

(No Model.)

2 Sheets—Sheet 1.

O. T. BAKER.

WAGON BRAKE.

No. 389,829.

Patented Sept. 18, 1888.

Fig. 1.

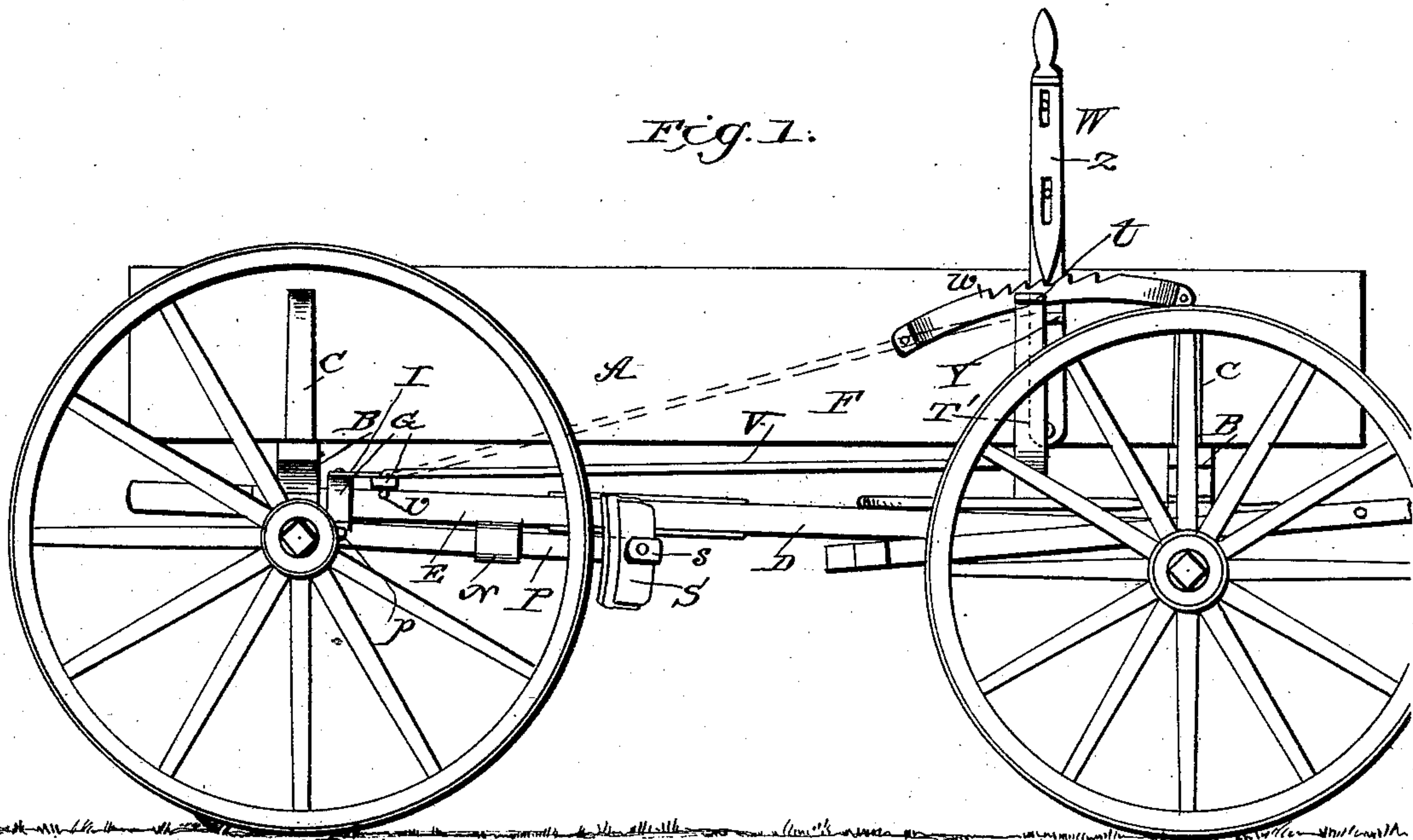
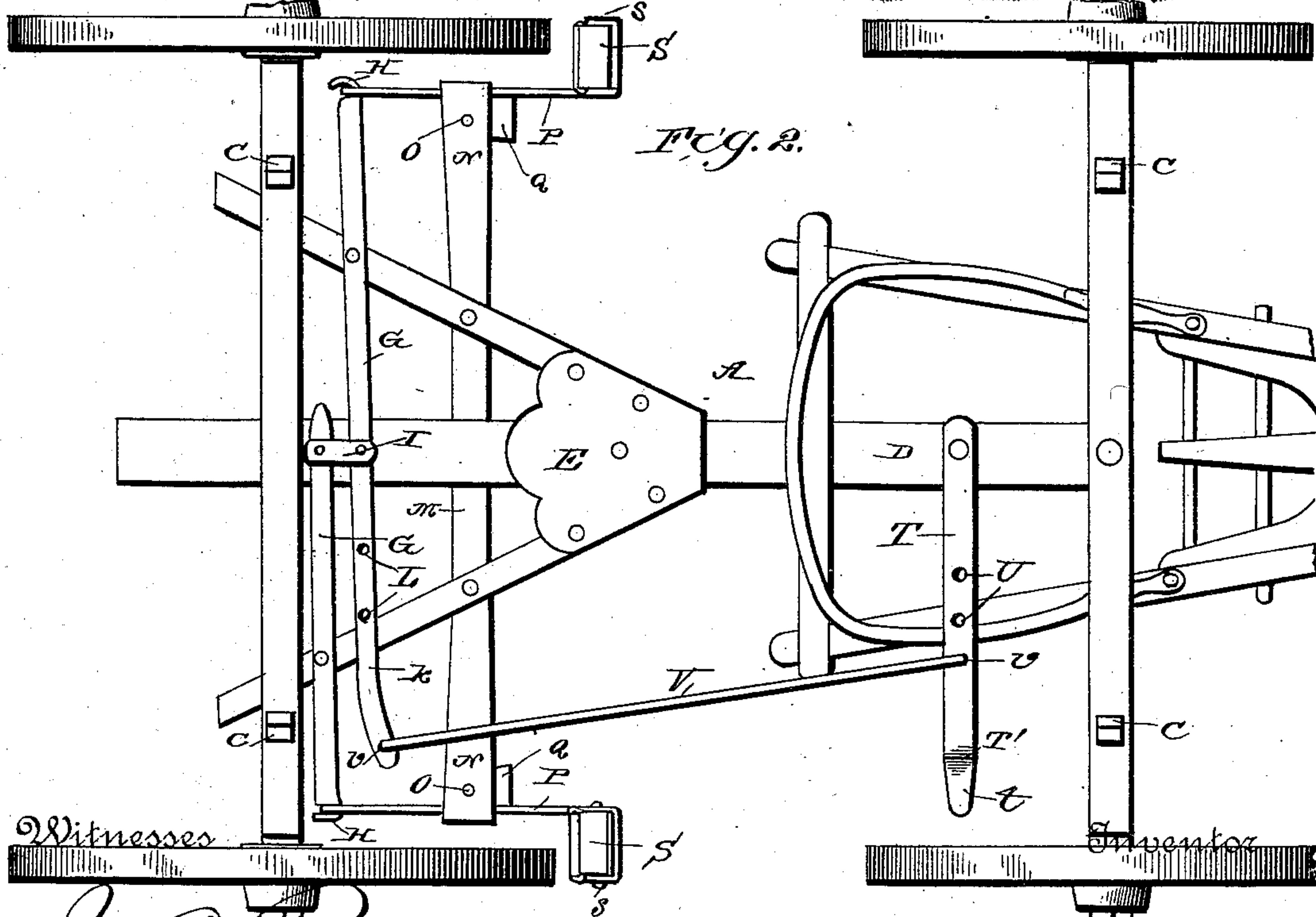


