

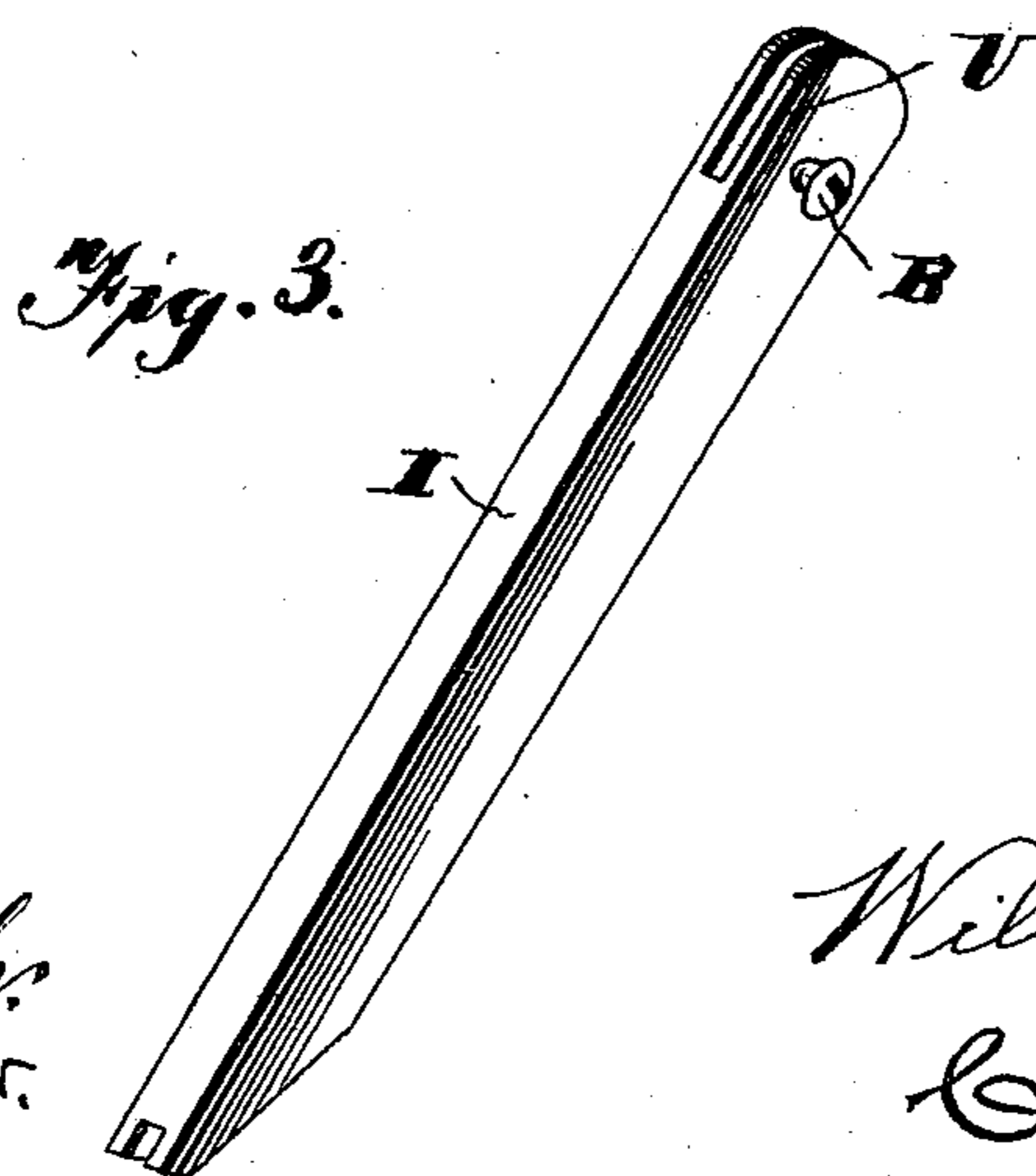
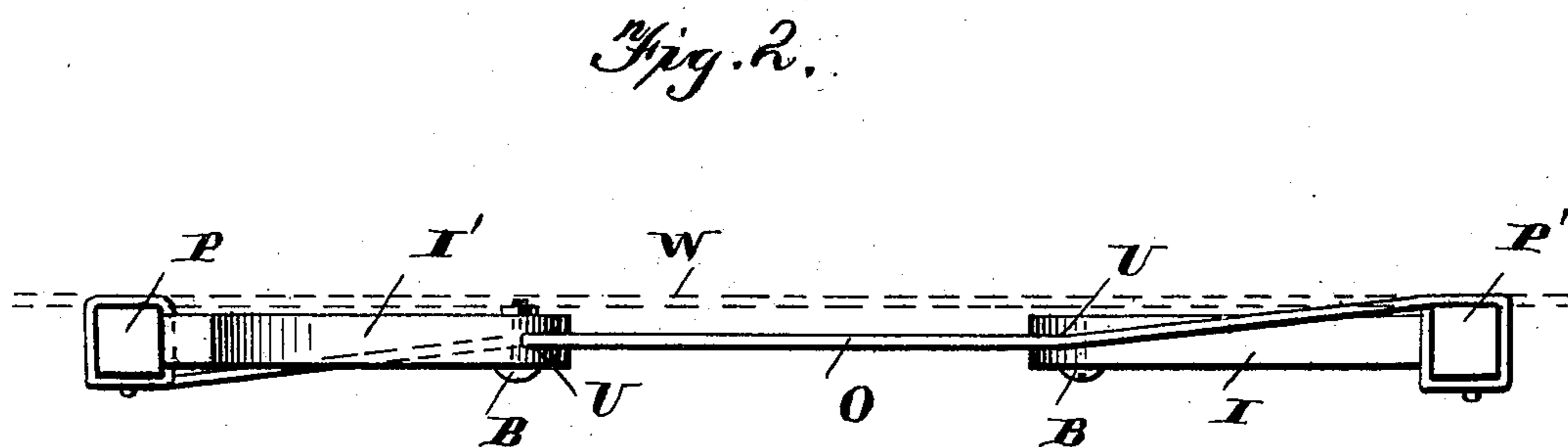
