

No. 776,203.

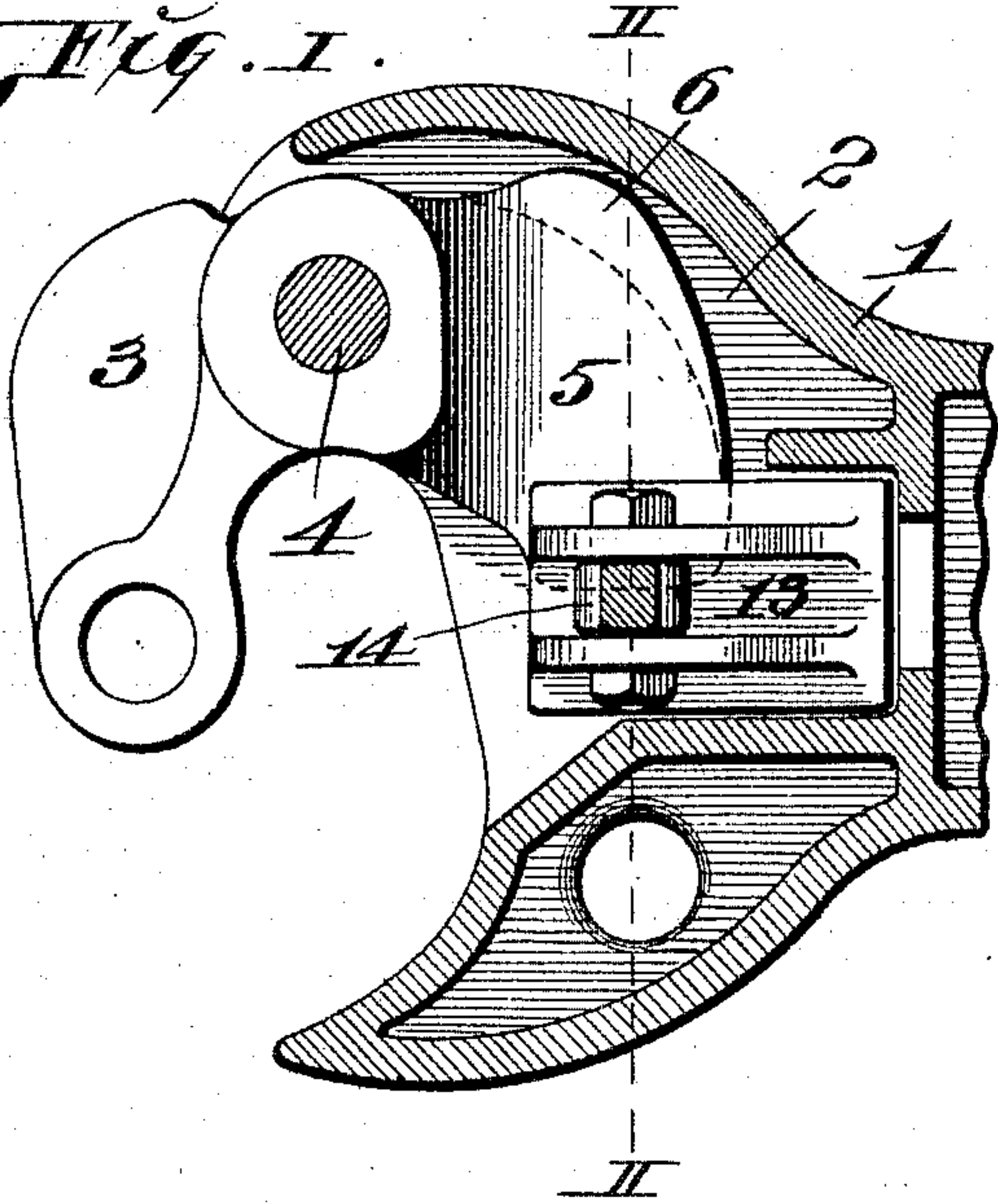
PATENTED NOV. 29, 1904.

