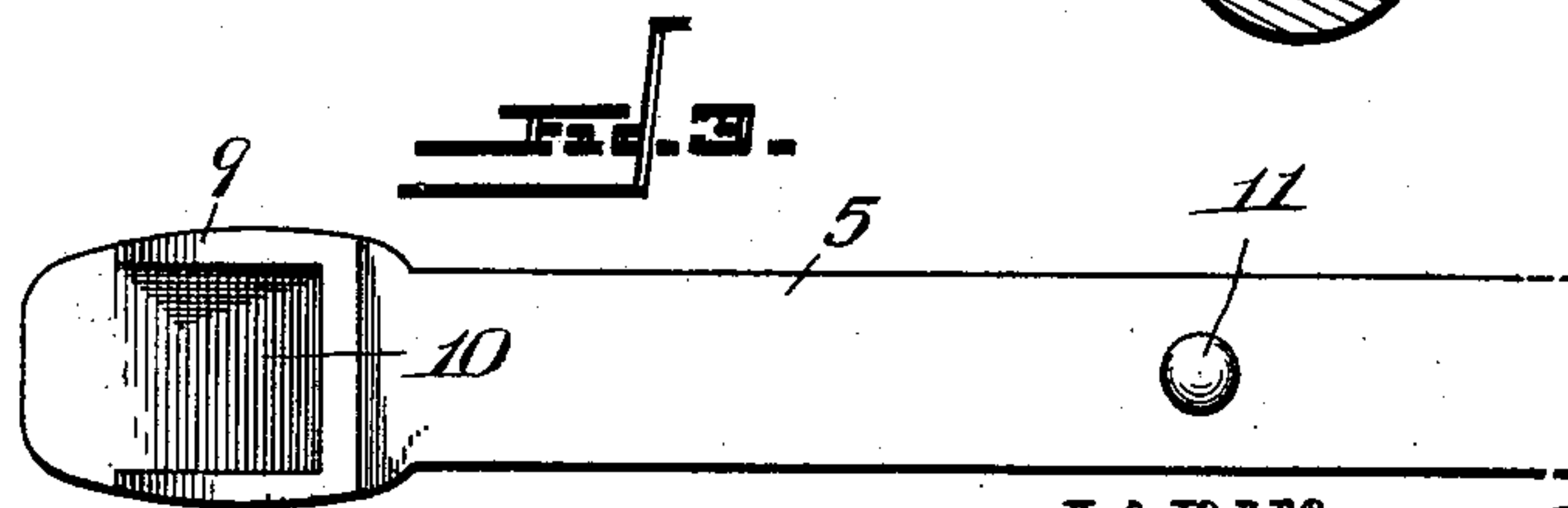
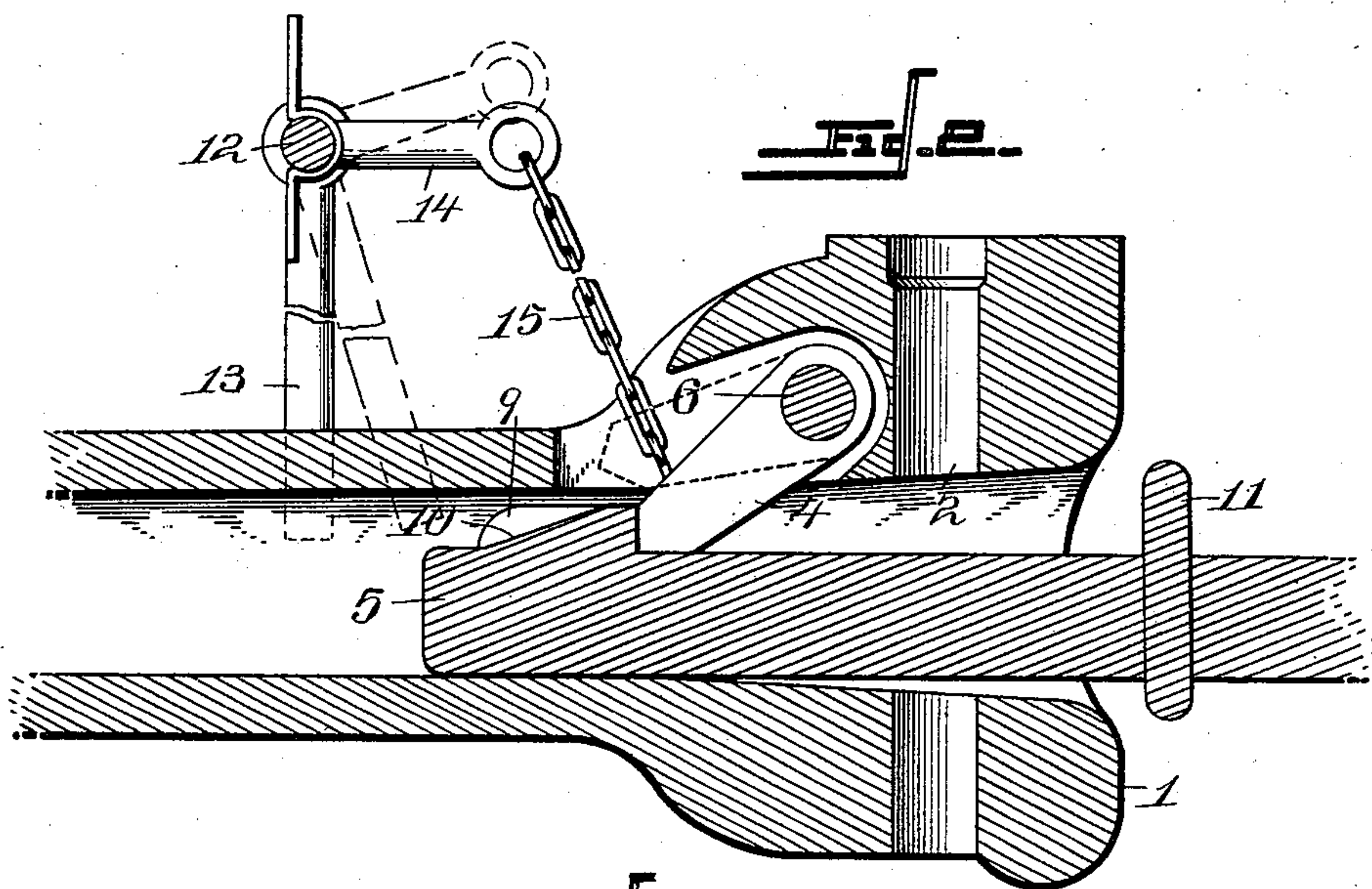
