

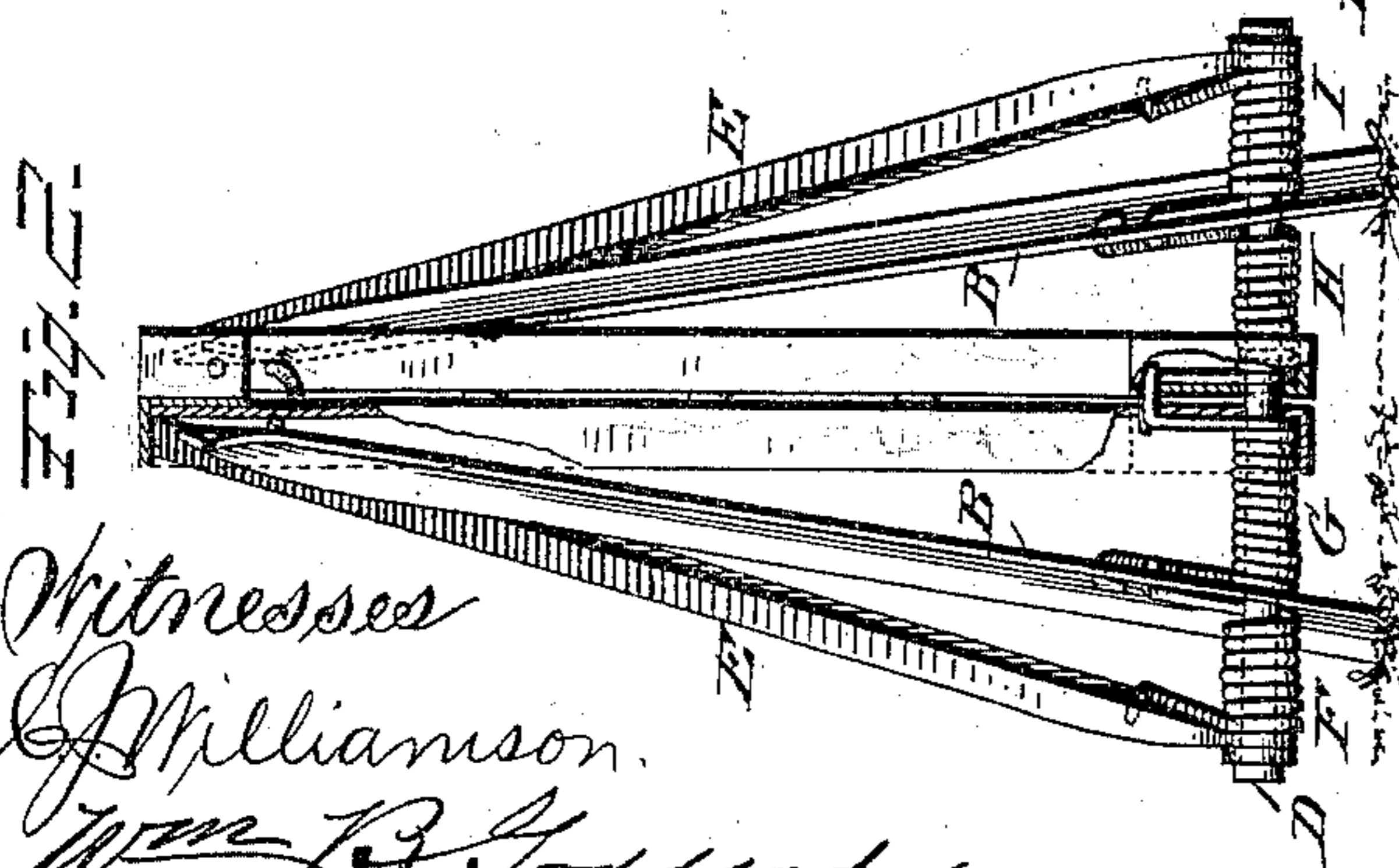