O. S. PULLIAM.  
CAR COUPLING.

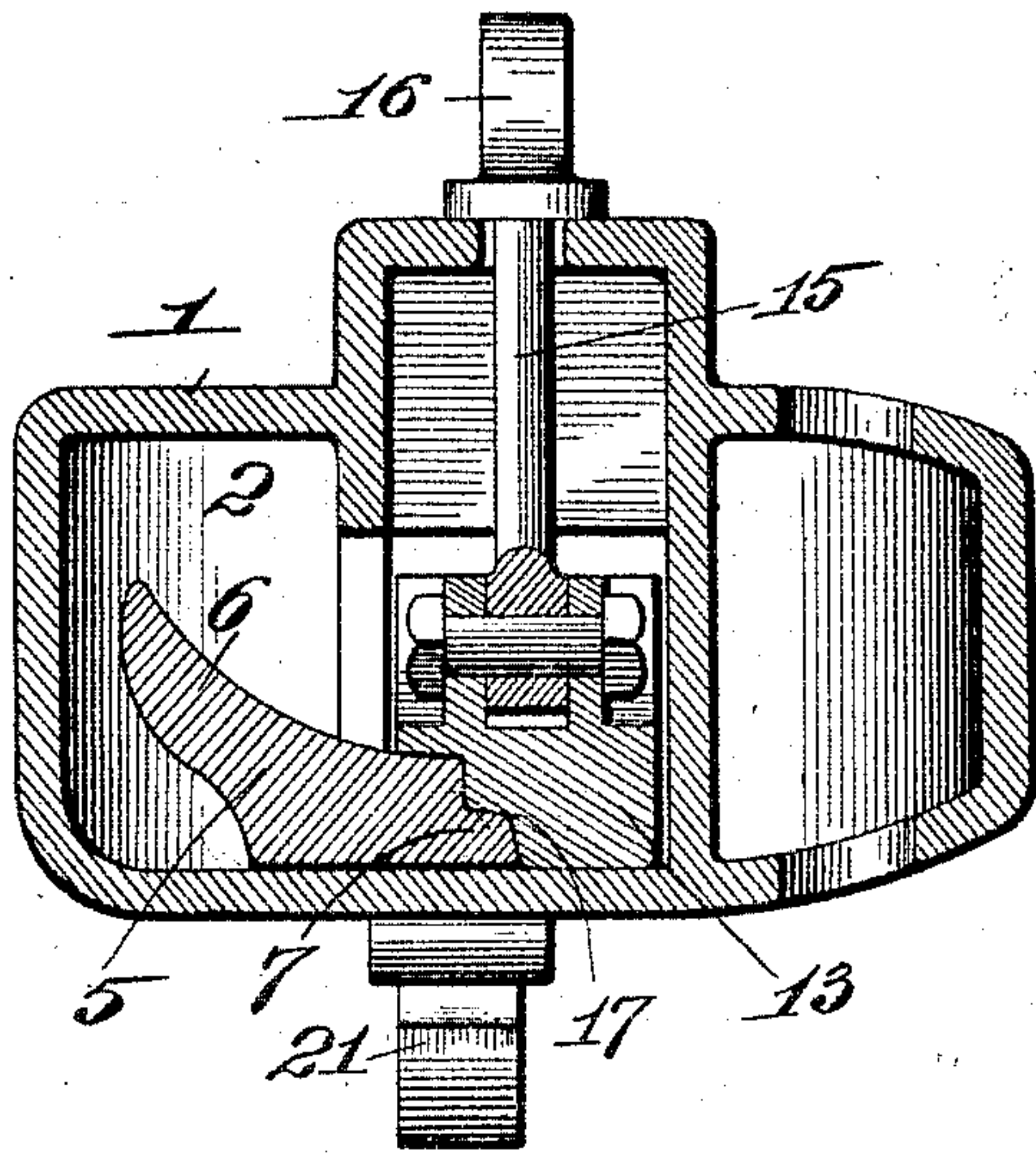
APPLICATION FILED JUNE 30, 1904.

NO MODEL.