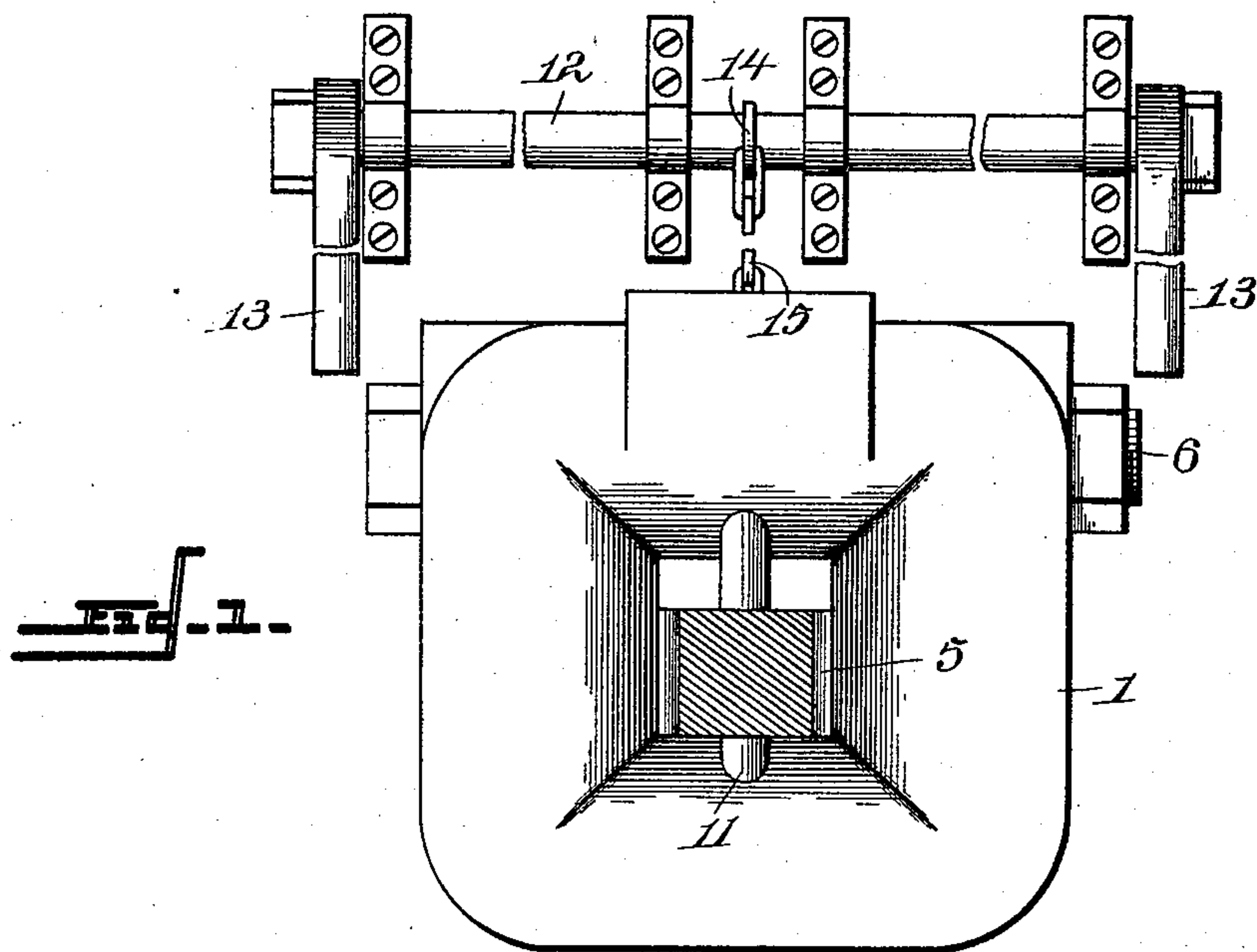


