

No. 840,126.

PATENTED JAN. 1, 1907.

J. GASZPER.
CAR COUPLING.

APPLICATION FILED AUG. 30, 1906.

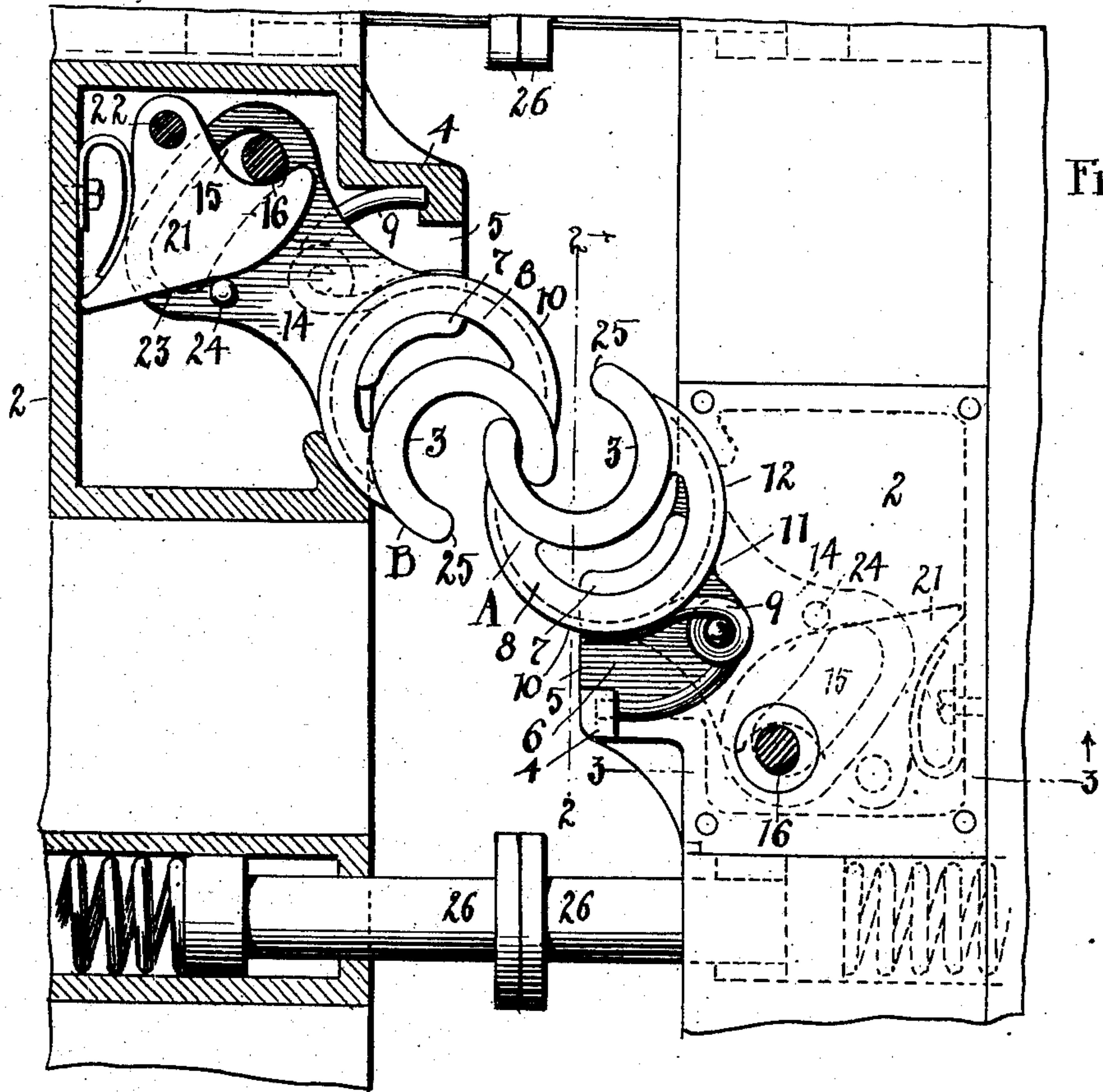


Fig. 1.

