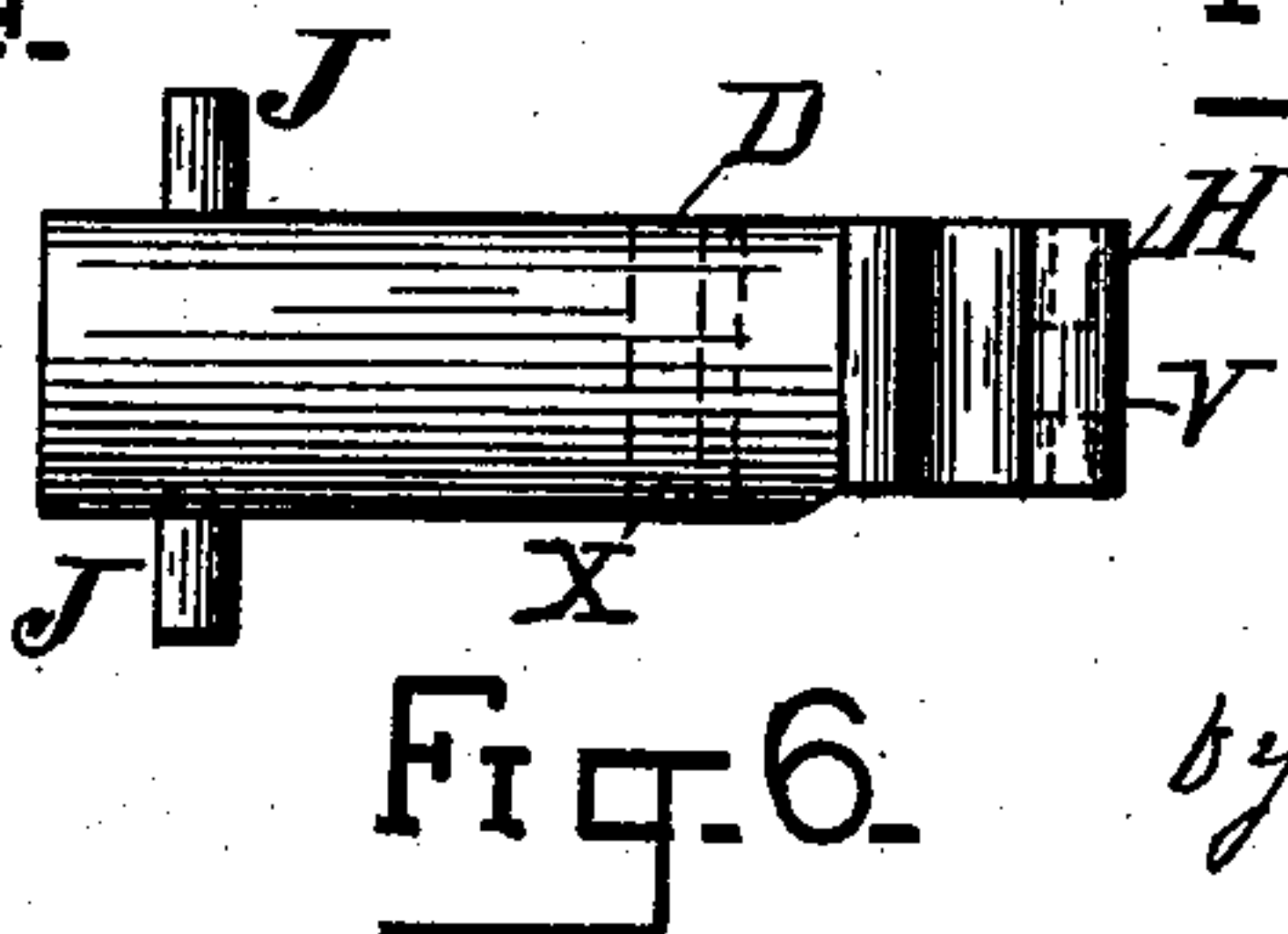