Fig. 2.



Witnesses

Jos. A. Ryan
C. E. Doyle

By his Attorneys Owen T. Baker.
C. A. Snow & Co.

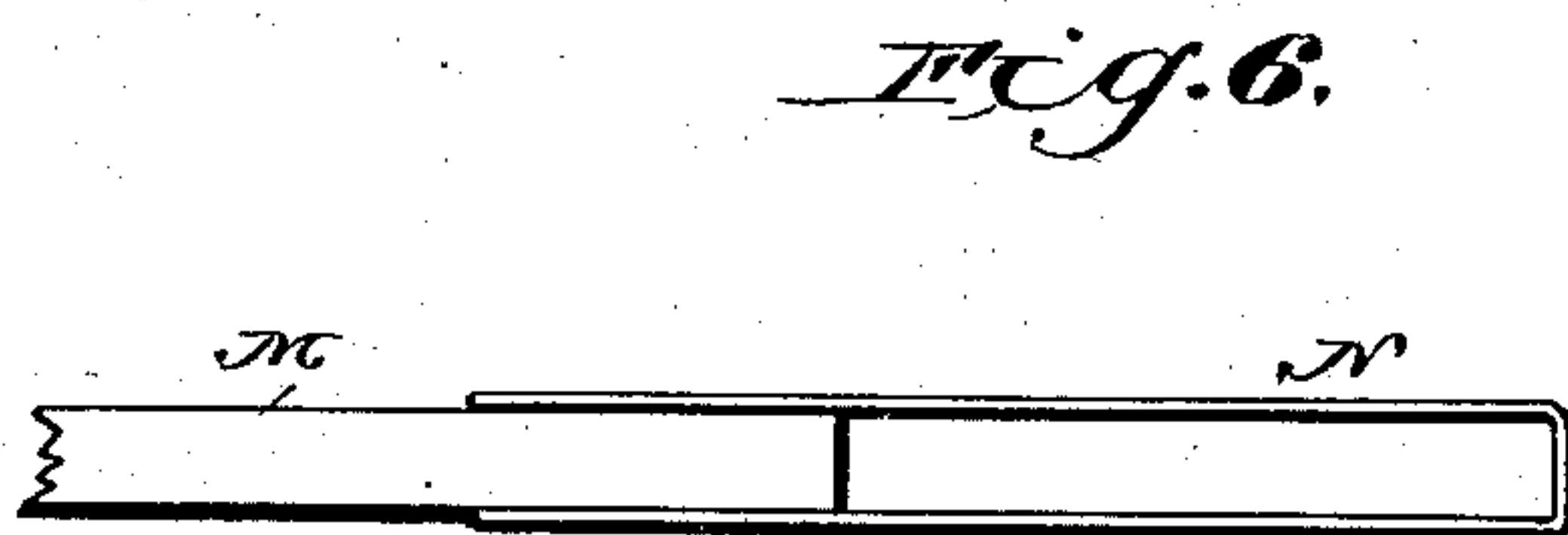
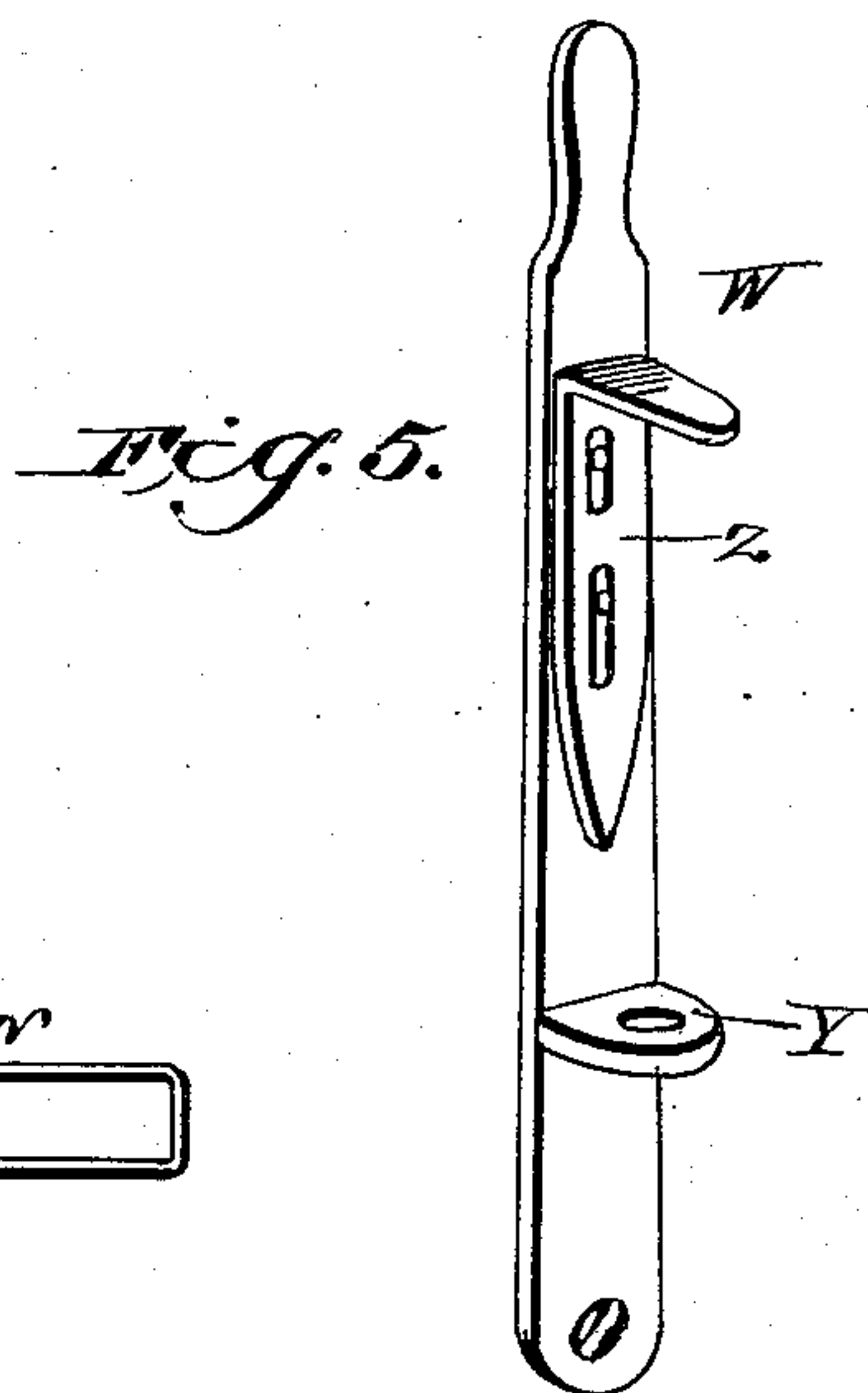
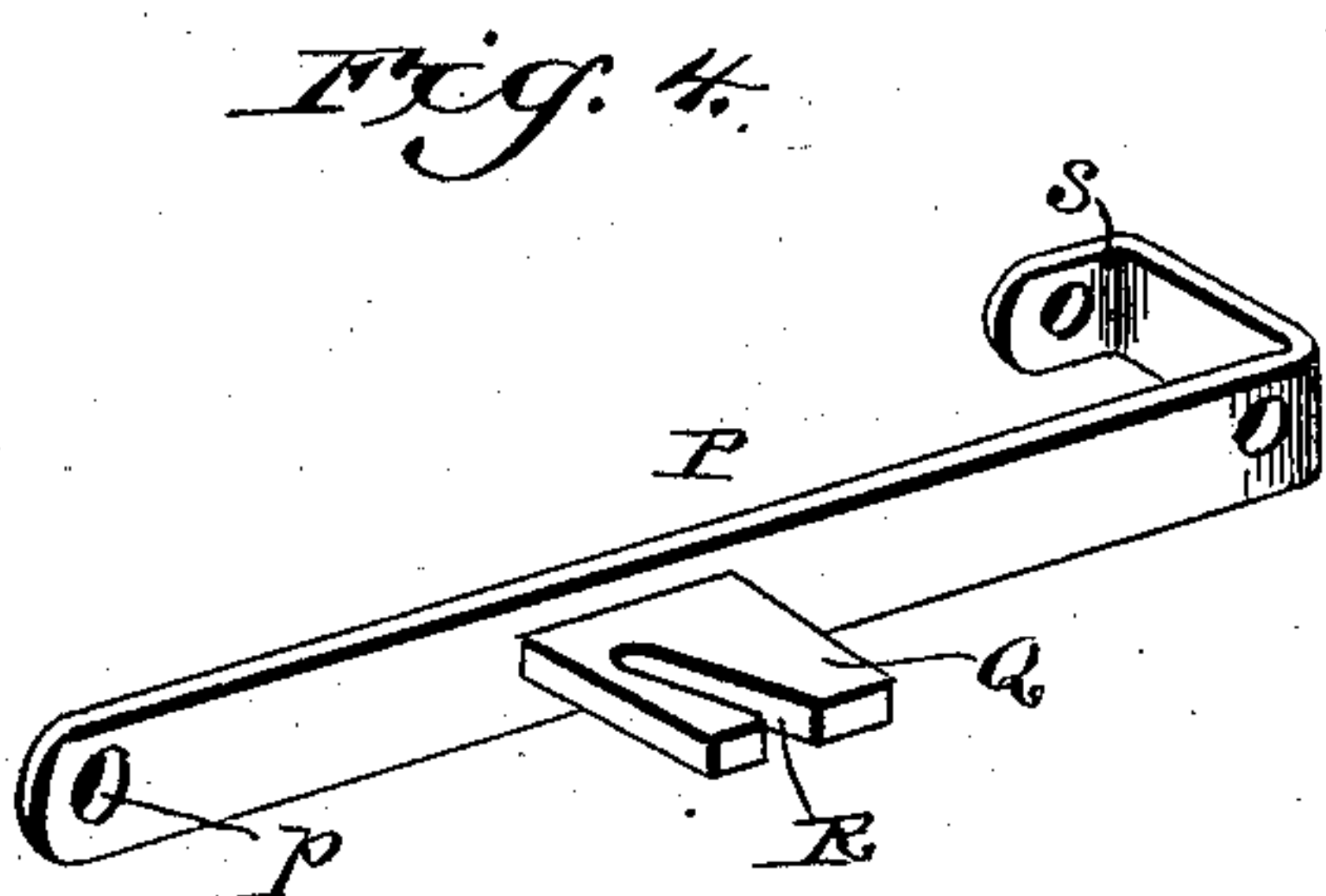