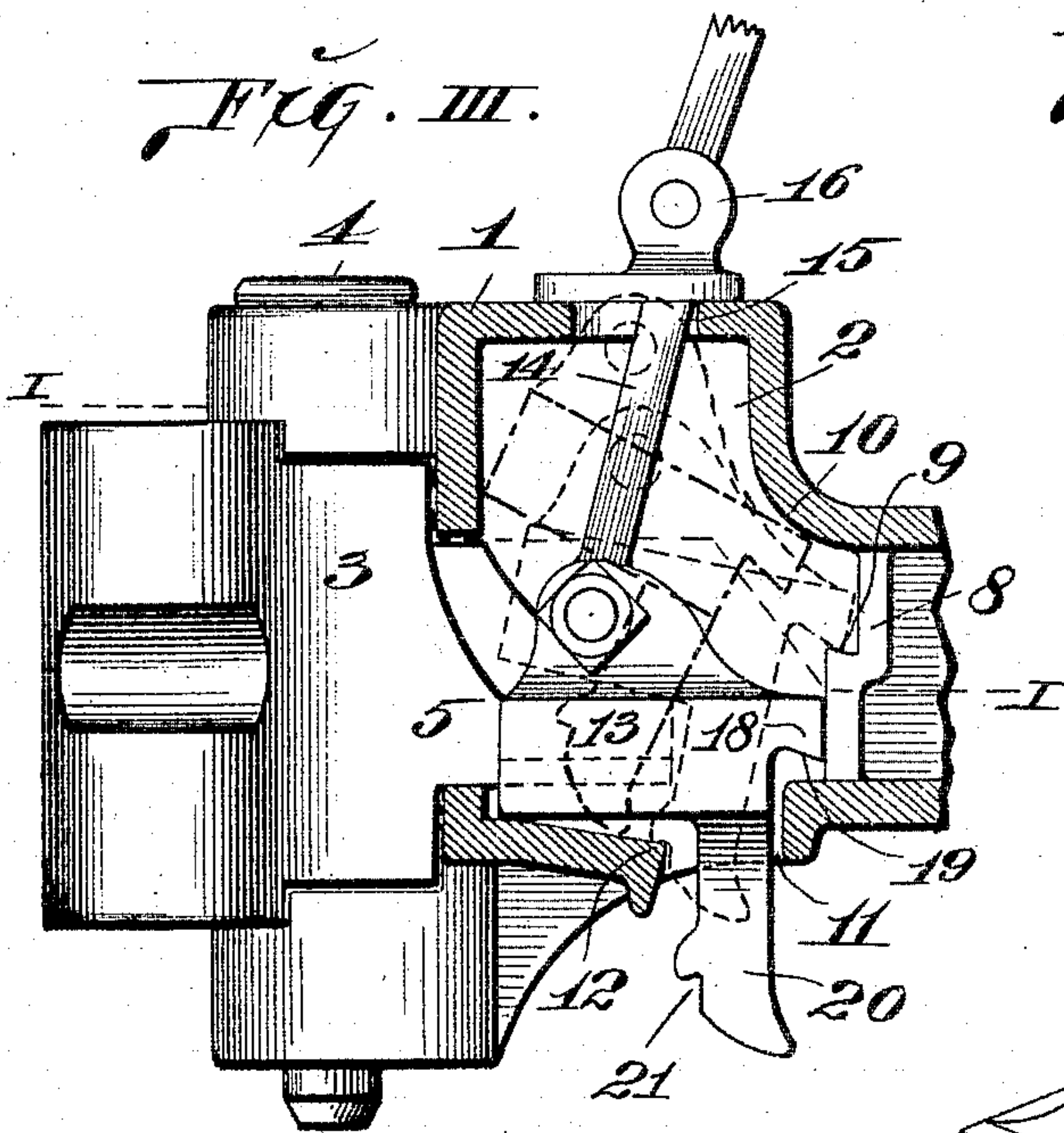
*Fig. I.*



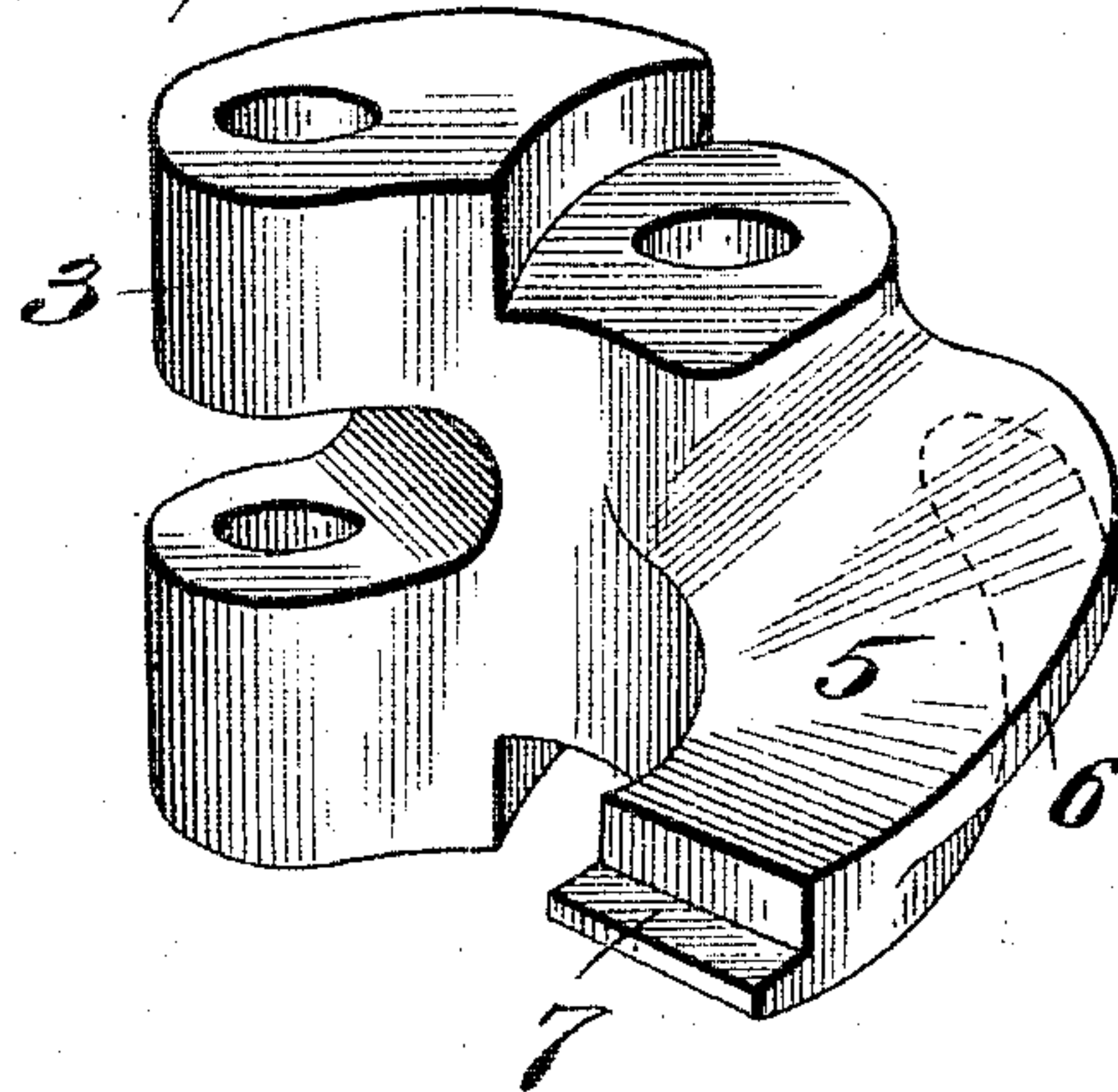
*Fig. II.*



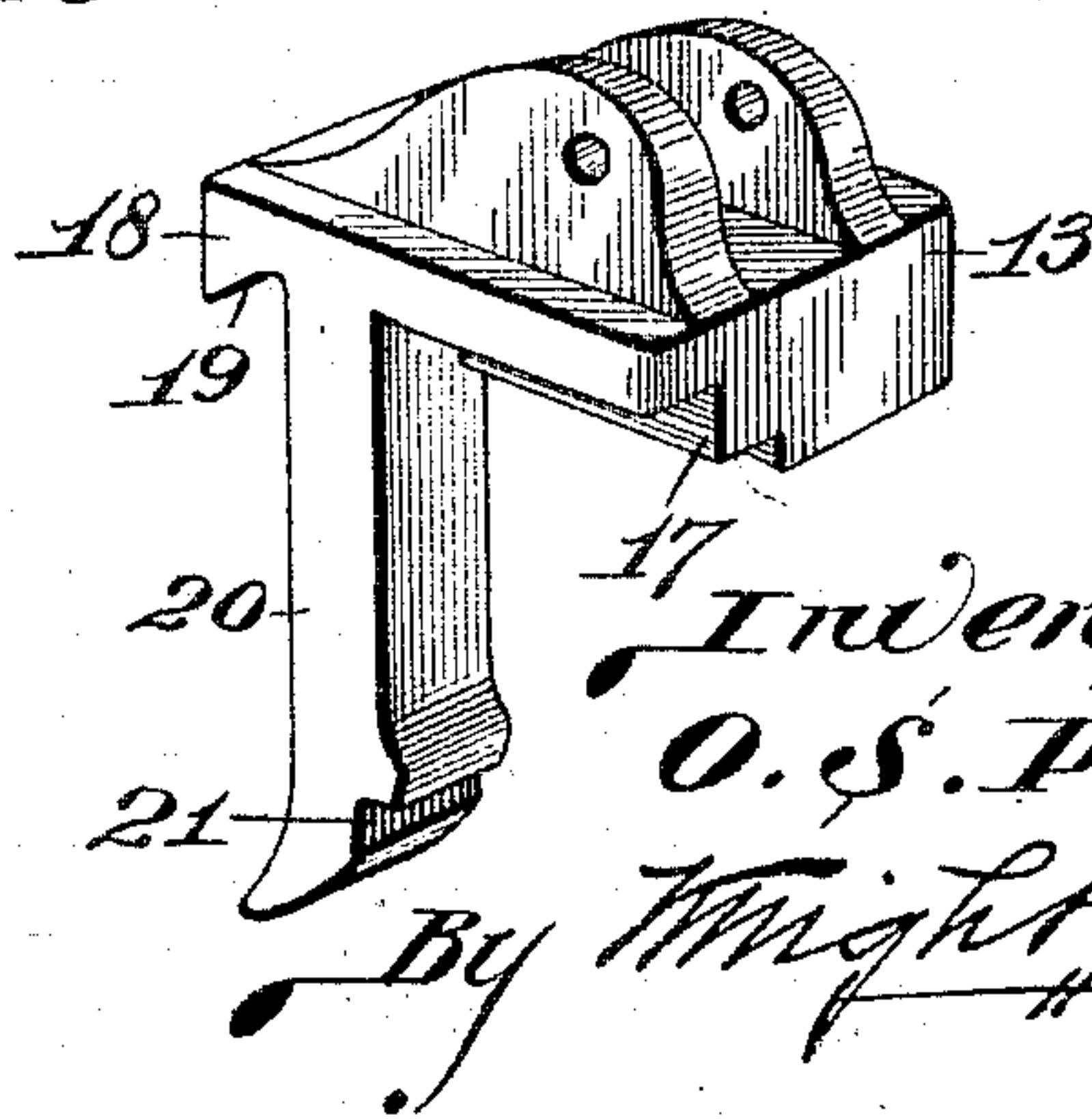
*Fig. III.*



*Fig. IV.*



*Fig. V.*



attest:  
*M. Smith*  
*E. Krug*

Inventor: —  
*O. S. Pulliam.*  
By *Wright Bros*  
Attys.



# UNITED STATES PATENT OFFICE.

OSWALD S. PULLIAM, OF ST. LOUIS, MISSOURI, ASSIGNOR TO COMMON-WEALTH STEEL COMPANY, OF ST. LOUIS, MISSOURI, A CORPORATION.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 776,203, dated November 29, 1904.

Application filed June 30, 1904. Serial No. 214,811. (No model.)