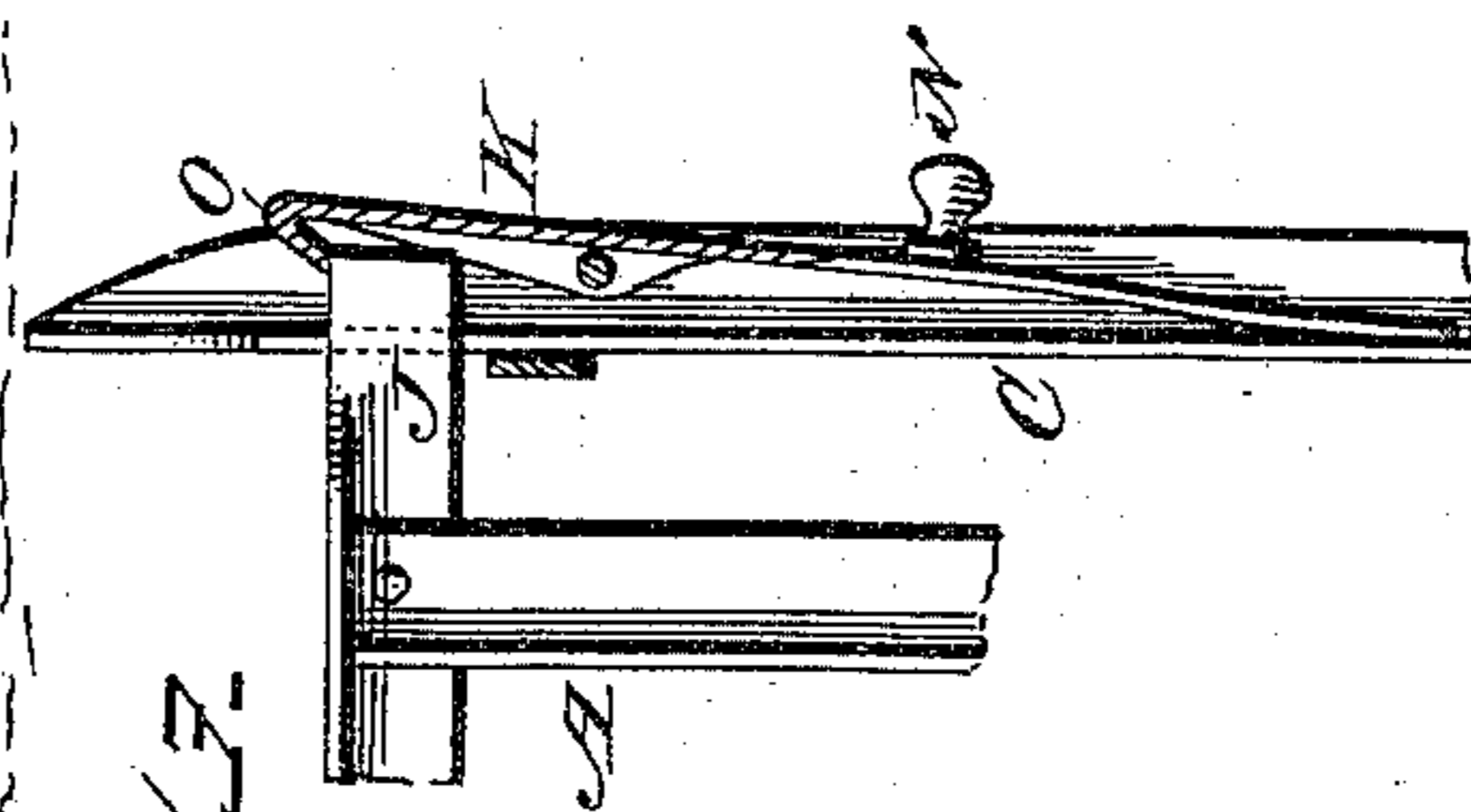
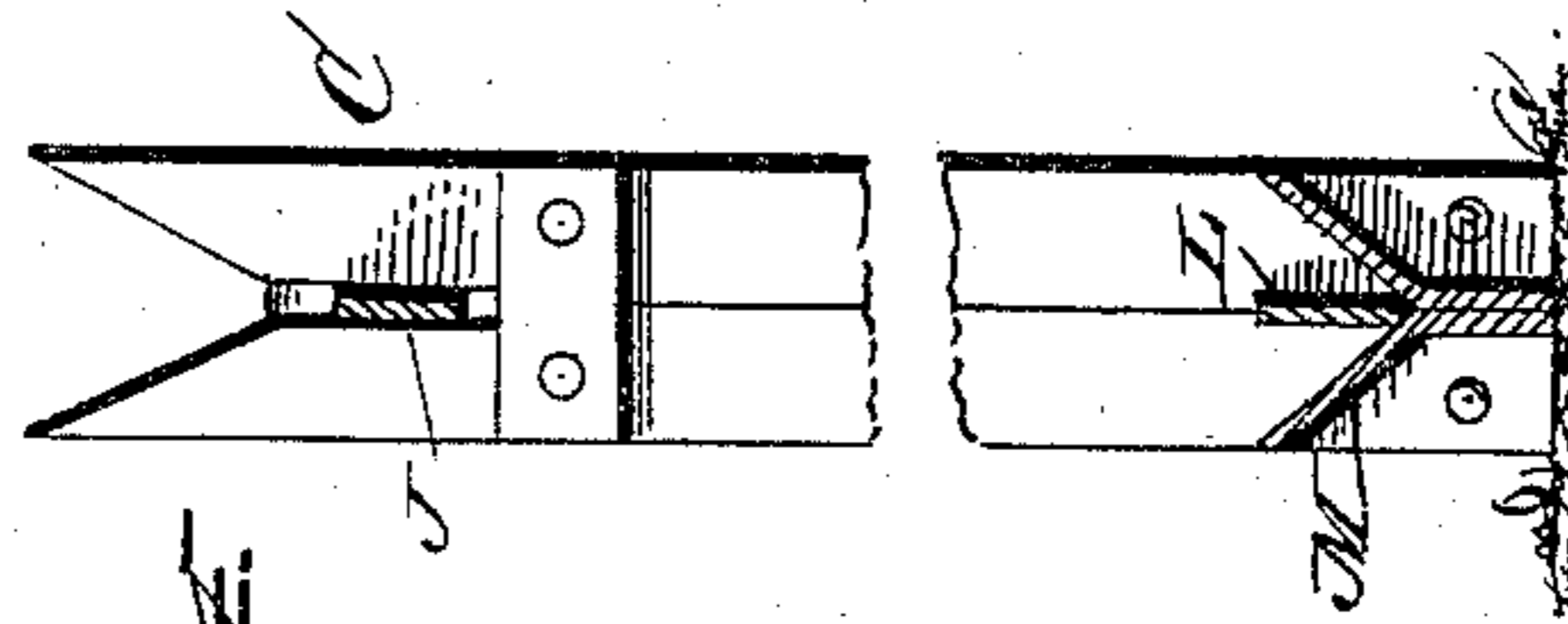