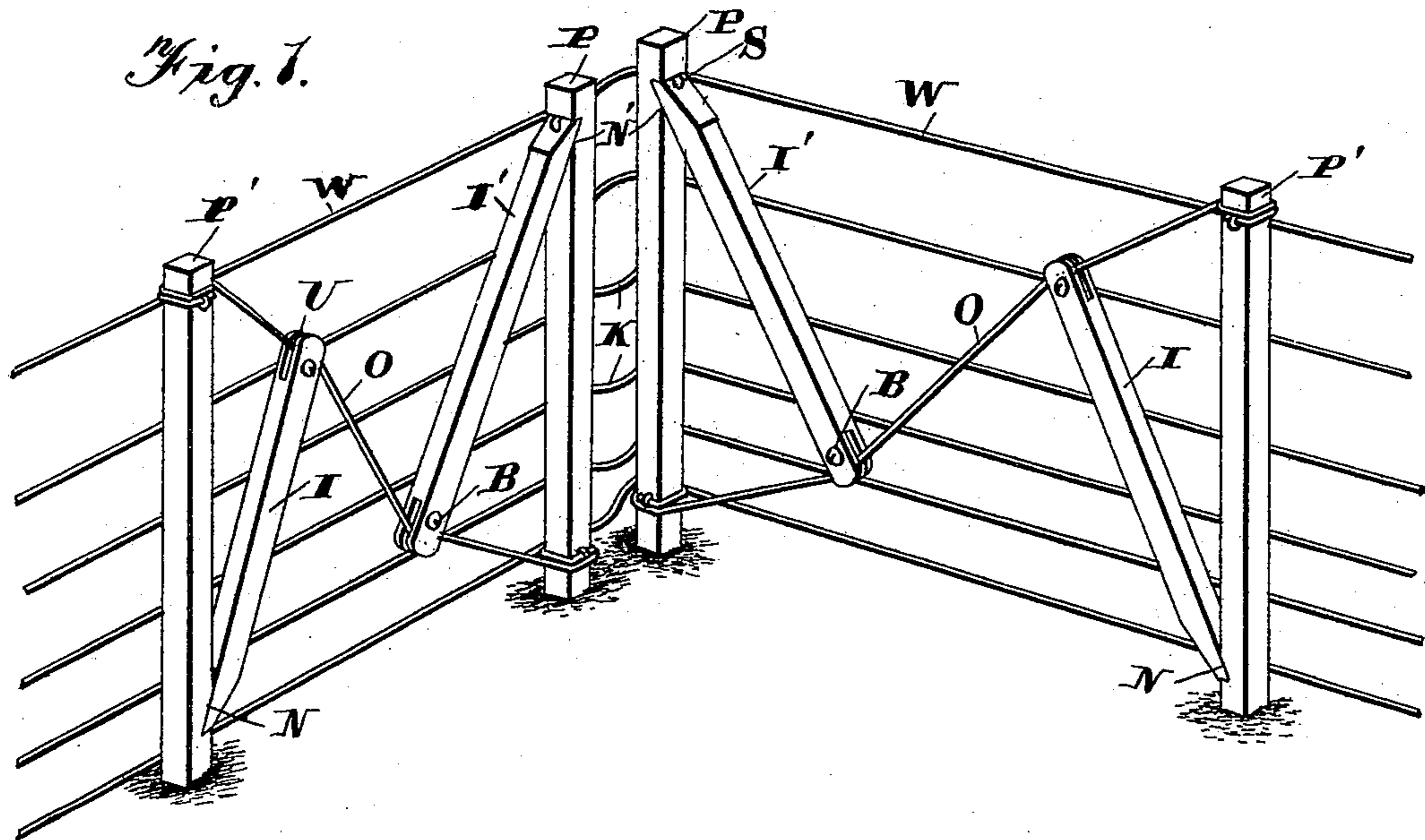
No. 614,420.