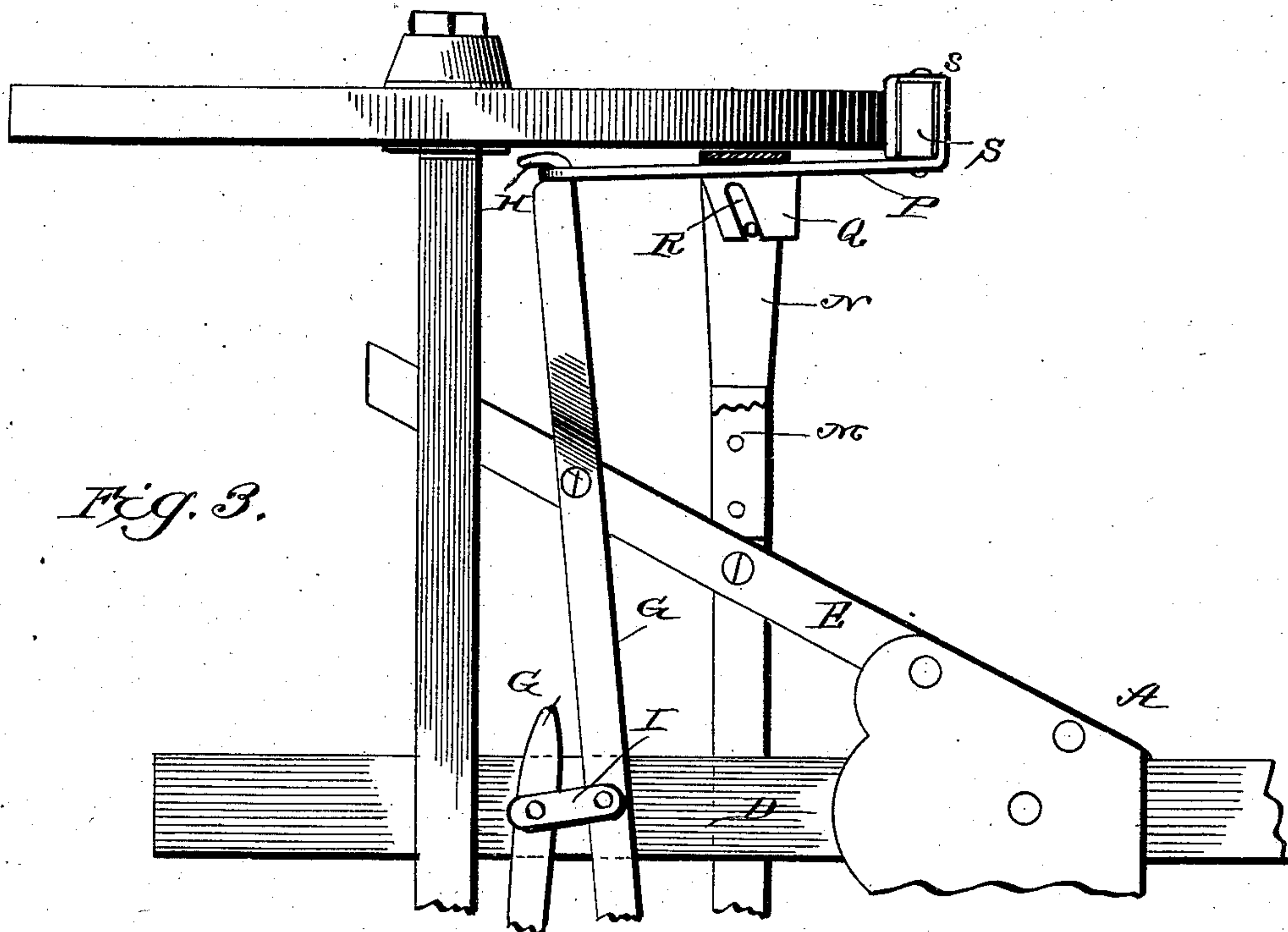
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2 Sheets—Sheet 2.