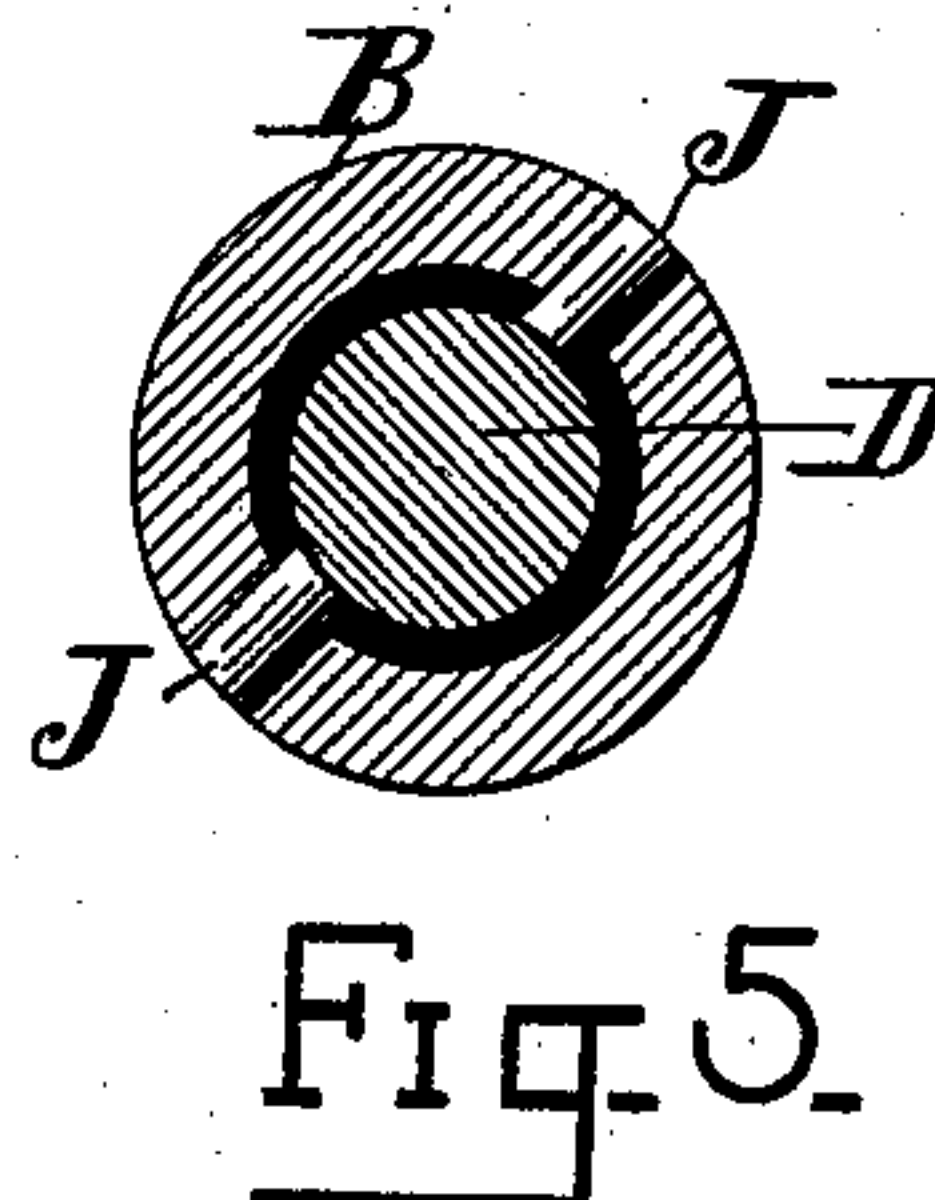