Patented Nov. 15, 1898.

W. COOPER, SR.  
WIRE STRETCHER.

(Application filed July 11, 1898.)

(No Model.)



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# UNITED STATES PATENT OFFICE.

WILLIAM COOPER, SR., OF OSGOOD, MISSOURI.

## WIRE-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 614,420, dated November 15, 1898.

Application filed July 11, 1898. Serial No. 685,574. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM COOPER, Sr., a citizen of the United States, and a resident of Osgood, Sullivan county, State of Missouri, have invented certain new and useful Improvements in Wire-Stretchers; and my preferred manner of carrying out the invention is set forth in the following full, clear, and exact description, terminating with claims particularly specifying the novelty.

This invention relates to wire fences, and more especially to the permanent stretchers used therein; and the object of the same is to produce a device which is cheap of construction and positive in use and which is intended to be left on the fence, but yet is capable of adjustment from time to time to take up the slack in the wires thereof.

To this end the invention consists of an oblique wire connecting the bottom of the first with the top of the second post and oblique stretchers attached to the top of the first and the bottom of the second post and adapted when moved and set to deflect said oblique wire from a straight line.

The invention further consists in certain details of construction, all as hereinafter more fully described and claimed and as illustrated in the accompanying drawings, wherein—

Figure 1 is a perspective view of the corner of a fenced field, showing the ends of the two stretches of wire fences tightened by my improved device. Fig. 2 is a plan view of one end of one stretch of fence, showing the fence-wires in dotted lines. Fig. 3 is a perspective detail of one of the braces.

Referring to the said drawings, P are the end posts, which are, as usual, set deep in the ground, and P' the other posts of certain stretches of fencing, which is composed of plain or barbed wires W, connected with said posts in any suitable manner. When two stretches of fencing meet, as at the corner of a field, as illustrated in Fig. 1, the end posts P are preferably connected by a slack or kinked wire K in order to give better results, although at this point an opening might be left, as for a gate or for other purposes, or in some instances a single post might be used as the end post of two stretches of fencing.

Coming now more particularly to the present invention, O is an oblique wire wrapped

around the end post P near the ground and where it will not be likely to unseat said post and stapled thereto on the opposite side thereof from the face to which the fence-wires W are attached, and this wire leads thence obliquely upward to the next post P', around which it is wrapped and to which it is stapled on the same face as that to which the fence-wires W are connected. The object of attaching this oblique wire to the faces specified is to overcome the tendency to twist which is imparted by the tightness of the fence-wires W to these two posts. The outer and endmost post P will obviously have a rotary tendency in its post-hole, because it is the end of a stretch of fencing, and the fence-wires are securely fastened thereto. This is overcome by attaching the oblique wire O to the other side of the post. The next innermost post P' will obviously have a rotary tendency in the same direction if the staples attaching the fence-wires W are driven tightly home. This is overcome by attaching the oblique wire O to the outer face of this post.

I I' are oblique braces, as of wood, preferably reduced at their outer ends and preferably entering notches N N', respectively, near the upper and lower ends of the posts P' and P, and S are staples or similar devices by which these engaging ends of the inclined braces I may be pivotally held within said notches, although these staples might be omitted, if preferred. The inner ends of these braces have upright slots or notches U, as best seen in Fig. 2, and transversely through the braces may pass bolts or screws B, adjacent the inner ends of the slots, for the purposes of preventing the splitting of the braces and, if desired, for drawing the walls of the slots tightly together to clamp the oblique wire O. The length of these braces is such as will permit their use as described below.