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No. 389,829.

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Witnesses

*Jas. A. Ryan
 O. E. Dayh.*

Inventor

Owen T. Baker.

By his Attorneys

Chas. Howard

UNITED STATES PATENT OFFICE.

OWEN T. BAKER, OF FORT WORTH, TEXAS, ASSIGNOR TO HENRY SCHWARTZ, OF SAME PLACE.

WAGON-BRAKE.

SPECIFICATION forming part of Letters Patent No. 389,829, dated September 18, 1888.

Application filed May 18, 1888. Serial No. 274,252. (No model.)

To all whom it may concern:

Be it known that I, OWEN T. BAKER, a citizen of the United States, residing at Fort Worth, in the county of Tarrant and State of Texas, have invented a new and useful Improvement in Wagon-Brakes, of which the following is a specification.

The invention relates to improvements in wagon-brakes, with the object of providing simple, effective, and durable means by which the brakes may be applied by either foot or hand power.

A further object is to provide means to draw the brake-shoes inward when the brake is off, to more effectually remove the same from contact with the wheels without requiring as great a movement of the operating mechanism, and, furthermore, to provide improved means for altering the power of the brake.

The invention consists in a certain novel construction and arrangement of parts, fully set forth hereinafter in connection with the accompanying drawings, wherein—

Figure 1 is a side view of a wagon with the improved brake mounted thereon and showing the hand-operating lever connected to the brake-levers in dotted lines. Fig. 2 is a plan view of the wagon with the body removed to show the brake-operating mechanism. Fig. 3 is a similar view, partly in section, showing the positions of the parts when the brakes are off. Fig. 4 is a detail view of one of the swinging arms. Fig. 5 is a similar view of the hand-lever. Fig. 6 is a detail rear view of one end of the supporting-bar to show the guide-stirrups thereon.

Referring by letter to the drawings, A designates the bed of the wagon, which may be of any ordinary construction, and is provided with the usual bolsters, B B, having the standards C C, the reach D, and the rear hounds, E E; and F represents the body, which is arranged on the said bolsters between the standards.

The levers G G are pivoted to the rear hounds, respectively, and are provided at their outer ends with hooks H, and they are connected at the center of the bed by the link I, whereby they may be moved simultaneously. One of the levers is extended beyond the cen-

ter of the bed to form the adjusting-arm K, which extends slightly beyond the side of the body, and is provided with a series of apertures, L.

A transverse supporting-bar, M, is secured to the hounds in front of the levers G, and it is provided at its ends with the guides or stirrups N N, which extend beyond the sides of the body and are provided with the vertical pins O O.