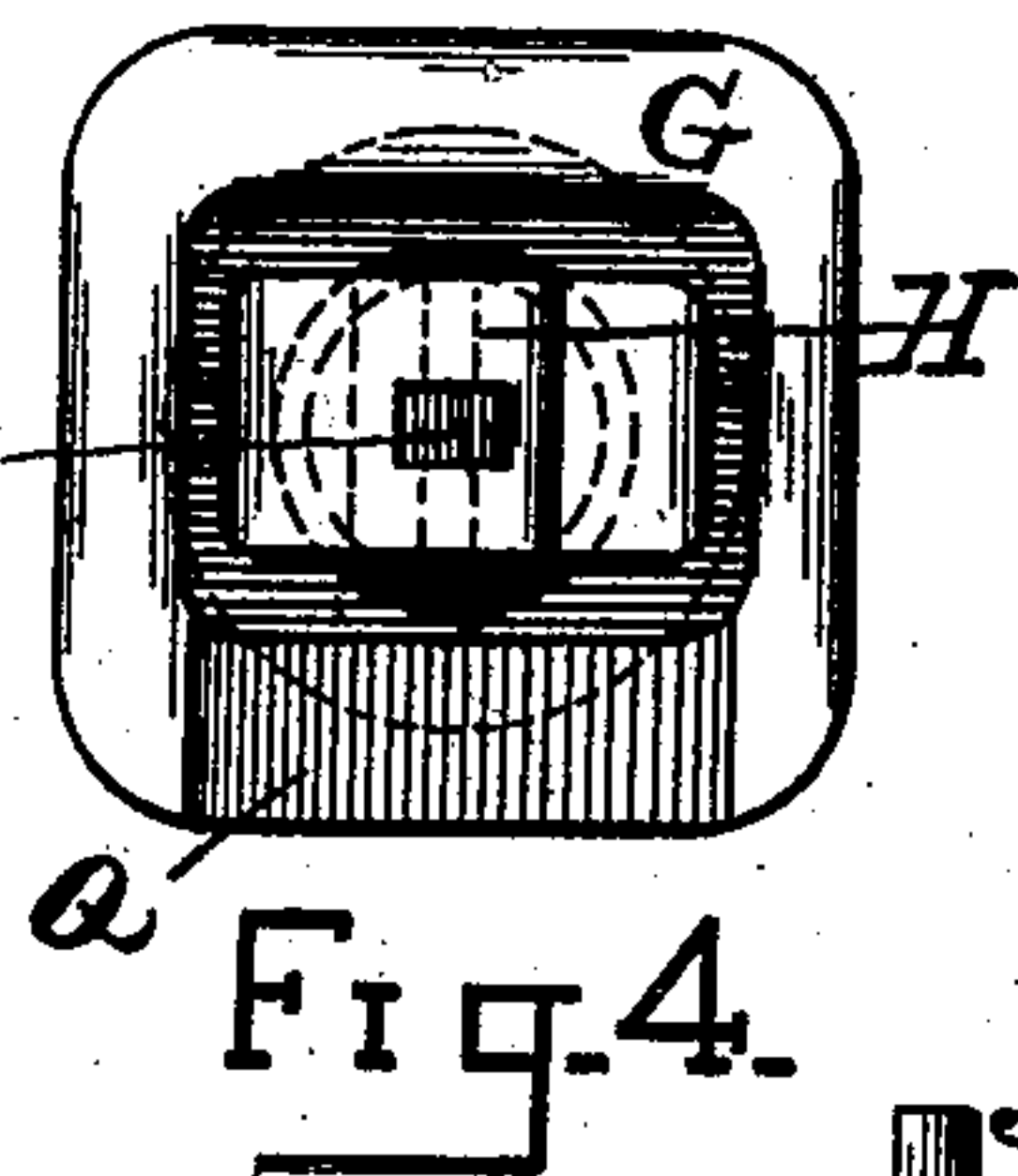
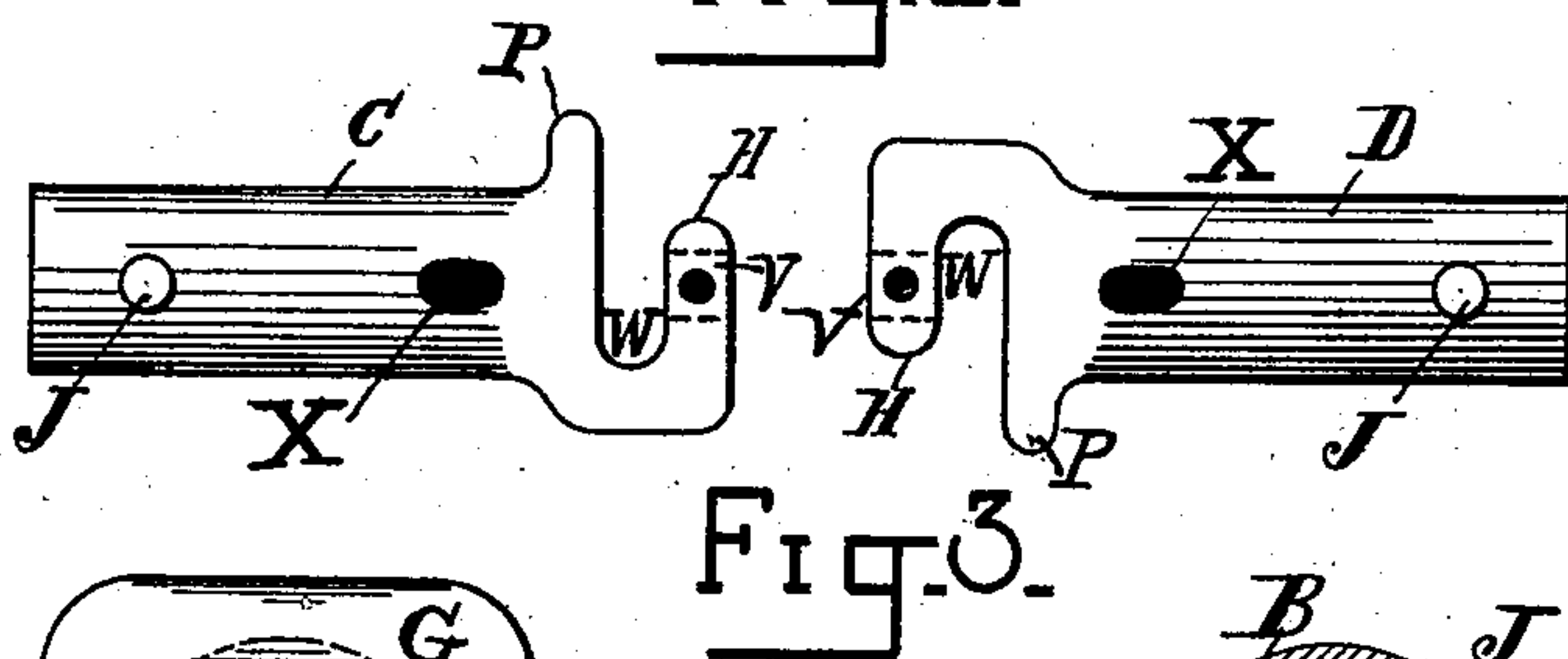