In operation when a fence is first set up that will be necessary is to stretch the oblique wire O to a sufficient degree to give proper and equal tension to the wires W beyond the second post P', which will of course incline these posts slightly outward from the post P, then draw the last panel of wires W very tightly, and finally staple them to the end post P. After the fence-wires have become slack under the influence of the weather or

by reason of stock pushing against them one or both of the inclined braces I are inserted as shown in the drawings and preferably stapled into the notches. This brace or these  
 5 braces are then borne at their outer ends toward their respective posts, and such movement deflects the oblique wire O, as indicated in Fig. 1, the bolts B, if used, preventing the splitting of the braces and serving later to  
 10 tighten the walls of the slots U astride the oblique wire O, so as to prevent a retrograde movement of the braces I. By reason of the fact that the stretching-wire O stands at one side of the plane of the fence-wires this action  
 15 of the stiff braces I will be permitted without interfering with the fence-wires. The latter are then again tightened between the posts P and P' and the fence is complete.

All parts are of the desired sizes, shapes, materials, and proportions, save only that the  
 20 braces should be of proper length to deflect the stretching-wire O slightly from a straight line between the lower portion of the outer post and the upper end of the next post, and  
 25 considerable change in the details of construction may be made without departing from the principle of my invention.

What is claimed as new is—

1. In a wire-fence stretcher, the combination with the posts, and the fence-wires stapled to one side thereof; of an oblique stretching-wire leading from the lower end of the  
 30 endmost post and connected with the face thereof opposite the fence-wires to the upper end of the next post and connected with that face thereof to which the fence-wires are stapled, as and for the purpose set forth.

2. In a wire-fence stretcher, the combination with the posts, and the fence-wires stapled  
 40 to one side thereof; of an oblique stretching-wire leading from the lower end of the endmost post and connected with the face thereof opposite the fence-wires to the upper end of the next post and connected with that face  
 45 thereof to which the fence-wires are stapled, and means substantially as described for deflecting said stretching-wire from a straight line between its ends, as and for the purpose set forth.

3. In a wire-fence stretcher, the combination with the posts, and the fence-wires attached thereto; of an oblique stretching-wire  
 50 attached to the lower end of the outermost post and the upper end of the next post, stiff braces respectively pivoted to the upper end of the outermost post and the lower end of the next post and having notches in their inner ends standing astride said stretching-wire, the length of said braces being such  
 55 that they will deflect the stretching-wire from a straight line between its ends, and means for holding said braces in position, as and for the purpose set forth.

4. In a wire-fence stretcher, the combina-

tion with the posts of which the endmost has  
 65 a notch near its upper end adjacent the second post and the latter has a notch near its lower end adjacent the end post, and the fence-wires attached to one side of said posts; of an oblique stretching-wire connecting the  
 70 lower end of the end post with the upper end of the next, and stiff braces reduced at their outer ends and respectively entering said notches, their inner ends having slots engaging said wire, and their length being such  
 75 that they are adapted to deflect the stretching-wire from a straight line between its ends, as and for the purpose set forth.

5. In a wire-fence stretcher, the combination with the posts of which the endmost has  
 80 a notch near its upper end adjacent the second post and the latter has a notch near its lower end adjacent the end post, and the fence-wires attached to one side of said posts; of an oblique stretching-wire connecting the  
 85 lower end of the end post with the upper end of the next, stiff braces whose outer ends rest in said notches, staples in the posts pivoting said ends therein, and means for connecting the inner ends of said braces with  
 90 said oblique wire, their length being such that they are adapted to deflect this wire from a straight line between its extremities, as and for the purpose set forth.

6. In a wire-fence stretcher, the combination with the posts, and the fence-wires secured thereto; of an oblique stretching-wire  
 95 leading from the lower end of the end post to the upper end of the next, stiff braces whose outer ends are pivoted respectively to the upper end of the end post and the lower end of the next, and whose inner ends are provided with upright notches adapted to stand astride said oblique wire, and transverse bolts through the bodies of these braces  
 105 at the inner ends of their notches, as and for the purpose set forth.

7. In a fence-wire stretcher, the combination with the posts, and the fence-wires attached thereto; of a stretching-wire attached  
 110 to the upper end of one post and to a fixed support near the ground, a stiff brace of which one end rests against a fixed support and the other end has a notch standing astride said stretching-wire, its length being such that it  
 115 will deflect the wire from a straight line, and a bolt passing transversely through this brace and adapted to draw the walls of the notch tightly against the opposite sides of the stretching-wire, as and for the purpose set  
 120 forth.

In testimony whereof I have hereunto subscribed my signature on this the 28th day of June, A. D. 1898.

WILLIAM COOPER, SR.

Witnesses:

HUGH M. COOPER,  
 TERAH JONES.