



(No Model.)

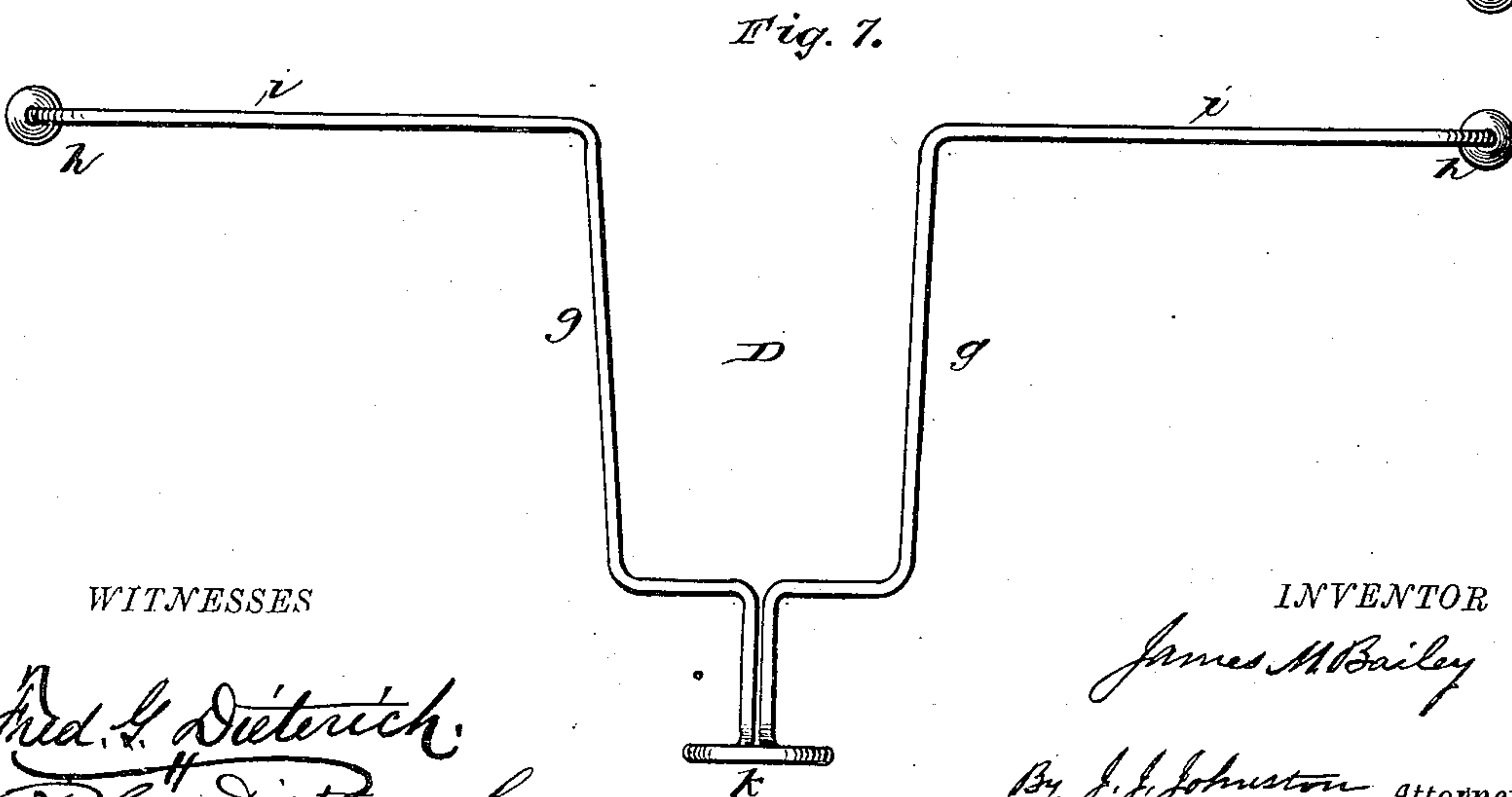