*To all whom it may concern:*

Be it known that I, OSWALD S. PULLIAM, a citizen of the United States, residing in the city of St. Louis and State of Missouri, have invented certain new and useful Improvements in Car-Couplings, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to a car-coupling, including therein a locking-block and means carried by it, through the medium of which the knuckle of the coupling may be swung into open condition when the locking-block is elevated, the construction being such that the locking-block is oscillated within the coupler-head and the knuckle-opening means is swung laterally into engagement with the tail of the knuckle to press thereagainst.

Figure I is a horizontal longitudinal section taken through the forward part of my coupling on line I I, Fig. III. Fig. II is a vertical transverse section taken on line II II, Fig. I. Fig. III is a vertical longitudinal section of the coupling. Fig. IV is a perspective view of the knuckle of my coupling. Fig. V is a perspective view of the locking-block and the knuckle-operating leg carried thereby.

1 designates the coupler-head of a car-coupling provided with a knuckle-cavity 2, in which the knuckle 3 is positioned, the said knuckle being held to the coupler-head by a pivot-pin 4. The tail of the knuckle 3 has an inclined upper face 5, a laterally-extending wing 6, and at its end is provided with a shoulder 7, as seen most clearly in Fig. IV. Within the coupler-head at the rear thereof is a vertical wall 8, that is provided at its forward side with a ledge 9. In front of said wall the coupler-head is curved upwardly to form a rounded bearing-point 10. (See Fig. III.) The bottom of the coupler-head is provided with an aperture 11, and at the front side of said aperture is a shelf 12.

13 designates a locking-block positioned in the knuckle-cavity 2 of the coupler-head and susceptible of vertical movement therein. This locking-block has connected to it a lift-rod 14, that extends upwardly and through an

elongated opening 15 in the top of the coupler-head, and through the medium of which the locking-block is raised and lowered. The upper end of said lift-rod is provided with a head 16, which extends over the lift-rod opening to close it and prevent the ingress of dirt or moisture therethrough into the knuckle-cavity of the coupler-head. At the side of the locking-block 13, which engages with the end of the knuckle-tail, are shoulders 17, that are adapted to fit against the shouldered end of the tail of the knuckle.

18 designates a nose at the rear end of the locking-block which is preferably undercut at its lower side, as seen at 19, Figs. III and V, and which when the locking-block is partially elevated is adapted to seat upon the shoulder 9 of the wall 8.

20 designates a leg extending downwardly from the lower side of the locking-block 13 and which when the locking-block is in lowered position occupies the aperture 11 in the bottom of the coupler-head 1. This leg is provided at its forward side with a tooth 21.

In the practical use of my coupling the operation is as follows: When the knuckle of the coupling is merely to be freed for the purpose of permitting it to be drawn open, the locking-block 13 is elevated by pulling the lift-rod 14 upwardly to a sufficient degree to cause the nose 18 of said block to seat on the shoulder of the wall 8 and the tooth 21 of the leg 20 to seat on the shelf 12, as illustrated in dotted lines, Fig. III. When the parts have been so moved, the knuckle is in freed condition and the locking-block is upheld in a set position, due to the seating of the leg and nose of the block. Where it is desired to utilize the locking members as a medium for swinging the knuckle into open condition, the locking-block is elevated to a greater degree and its upper face rides against the bearing-point 10 in the interior of the coupler-head, and as a consequence the leg 20 is drawn completely into the coupler-head, so that it will bear against the wing 6 of the knuckle-tail and exert pressure thereagainst in a forward direction while the locking-block is being oscillated into the most elevated condition, (illus-

trated in dotted lines, Fig. III,) and at the time the parts are moved into said elevated condition the knuckle is swung entirely open.

I claim as my invention—

- 5 In a car-coupling, the combination with a coupler-head and a knuckle swingingly mounted therein, of a locking-block oscillatingly positioned in said coupler-head, a seat upon which said locking-block rests when in ele-  
10 vated position, and a toothed leg depending

from said locking-block; said coupler-head being provided at its lower side with an aperture and a shelf on which said leg may rest when said locking-block is in elevated position, substantially as set forth.

OSWALD S. PULLIAM.

In presence of—

NELLIE V. ALEXANDER,  
BLANCHE HOGAN.