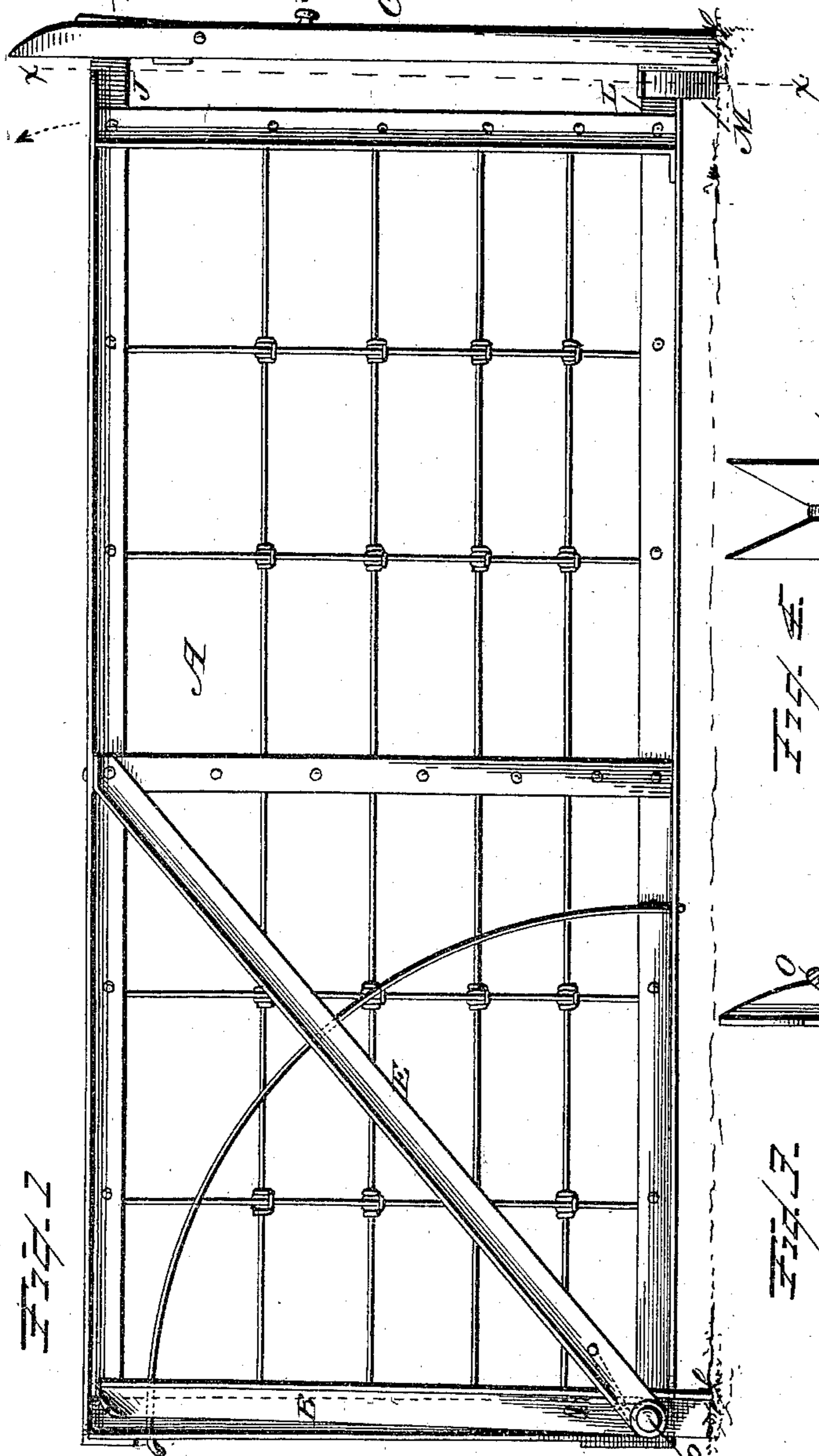
No. 612,514.