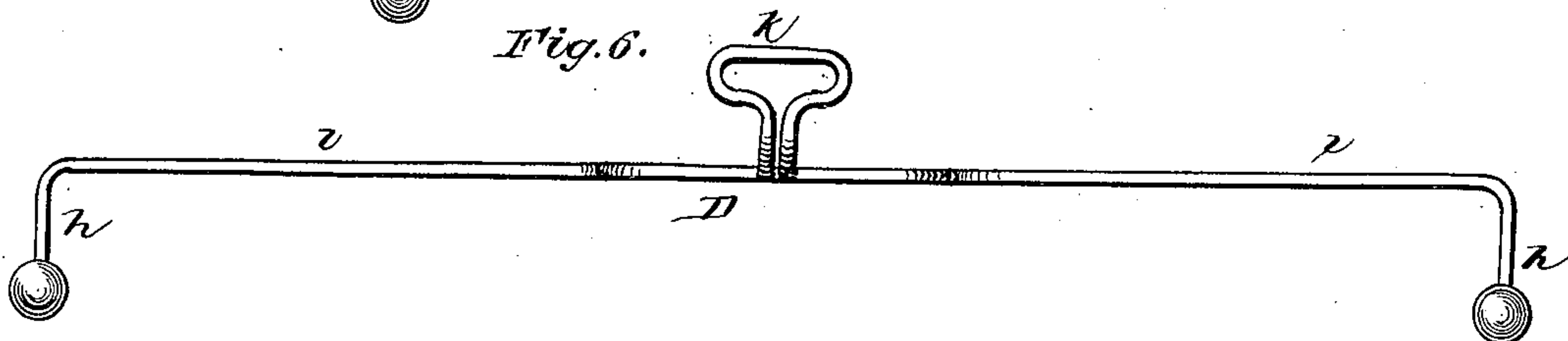
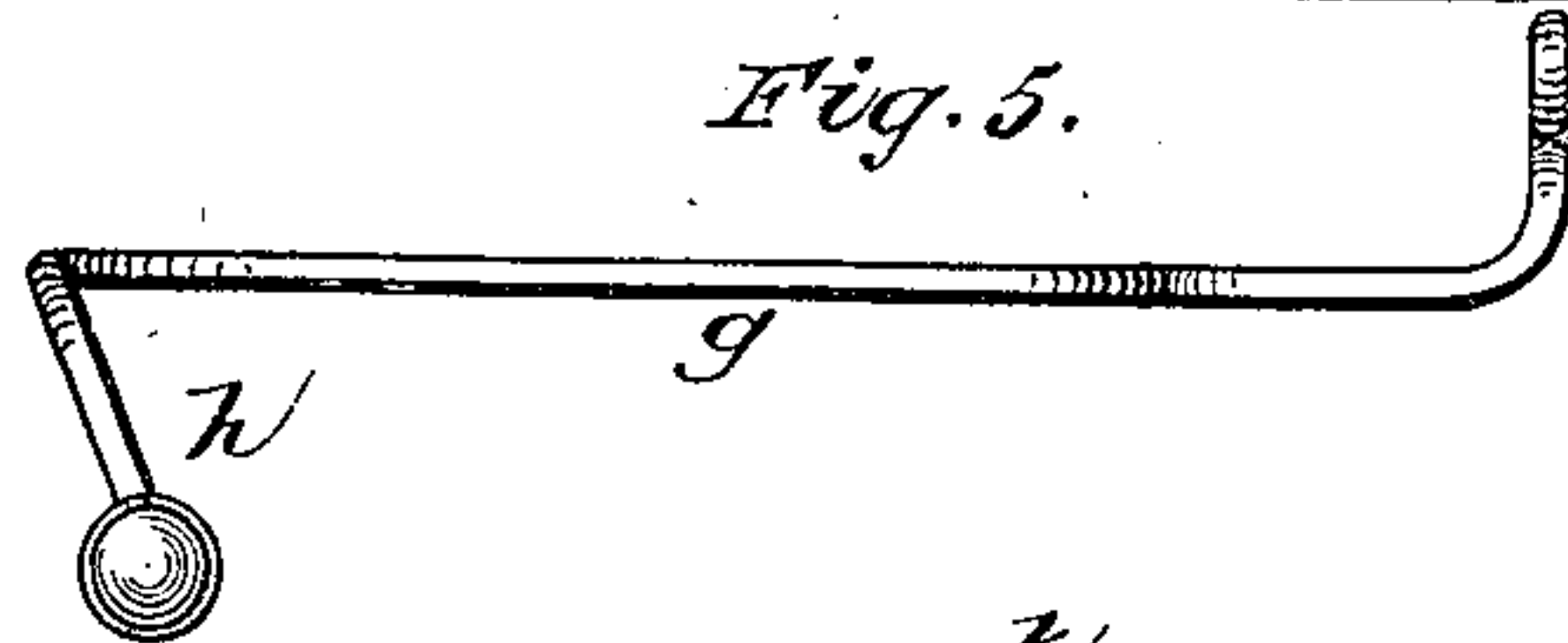