Swinging arms P P are mounted in the guides or stirrups, and are provided at their rear ends with eyes *p p*, engaging the hooks on the outer ends of the levers. The inner sides of the said swinging arms are provided with the guide-blocks Q Q, having inclined slots R R therein, which slide on the pins O, above mentioned. These slots are inclined forward toward their inner ends, whereby, when the rear ends of the swinging arms are drawn backward, the front ends thereof are not only drawn back slightly, but are also swung outward, and when the rear ends of the swinging arms are forced forward their front ends are also swung inward. The brake-shoes S S are attached to the front ends of the swinging arms, the said front ends of the latter being provided with hooks *s s* to embrace the shoes.

T represents the foot operating-lever, which is pivoted to the reach near its front end, or to any other rigid support, and extends outward to the side of the body approximately parallel to the adjusting-arm K, and it is provided with the vertical arm T', having an outwardly-turned hook or foothold, *t*, on its upper end. The horizontal portion of the lever is provided with a series of apertures, U U, similar to those in the arm K.

The connecting-rod V is provided at its ends with depending studs or hooks *v v*, which may be engaged in any of the apertures L U, respectively, whereby the lever and the arm are connected together for simultaneous operation. This rod may be so arranged as to multiply the power exerted upon the lever or reduce the power exerted thereon; or it may be arranged so as to exactly transmit the power without change.

A hand-lever, W, is mounted on the side of

the body and operates in contact with a segmental rack-bar, *w*, and is provided with an eye or loop, *Y*, in which the front end of the connecting-rod may be engaged to enable the brake to be operated by hand. A sliding pawl, *Z*, is mounted on the hand-lever to engage the teeth of the rack-bar, whereby the lever is held at the desired adjustment.

This brake, as will be seen, may be arranged to be operated either by hand or by foot, the adjustment being made by simply altering the position of the front end of the connecting-rod.

When the brakes are off, the shoes are drawn inward, thereby more effectually removing them from contact with the wheel without necessitating a great movement of the operating-lever.

Having thus described my invention, I claim—

1. In a wagon-brake, the combination, with the levers *G*, of the swinging arms connected to the levers and carrying the brake-shoes, and the guide-blocks on the swinging arms provided with inclined slots sliding on transverse pins, substantially as specified.

2. In a wagon-brake, the combination, with the levers *G*, of the laterally-extending horizontal guides or stirrups *N*, having pins *O*, arranged vertically therein, the swinging arms connected to the levers passing through the guides or stirrups and provided with brake-shoes, and the guide-blocks arranged on the swinging arms and provided with inclined

slots sliding on the pins *O*, substantially as specified.

3. In a wagon-brake, the combination, with suitable guide-pins, *O*, of the longitudinally-movable arms *P*, carrying the brake-shoes and provided with inclined slots which slide on the guide-pins and cause the free ends of the arms to swing laterally when moved longitudinally, substantially as specified.

4. In a wagon-brake, the combination, with guides or stirrups and the levers *G*, of the swinging shoe-bearing arms connected to the levers and passing through the guides or stirrups, whereby when the levers are operated the free ends of the swinging arms are moved longitudinally and laterally, substantially as specified.

5. In a wagon-brake, the levers *G* and swinging shoe-bearing arms connected to the levers, in combination with the arm *K*, connected to one of the levers *G* and provided with perforations *L*, the operating-lever *T*, provided with the perforations *U*, and the connecting-rod *V*, engaging at its ends, respectively, in the perforations *L* and *U*, substantially as specified.

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

OWEN T. BAKER.

Witnesses:

C. M. CARB,

A. KAISER.

Correction in Letters Patent No. 389,829.

It is hereby certified that Letters Patent No. 389,829, granted September 18, 1888, upon the application of Owen T. Baker, of Fort Worth, Texas, for an improvement in "Wagon Brakes" were erroneously issued to Henry Schwartz, as assignee of the entire interest in said invention; that said Letters Patent should have been issued to *Owen T. Baker and Henry Schwartz*, said Schwartz being assignee of one-half interest only; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed, countersigned, and sealed this 9th day of October, A. D. 1888.

[SEAL.]

Countersigned:

BENTON J. HALL,
Commissioner of Patents.

D. L. HAWKINS,
Assistant Secretary of the Interior.