(No Model.)

W. SHAY.  
CAR COUPLING.

No. 565,517.

Patented Aug. 11, 1896.



Inventor

Witnesses

*Thos. W. Riley*  
*J. F. Riley*

By *his* Attorneys, **William Shay.**

*CA Snow & Co.*



# UNITED STATES PATENT OFFICE.

WILLIAM SHAY, OF EAST PORTLAND, OREGON.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 565,517, dated August 11, 1896.

Application filed February 29, 1896. Serial No. 581,282. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM SHAY, a citizen of the United States, residing at East Portland, in the county of Multnomah and State of Oregon, have invented a new and useful Car-Coupling, of which the following is a specification.

The invention relates to improvements in car-couplings.

10 The object of the present invention is to improve the construction of car-couplings, and to provide a simple and inexpensive one which will be capable of coupling automatically, and which may be readily uncoupled  
15 without going between cars.

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

In the drawings, Figure 1 is a front elevation of a car-coupling constructed in accordance with this invention and shown applied to a car. Fig. 2 is a longitudinal sectional  
25 view. Fig. 3 is a detail view of the link.

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

1 designates a draw-head having a longitudinal link-pin and provided with a coupling-pin perforation 2, adapted to receive a coupling-pin of the ordinary construction to enable the draw-head to be coupled with another by means of the ordinary link when desirable  
35 or necessary. In rear of the coupling-pin perforation in a recess 3 is mounted a pivoted catch 4, which depends from the top of the draw-head and engages a link 5. The catch is mounted on a transverse pin 6, and  
40 the link is provided at each end with a shoulder 7, and has its upper face beveled in advance of the shoulder, whereby when the link enters the draw-head it is adapted to lift the catch to cause the same to drop automatically in engagement with the shoulder 7. The  
45 engaging end of the catch is pointed, the faces of the end being arranged at right angles to each other, and being adapted to fit squarely against the upper face of the link  
50 and the vertical face of the shoulder 7.

At opposite sides of each end of the link on the upper face thereof is located a pair of

integral flanges 9, which, when the link is in the draw-head, engage the upper wall thereof to hold the link in substantially a horizontal  
55 position to prevent it from sagging and dropping below the mouth of another draw-head, and these flanges are located at opposite sides of the inclined face 10 of the link, and serve as guides to prevent the link from shifting laterally as it comes in contact with the catch,  
60 the latter passing between the flanges.

The link is prevented from entering the draw-head too far by a pin 11, which passes through the link at the center thereof, and  
65 which is welded or otherwise suitably secured to the same.

The operation of uncoupling is performed from the sides of a car by a transverse rock-shaft 12, journaled in suitable bearings and  
70 provided at its terminals with handles 13, and having a central arm 14, which is connected by a chain 15, or other suitable connection, with the catch 4. The chain extends through  
75 an opening at the back of the draw-head, and when the handles are swung upward, as illustrated in dotted lines in Fig. 2 of the accompanying drawings, the catch is raised to release the link.

Any suitable means may be employed for  
80 enabling the operation of uncoupling to be performed from the top of a car, or from the platform of a coach, as will be readily understood.

It will be seen that the car-coupling is exceedingly simple and inexpensive in construction, that it is positive and reliable in operation, and that it is capable of coupling automatically, and of being readily uncoupled  
90 without going between cars.

Changes in the form, proportion, and minor details of construction may be resorted to without departing from the principle or sacrificing any advantages of the invention.

What I claim is—

95 In a car-coupling, the combination of a draw-head having a coupling-pin perforation and provided in rear of the upper portion of the same with a recess, a catch pivoted in the recess of the draw-head, depending from  
100 the top of the latter and adapted to swing upward into the recess, and a link provided at the upper faces of its ends with inclined surfaces 10, having vertical shoulders in rear

of the same to be engaged by the said catch  
and provided with vertically-disposed longi-  
tudinal flanges 9, located at opposite sides of  
the inclined surfaces, extending outward from  
5 the vertical shoulders and forming guides,  
said flanges being adapted to engage the upper  
wall of the draw-head to prevent the latter  
from sagging, substantially as described.

In testimony that I claim the foregoing as  
my own I have hereto affixed my signature in 10  
the presence of two witnesses.

WILLIAM SHAY.

Witnesses:

JAMES E. TURNER,  
JOHN M. PITTENGER.