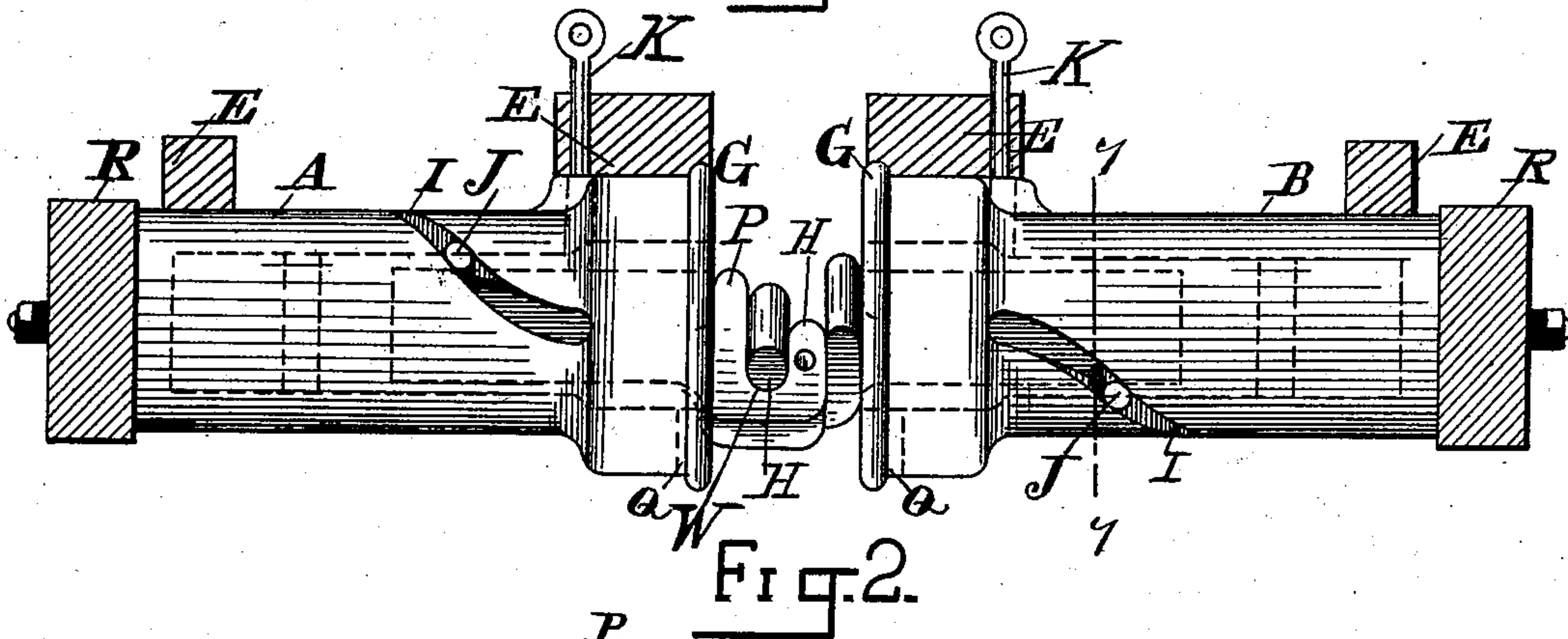