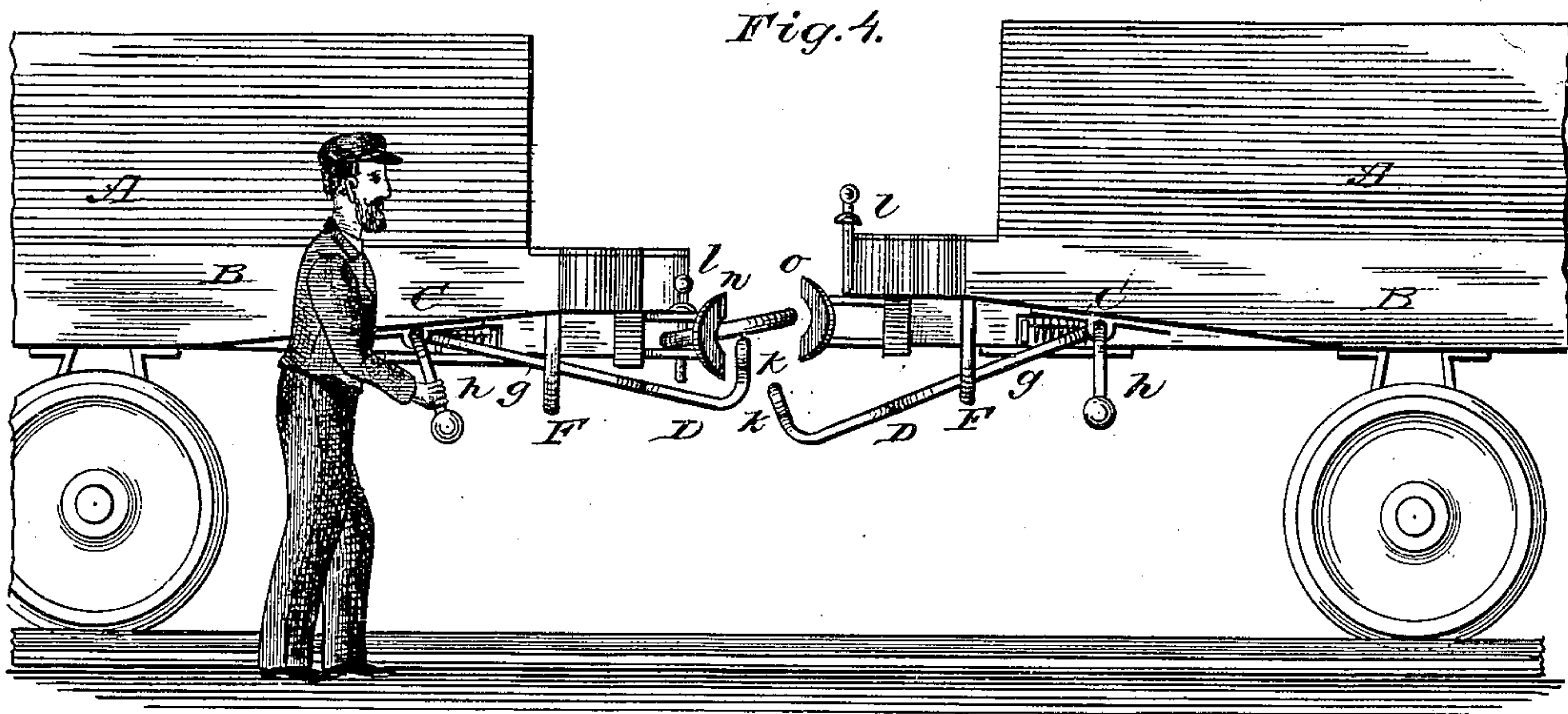
2 Sheets—Sheet 2.