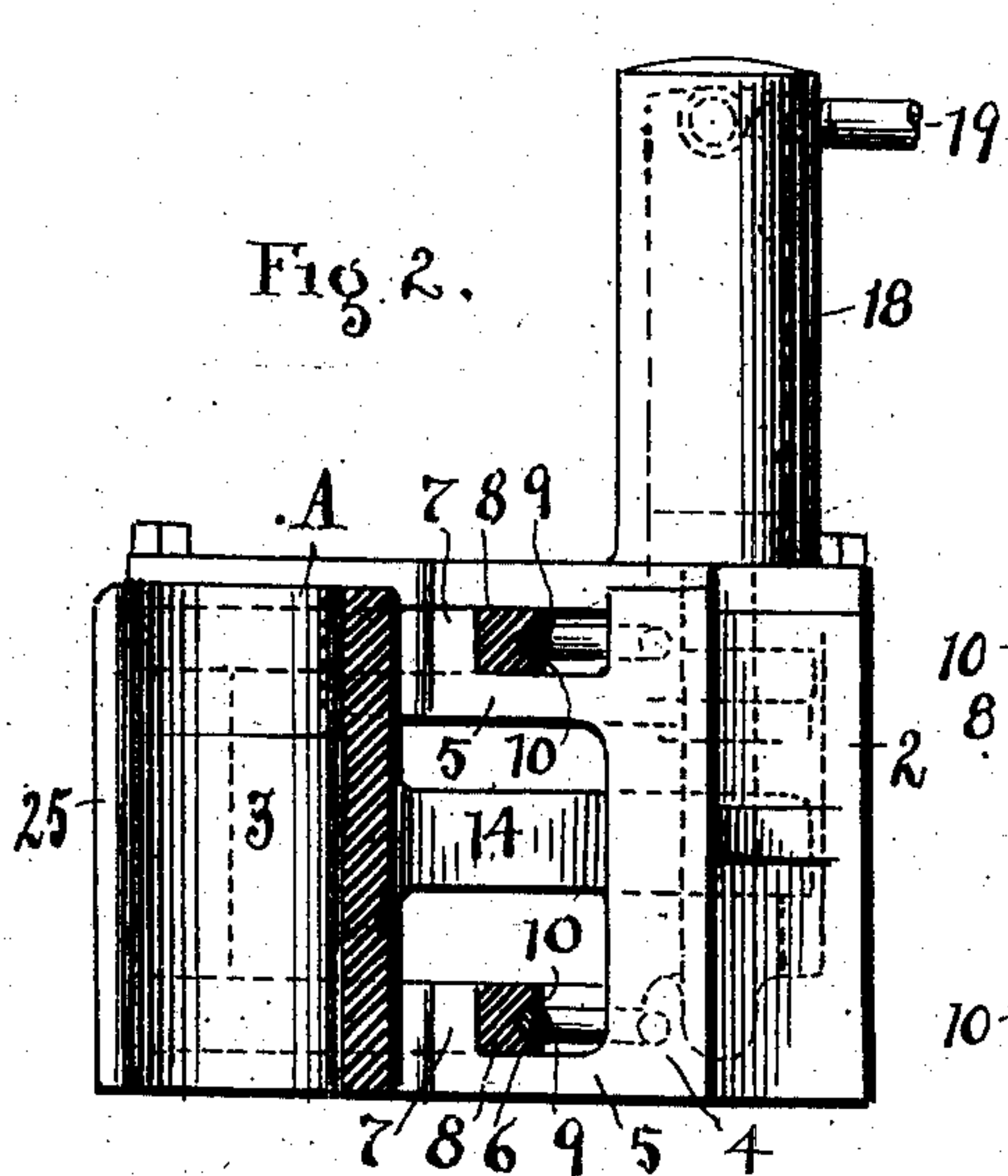


Fig. 2.

