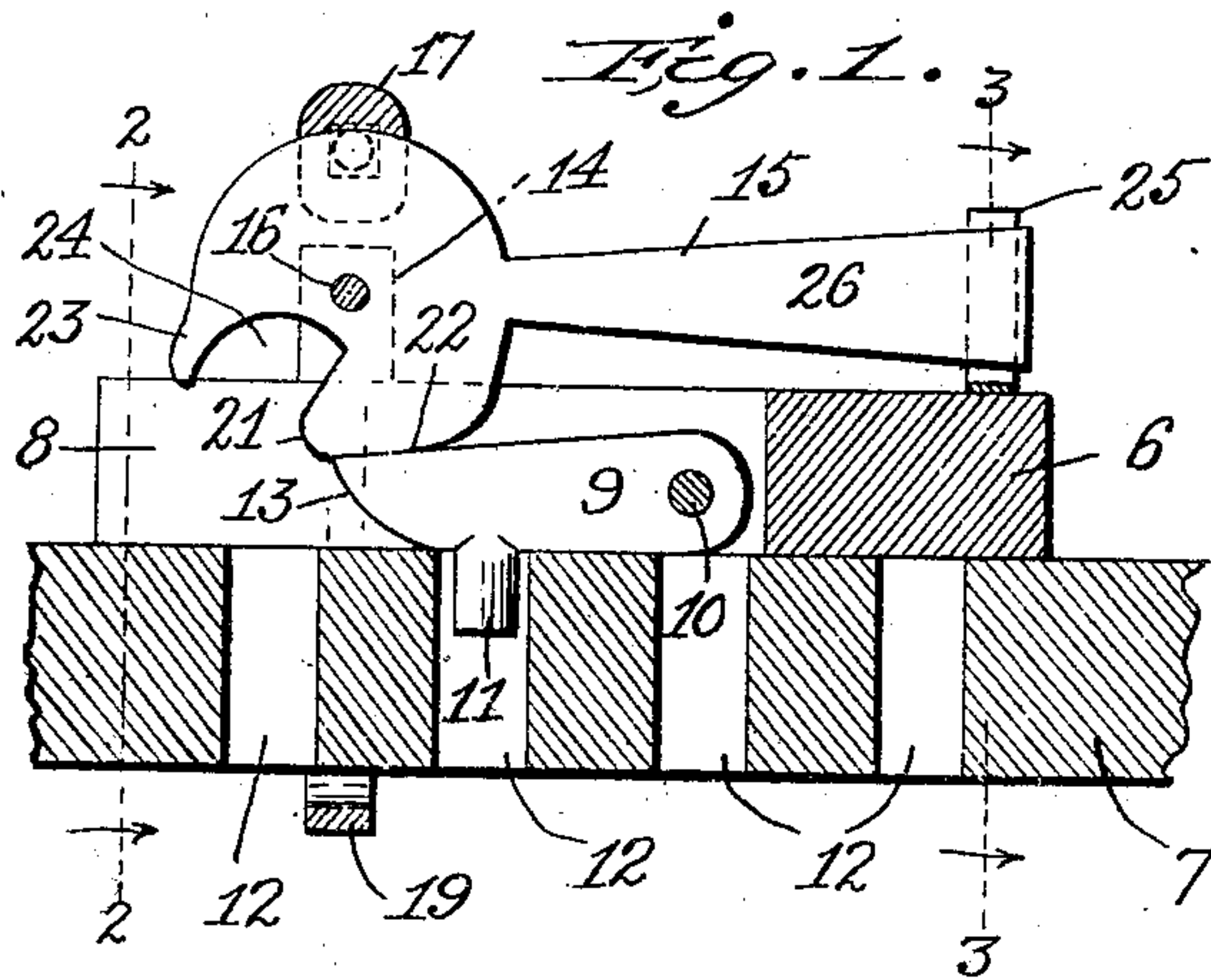


No. 880,199.

PATENTED FEB. 25, 1908.

J. M. DICK.
RUNNING GEAR FOR VEHICLES.
APPLICATION FILED SEPT. 17, 1907.



Witnesses
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JAMES M. DICK, OF FLEMING, PENNSYLVANIA.

RUNNING-GEAR FOR VEHICLES.

No. 880,199.

Specification of Letters Patent.

Patented Feb. 25, 1908.

Application filed September 17, 1907. Serial No. 393,283.

To all whom it may concern:

Be it known that I, JAMES M. DICK, a citizen of the United States, and a resident of Fleming, in the county of Center and State of Pennsylvania, have invented certain new and useful Improvements in Running-Gear for Vehicles, of which the following is a full, clear, and exact description, such as will enable those skilled in the art to which the invention appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

The invention relates to the mechanism for adjustably attaching the reach to the hounds so that the distance between the front and rear axles can be regulated to accommodate the vehicle to different loads.

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

In the drawings, in which similar reference characters designate corresponding parts, Figure 1 is a longitudinal sectional view of a device embodying the invention. Fig. 2 is a sectional view on the line 2—2 of Fig. 1. Fig. 3 is a sectional view on the line 3—3 of Fig. 1. Fig. 4 is a cross sectional view showing a modification of the device. Fig. 5 is a sectional view on the line 5—5 of Fig. 4.