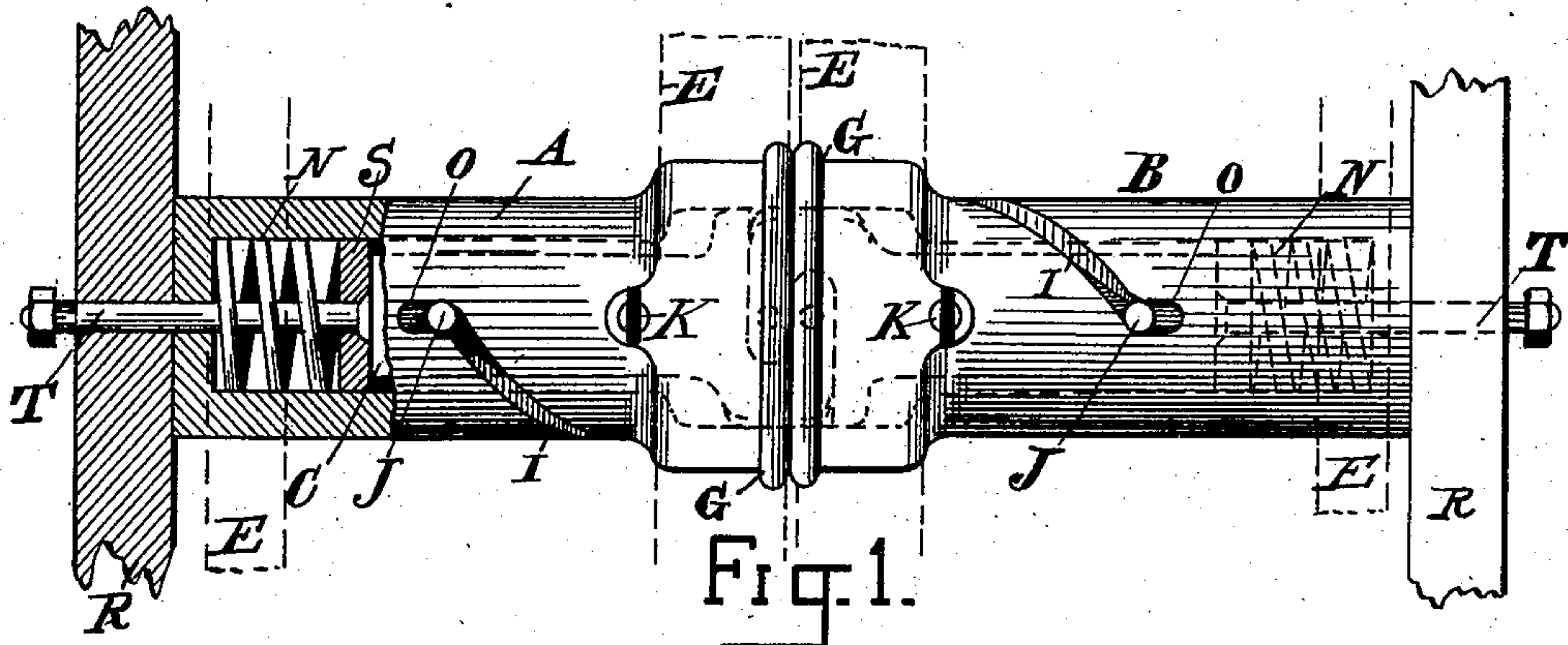