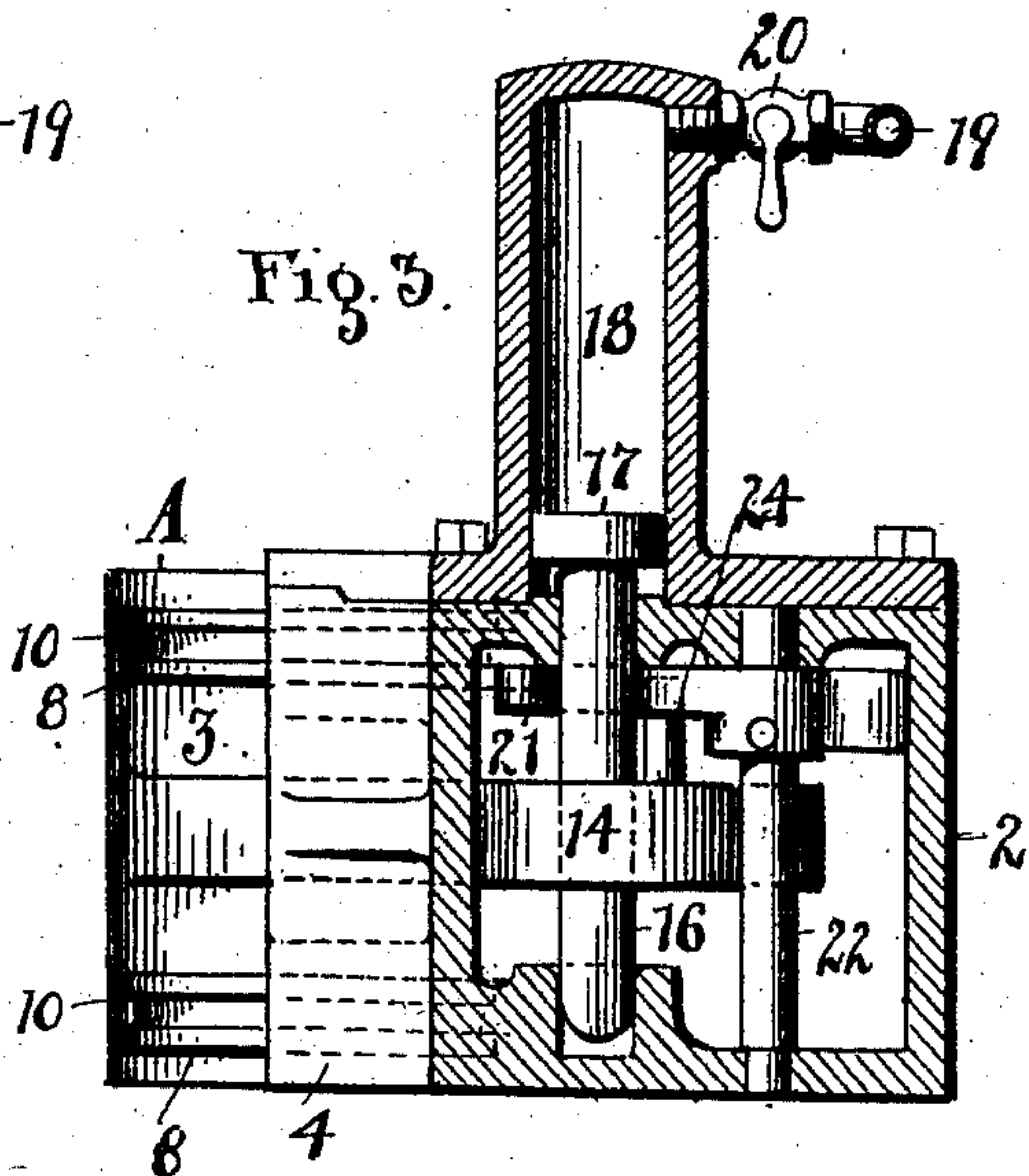


Fig. 3.

ATTEST.

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JOHN GASZPER, OF CLEVELAND, OHIO.

CAR-COUPLING.

No. 840,126.

Specification of Letters Patent.

Patented Jan. 1, 1907.

Application filed August 30, 1906. Serial No. 332,611.

To all whom it may concern:

Be it known that I, JOHN GASZPER, a citizen of Austria-Hungary, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Car-Couplers; and I do declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to car-couplers; and the invention consists in the construction and combination of parts, substantially as hereinafter shown and described, and more particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a plan view, partly sectioned away, of a set of my improved couplers in connected relation. Fig. 2 is a cross-section on line 2 2, Fig. 1, looking to the right thereof. Fig. 3 is a vertical cross-section on line 3 3, Fig. 1, showing the air-controlled coupling-pin in locking position.

A and B represent two interlocking couplers each of which is a counterpart of the other, and the same reference characters are used to designate like parts in both couplers.