The base plate 6 of the adjusting mechanism is secured to the hounds of the vehicle in any suitable manner. When the device is in operative position the under side of the plate contacts with the upper face of the reach 7. In the forward end of the plate is the longitudinal groove or slot 8 in the inner end of which is pivoted an end of the dog 9 by the bolt 10 passing through the same and the adjacent sides of the base plate. Projecting from the under side of the dog 9 near its free end is the locking pin 11 to engage the sockets 12 in the reach 7. The free end of the dog is beveled, as at 13, for a purpose that will be explained further on.

On the top of the base plate 6 above the free end of the dog 9 and on opposite sides of the slot 8 are the uprights 14 between which is pivoted the front end or head of the lever 15 by the bolt 16. On the top of the head of the lever is the cross-piece 17 to the ends of which are attached the chains 18 carrying the saddle 19 beneath the reach 7. The

cross-piece and chains form a toggle connection between the saddle and lever so that the latter can be operated to press the reach against the under side of the base plate 6. By means of the hooks 20 in the chains 18 the saddle can be adjusted to fit the reach.

On the under side of the head of the lever 15 is the cam 21 eccentric with the pivoting bolt 16. This cam bears on the free end of the dog 9 and by operating the lever 15 the locking pin 11 can be forced into one of the sockets 12 of the reach. Part of the engaging face of the cam, as at 22, is flat. This flat part engages the dog when the lever is in a lowered position, as shown in Fig. 1, and tends to hold the lever in such position.

On the front end of the lever 15 is the tongue 23 operating to engage the bevel 13 of the dog 9 when the lever is raised. Adjacent to the tongue the head of the lever is cut away, as at 24, to permit the tongue to pass beneath the end of the dog.

On the rear end of the base plate 6 is the U-shaped bracket 25 to receive the end of the handle 26 of the lever 15. On one of the arms of the bracket is the spring catch 27 to engage the handle to hold the lever in a depressed position.

The operation of the device is as follows: As disclosed in Fig. 1 the device is shown in a position to lock the reach 7 to the plate 6. To release the reach, the spring catch 27 is moved to disengage the handle 26. On raising the lever the cam 21 is turned off the dog 9 and the tongue 23 engages the bevel 13 and raises the dog so that the locking pin 11 leaves the socket 12. Also as the handle is raised, through the toggle connection, the saddle 19 is lowered and permits the reach to drop away from the plate 6. After this has been done the reach can be adjusted to give the desired coupling between the front and rear axles of the vehicle. To secure the reach, the lever is turned back to its original position as shown in Fig. 1. As the lever is turned back, through the toggle connection, the saddle 19 is raised against the under side of the reach and presses the latter against the under side of the plate 6 with one of the sockets 12 in position to receive the locking pin 11. Also through the movement of the lever the tongue 23 releases the dog 9 and the cam 21 forces the locking pin into the socket 12 beneath. The lever is turned until the flat portion 22 of the cam bears on the dog and

the catch 27 engages the handle 26. By means of the flat portion and the catch the lever is firmly held in its locked position.

In the modification shown in Figs. 4 and 5 the saddle and chains are replaced by the yoke 28 and the arms 29. The latter are pivoted at their upper ends to the cross-piece 30 of the operating lever. To the lower ends of the arms 29 the ends of the yoke are adjustably attached by the links 31 pivoted to the yoke and engaging the grooves 32 in the arms. The links are long enough to release the yoke from the arms when the latter are lowered by the operating lever. Also there is a plurality of grooves to permit an adjustment of the yoke relative to the arms to accommodate reaches of different diameters.

Having thus described my invention, what I claim and desire to secure by Letters Patent is,

1. In running gear for vehicles, a reach, a plate adjustable on said reach, a dog pivoted on said plate and operating to engage said reach, a lever to actuate said dog, a saddle for said reach, and a toggle connection between said lever and said saddle for clamping the reach and plate together.

2. In running gear for vehicles, a reach provided with a plurality of sockets, a plate adjustable on said reach, a dog pivoted on said plate, a locking pin on said dog to engage said sockets, a lever pivoted to said

plate, a cam on said lever operating on said dog to press said locking pin into a socket, a tongue on said lever to engage said dog and operating to raise the same to lift the locking pin from the socket, and means for clamping the plate and reach together.

3. In running gear for vehicles, a reach, a plate adjustable on said reach, means for locking the plate and reach together, a lever pivoted to said plate, a saddle for said reach, and a toggle connection between said saddle and the lever for clamping the reach and plate together.

4. In running gear for vehicles, a reach provided with sockets, a plate adjustable on said reach, a dog pivoted to said plate, a locking pin on said dog to engage a socket, a lever pivoted to said plate, a cam on said lever operating on said dog to press said locking pin into a socket, a tongue on said lever to engage said dog and operating to raise the same to lift the locking pin from the socket, a cross-piece on said lever, a saddle for said reach, chains connecting said saddle with said cross-piece, and adjusting hooks in said chains.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

JAMES M. DICK.

Witnesses:

JAMES A. PRATT,
HARRY UNDERWOOD.