Patented Oct. 18, 1898.

M. BRUNER.  
FARM GATE.

(Application filed July 8, 1898.)

(No Model.)



Witnesses  
Williamson.  
Wm. B. Goddard.

Inventor  
Martin Bruner.  
per  
Chas. H. Fowler.  
Attorney.

# UNITED STATES PATENT OFFICE.

MARTIN BRUNER, OF BUCKLAND, OHIO.

## FARM-GATE.

SPECIFICATION forming part of Letters Patent No. 612,514, dated October 18, 1898.

Application filed July 8, 1898. Serial No. 685,422. (No model.)

*To all whom it may concern:*

Be it known that I, MARTIN BRUNER, a citizen of the United States, residing at Buckland, in the county of Auglaize and State of Ohio, have invented certain new and useful Improvements in Farm-Gates; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters of reference marked thereon.

The present invention has relation to that class of farm-gates which are pivoted or hinged at their lower corner and which are adapted to tilt or swing backward and upward in opening the same; and the object thereof is to increase the effectiveness and perfect balancing of the gate and render the same both strong and durable.

The invention therefore consists in a gate constructed substantially as shown in the drawings and hereinafter described and claimed.

Figure 1 of the drawings is a side elevation of a gate constructed in accordance with my invention; Fig. 2, an end view, partly in section; Fig. 3, a detail view, on an enlarged scale, of the latch mechanism, showing the upper rail of the gate engaging therewith; Fig. 4, a vertical section on line  $x x$  of Fig. 1.