Each coupler consists of a cast-iron body 2, adapted to support a revoluble rocking member 3 at its front. Body 2 has a projecting portion 4, provided with separate upper and lower flanges 5, having recesses 6 in their top faces and curved lugs 7 at one side. Member 3 comprises an interlocking head of C form in cross-section, which is provided with integral flanges 8 top and bottom of ring shape arranged eccentric to the main body and open and apart therefrom to admit seating of flanges 8 against lugs 7 and within recesses 6. Springs 9 are also seated within recesses 6 and bear against grooved face 10 of flanges 8 to take the impact of a blow upon member 3. Said coupler member is adapted to revolve within limits as determined by its engagement with lugs 7 and is also adapted to rock in a limited degree with end 11 of shoulder 12 on body 2 as the fulcrum of its movement. Shoulder 12 is curved to correspond to the ring shape of flanges 8 and forms a backing for member 3.

Body 2 is hollow and open at its front opposite member 3, and an arm 14 on said member projects into said body and has free play

therein. The end of arm 14 has a curved slot 15, adapted to be entered by locking-pin 16 when member 3 is interlocked with another coupler member, as in Fig. 1, and whereby said member is prevented from opening and effecting a release between the two coupler members.

Locking-pin 16 has a head or piston 17, adapted to travel within vacuum-chamber 18, and a vacuum connection is made with said chamber 18 by valved pipe 19. The lifting of locking-pin 16 may be under control at a distant point or at the coupler itself and as determined by the position of valve 20 in the line of pipe 19; but when pin 16 is raised it is prevented from again coming down by stop-plate 21, which crosses beneath said pin. Plate 21 is mounted on a rock-shaft 22, seated in the top and bottom of body 2 and is spring-pressed to maintain a closed position beneath pin 16, but is thrown back and held open when engaged at its heel 23 by stud 24 on arm 14 as the said arm travels toward pin 16. This action occurs when member 3 revolves in its seat during an interlocking movement with another coupler member, and the revolution thereof is caused by contact between the two members at their face edges 25. (See Fig. 1.)

Suitable spring-buffers 26 are also mounted at each side of the coupling members A and B and combine therewith to maintain working relation between the couplers.

As shown the couplers are in locked position, and this relationship is permanent as long as pin 16 is down and in engagement with arm 14. When either one of the two pins 16 is withdrawn from its respective coupling-body, separation of the couplers is effected, because the unlocked member is free to rotate and rock in its seat, which movement occurs under pull between members 3. When either or both members are opened, the stop-plates 21 come beneath locking-pins 16. Said members are automatically brought into coupling position again when one member strikes another at edge 25, which causes rotation of either or both members, if unlocked, until stud 24 engages plate 21 and throws it back to release pin 16, which drops by gravity into slot 15 of arm 14. The circular open-jaw formation of each member 3, combined with its rotary movement, is pri-

marily effective in bringing about the proper locking relations between the two couplers, and the independent rocking movement of each member favors quick and free uncoupling.

What I claim is—

1. In car-couplers, a supporting-body and an interlocking head of circular form having circular flanges eccentrically disposed thereon and constructed to have independent rocking and rotatable engagement with said body and a spring to take up the rocking movement, and locking means on said body adapted to hold said head in locked relation therewith.

2. In car-couplers, a supporting-body having recessed flanges, and an interlocking head of circular form having curved flanges eccentrically disposed at one side thereof and adapted to both rock and rotate within said recessed body-flanges, a shoulder on said body adapted to provide a fulcrum for rocking said head, a slotted arm on said head, and a locking-pin slidably seated within said body and adapted to engage said slotted arm.

3. In car-couplers, a supporting-body, an interlocking head of circular form having circular flanges eccentric therewith and rotatably engaged with said body, a slotted arm on said head, a locking-pin adapted to engage said arm, a stop-plate adapted to cross beneath said pin, and a stud on said

arm adapted to engage said stop-plate to release said pin.

4. In car-couplers, a supporting-body and an interlocking member having a circular head and eccentric supporting-flanges rotatably engaged with said body and adapted to have an independent rocking movement therewith, springs to hold said member against rocking, and a locking-pin for said member slidably mounted within said body.

5. In car-couplers, a body having recessed flanges at its front, an interlocking head of circular form having curved flanges eccentrically disposed at one side thereof and adapted to be rotatably mounted within said recessed flanges, shoulders on said body adapted to provide a backing and a fulcrum rocking-point for said head, a spring to hold said head in position, an arm integral with said head having a slot in its outer face portion, a locking-pin adapted to enter said slot to fix the position of said head, a stop-plate adapted to prevent said pin from entering the slot, and means on said arm adapted to operate said plate to release said pin.

In testimony whereof I sign this specification in the presence of two witnesses.

JOHN GASZPER.

Witnesses:

R. B. MOSER,
HENRY BARNES.