J. M. BAILEY.

CAR COUPLING.

No. 258,541.

Patented May 30, 1882.



WITNESSES

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# UNITED STATES PATENT OFFICE.

JAMES M. BAILEY, OF PITTSBURG, PENNSYLVANIA.

## CAR-COUPLING.

SPECIFICATION forming part of Letters Patent No. 258,541, dated May 30, 1882.

Application filed January 16, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES M. BAILEY, of Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Apparatus for Manipulating Coupling-Links of Railway-Cars; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention relates to an improvement in apparatus for manipulating coupling-links of railway-cars; and it consists in adjusting the plane of the coupling-links when secured in the buffer-head of one car so that it will enter the buffer-head of another car in the operation of coupling railway-cars, said link being manipulated through the medium of a flexible lever of peculiar construction adapted to be operated at either side of the cars, whereby the operator is enabled to couple them together without danger of being injured, all of which will hereinafter more fully and at large appear.

To enable others skilled in the art with which my invention is most nearly connected to make and use it, I will proceed to describe its construction and operation.

In the accompanying drawings, which form part of my specification, Figure 1 is a side elevation of an ordinary freight-car provided with my improvement for manipulating the coupling-link. Fig. 2 is a vertical and longitudinal section of the same. Fig. 3 is an inverted view of the same. Fig. 4 is a side elevation of two cars the buffer-heads of which are on different horizontal planes, and represents the position of the operator while manipulating the coupling-link in the operation of coupling the cars. Fig. 5 is a side view of the flexible lever used for manipulating the coupling-link. Fig. 6 is a front view of the same. Fig. 7 is a top view or plan of the same.

Reference being had to the accompanying drawings, A represents an ordinary freight-car for railways, and may be of any known construction and furnished with the usual appendages.

To the frame B of the car A is pivoted in suitable bearings, C, a flexible lever, D, the

contour of which is clearly shown in Figs. 5, 6, and 7.

To the end timbers, E, of the frame B is secured a yoke, F, which surrounds the limbs *g* of the lever D, for preventing the front end of said lever from dropping down below the desired plane.

The lever D is provided with weighted arms *h h*, which are arranged at such angle with relation to the limbs *i i* that said weighted arms will bring down the point *k* of the lever D forward of the limbs *i i*. The lever should be constructed of steel, or of steel and iron combined, the limbs *i i* having sufficient spring to allow said limbs and that portion of the lever forward of them to yield with the back movements of the buffer-heads and yielding of the lever D, as indicated by dotted lines in Fig. 3. By constructing the lever D so that it will yield with the back movement of the buffer-heads said lever will not be injured or rendered inoperative when the lifting-point *k* is caught between the buffer-heads in the act of coupling the cars together.

The foregoing description and reference had to the accompanying drawings will enable the skillful mechanic to readily construct and apply my invention to railway-cars for the purpose of manipulating the coupling-link in the operation of coupling the cars together. I will therefore proceed to describe the operation of my improvement.

Having the lever constructed, combined, and arranged with relation to the buffer-heads of the car, as described and shown, the operator arranges the coupling-pin *l* in the buffer-head, as shown in Fig. 4. He then pushes or pulls forward the weighted arm *h*, which will bring the lifting-point *k* up against the coupling-link *m* and raise it to a proper plane for entering the buffer-head *n*, as shown in Fig. 4. The jarring action produced by the buffer-heads *n* and *o* coming together will cause the coupling-pin *l* to drop into its position in the buffer-head *n*, and thereby couple the cars together, all of which can be accomplished with ease and facility by the operator at the side of the car (in contradistinction to going between them) by and through the medium of the lever D.

By the method and apparatus hereinbefore

described the danger common to the operation of coupling railway-cars is entirely obviated, and this desirable result secured by a simple, cheap, and efficient means.

5 Having thus described my improvement, what I claim as of my invention is—

The combination of lever D, having flexible

arms *i i*, and weighted arms *h h*, and lifting-point *k*, pivot *e*, yoke F, and buffer-head of railway-car, substantially as herein described. 10

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Witnesses:

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