In the accompanying drawings, A represents the gate, which may be of any preferred construction and either of metal or wood, as found best adapted to the purpose.

At the pivotal end of the gate are provided the two posts B, between which the gate works, and at the outer end of the gate is the post C, to which the gate is fastened when closed.

In connecting the gate to posts B a horizontal rod D is provided, which rod is of sufficient length to extend some distance beyond the sides of the posts after passing through them. The rod D is stationary, while the gate is loosely mounted thereon to form a pivotal connection and enable the gate to tilt in opening and closing the same. The posts B extend outward in a direction from their upper to their lower ends to adapt them to the length of the rod D, to which the posts are connected, and to brace them more perfectly

and prevent sagging in a sidewise or lateral direction.

The diagonal braces E are secured at their upper ends to any part of the gate that may be found most practical; but in the present instance the braces are shown as connected to the upper rail of the gate substantially midway of its ends. These braces E extend outwardly in a direction from their upper to their lower ends and are loosely connected to the extremities of the rod D.

Four springs are used, as shown at F G H I, each spring being independently coiled around the rod D, which springs act to throw the gate upward and backward when the gate is released to open it. The springs F I are located between the posts and the braces E, while the springs G H are located between said braces and the sides of the gate, at the lower corner thereof, as shown in Fig. 2 of the drawings. The arms of the several springs are connected to the gate, gate-posts, and braces, as shown, to give them the necessary resistance to act as springs.

The flaring of the braces E, as shown in Fig. 2, increases the bracing of the gate and renders it more rigid and perfect in balancing and provides a wide pivotal connection between the gate and diagonal or flaring posts on the extension of the rod D, thus defending the gate against sidewise movement when being opened or closed and forming a strong and durable support. This is a special feature of the invention, as the widening of the support of the gate at its lower corner gives increased strength to the gate and renders it less liable to get out of order.

The upper rail of the gate extends beyond the end thereof to form a projecting arm J to engage itself with the spring-latch K upon the post when said gate is in a closed position, the lower rail of the gate also extending beyond the end to form a similar arm L, which engages with a keeper M, thereby securely holding the gate at both top and bottom from lateral displacement when closed.

The spring-latch K is constructed of spring metal and is suitably pivoted to the post C, as shown in Fig. 3 of the drawings, and is provided with a suitable handle, knob, or push-button N for operating the latch when

it is desired to release the gate. The upper end of the latch K has a curved or cam-bearing O, so that when the gate is brought down from its open position to be closed the projecting arm J will strike this bearing O and force out the upper end of the latch. In opening the gate the arm J is released from the latch K by pressing on the knob or button N, when the several springs F G H I will force the gate upward and backward to open the same. These springs are independent, and should one spring break or become out of order there are always a sufficient number left to insure a satisfactory operation of the gate. A further advantage in using a number of independent springs is in the increased strength and power obtained over a single spring of equal length.

Many modifications and changes may be made in the gate and its connections without affecting the principle and essential features of the invention so long as such changes come within ordinary mechanical skill.

Having now fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A farm-gate pivotally connected at its lower corner to a horizontal rod, said rod extending out laterally beyond the opposite

sides of the gate, independent springs upon the extremities of the rod and independent springs upon the rod located between the end springs and the sides of the gate, substantially as and for the purpose set forth.

2. A farm-gate, suitable braces connected thereto, posts flaring outward in a direction from the upper to their lower ends, a pivot-rod extending through the ends of the braces, the gate, and the posts, and coiled springs encircling the rod with their arms secured to the gate, braces and posts, substantially as and for the purpose specified.

3. In a pivoted or swinging gate, suitable flaring braces connected thereto, flaring posts between which the gate is pivoted, a horizontal pivot-rod extending through the gate, posts, and the braces, a plurality of independent coiled springs encircling the rod, and a suitable spring-latch device for holding the gate in a closed position, substantially as and for the purpose described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

MARTIN BRUNER.

Witnesses:

GEO. M. COPENHAVER,  
WM. H. DE LACY.