(No Model.)

J. WADLEIGH.  
CAR COUPLING.

No. 506,287.

Patented Oct. 10, 1893.



WITNESSES:  
Fred W. Hersey,  
Stephen Reid.

INVENTOR:  
Joseph Wadleigh  
by G. L. Chapin,  
his Att'y.



# UNITED STATES PATENT OFFICE.

JOSEPH WADLEIGH, OF MILKS GROVE, ILLINOIS.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 506,287, dated October 10, 1893.

Application filed June 13, 1893. Serial No. 477,463. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH WADLEIGH, a citizen of the United States, residing at Milks Grove, county of Iroquois, (post-office address  
5 Herscher, Kankakee county,) State of Illinois, have invented new and useful Improvements in Car-Couplers, of which the following is a complete specification, reference being had to the annexed drawings, illustrating the invention, in which—

10 Figure 1, is a plan, or top view of the coupling with the draw-bars locked and in position as when a train of cars is to be moved, a portion of the platform timbers being removed, more clearly to show the devices; Fig.  
15 2, a side elevation of Fig. 1, and a section of the supporting timbers; Fig. 3, the two draw-bars in plan view, removed more clearly to show their construction; Fig. 4, an end view  
20 of the buffer portion of one coupler frame; Fig. 5, a transverse section of Fig. 2 on line *y*; Fig. 6, an elevation of one of the draw-bars shown at Fig. 3.

The novelty, construction and operation  
25 of this invention will be fully comprehended by the following detail description.

A, B, represent the two hollow frame supports in which the draw-bars C, D, operate. These frames are supported by the ordinary  
30 timbers E, E, of the car platform in the ordinary manner, said timbers being shown by dotted lines at Fig. 1, and in section at Fig. 2. The buffer portion G, G, are nearly square  
35 in face view, thereby permitting a considerable downwardly inclined position to the lock-ends H, of the draw-bars C, D. In opposite sides of both frames A and B are formed  
40 slots I, I, on the lines of screw paths, and each slot registers nearly forty-five degrees of the cylindrical portions of the said frames. Two  
pins J, are inserted in the shank portions of both draw-bars and the pins project into the  
45 slots I, and are guided thereby to turn each draw-bar about one fourth round during the locking process. An ordinary pin K, by means of a hole L in each frame A, B, drops  
into each hole X when the buffers G meet. One draw-bar may be pinned fast to its frame,  
50 or both by gravity may extend down and out from the buffers G and the lock will be, in each case, complete. A spring N, is placed

in each frame A, B, and by means of pistons S, placed between the springs and the ends of the draw-bars, the projections P, P, which  
compose portions of the lock will, by contact  
55 of the lock ends of the draw-bars pass back into the buffer ends of the frames A, B, as shown by dotted lines Fig. 1; and thus the  
draw-bars may come together with a yielding  
60 force; a rod T to each piston, passing through a timber R, and secured by a nut, permits the  
springs to be compressed, but prevents the  
expansion of the spring beyond a given point  
which will permit the portions P, P to project  
65 their respective thicknesses beyond the buffers G, G. O, O, &c., are straight slots and  
continuations of the slots I, and permit of  
the movement back of the curved slots. Each  
buffer G is recessed in at its under side at Q  
70 freely to permit the draw-bars to slide downward and out of the frames; and so as not to  
be in the way of their movement into the  
frames.

For the convenience of using on one car  
one of my couplers and a link coupler of the  
75 ordinary kind on another car, mortises V are formed in the portions H and holes *a*, are  
also formed in them to receive the ordinary  
pins. The frames A, B, are to be secured to  
the timbers E, E, by straps and bolts of such  
80 ordinary construction as to require no description.

The operation is simple; the locks H, H, in forcible contact pass into the frames and in  
so doing are turned by means of the slots I  
85 and pins J, and the locks H are brought into the recesses W, and at the proper time the  
pins K fall into the holes X. The said pins, may if desired be operated by levers to obviate  
the necessity of a person going between  
90 the cars.

Having thus described my invention, I claim and desire to secure by Letters Patent  
of the United States—

An improvement in car couplers consisting  
95 of two cylindrical draw-bar frames with notched buffers at their face portions, and  
provided each in their opposite cylindrical  
portions with spiral slots and short straight  
slots which are continuations of the spiral  
100 slots, in combination with two draw-bars,  
which are provided with two opposite pins

engaging and operating in said slots, and each  
draw-bar provided with a hook and recess at  
its locking end, said bars each having a par-  
tial rotary motion in its movement in the  
5 frame supports, and the hook of each draw-  
bar engaging the recess in the other bar, and  
a spring at the back end of each bar, having

an expansion and compression equal to the  
length of the short, straight slot; as and for  
the purpose specified.

JOSEPH WADLEIGH.

Witnesses:

G. L. CHAPIN,  
HERMAN HOFF.