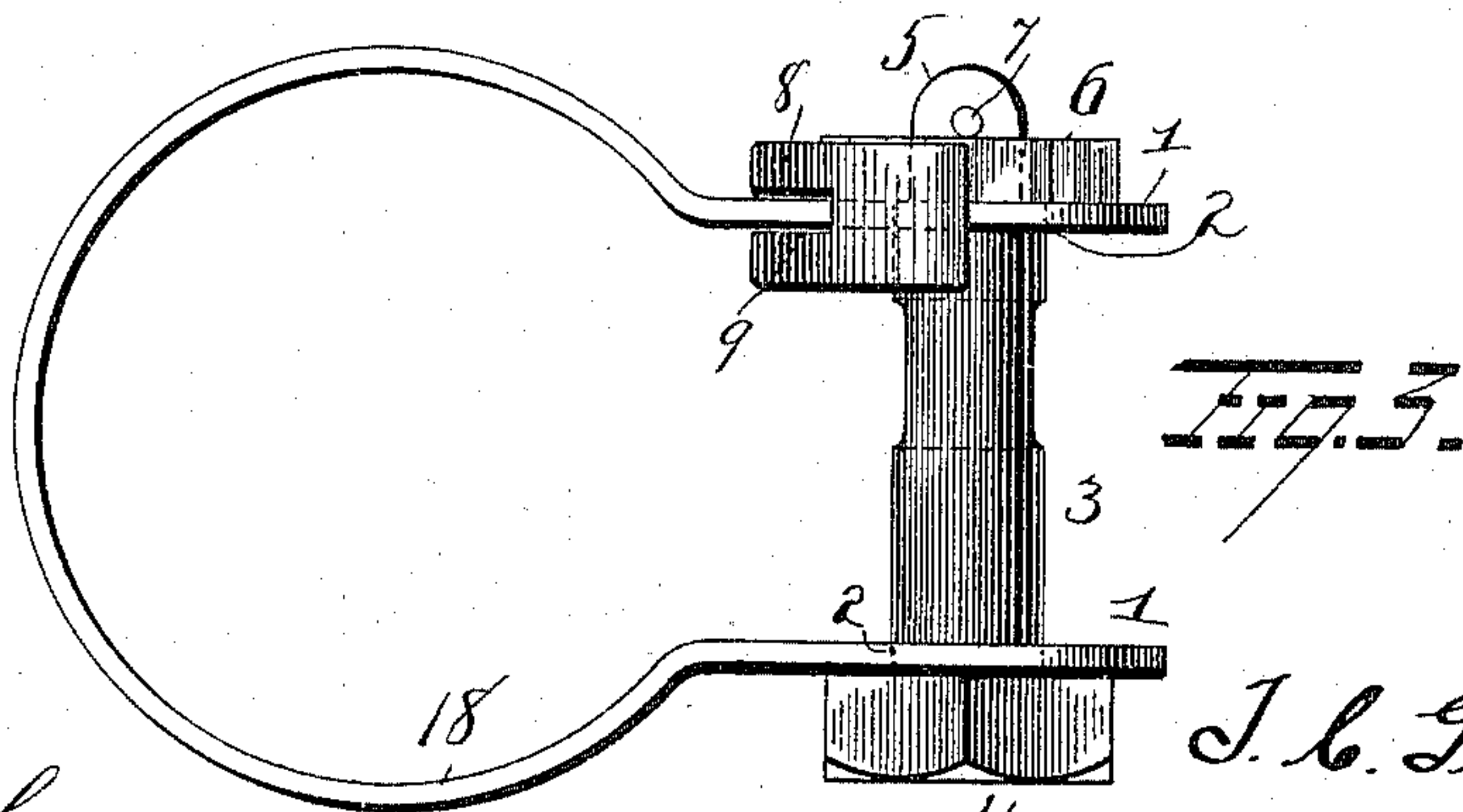
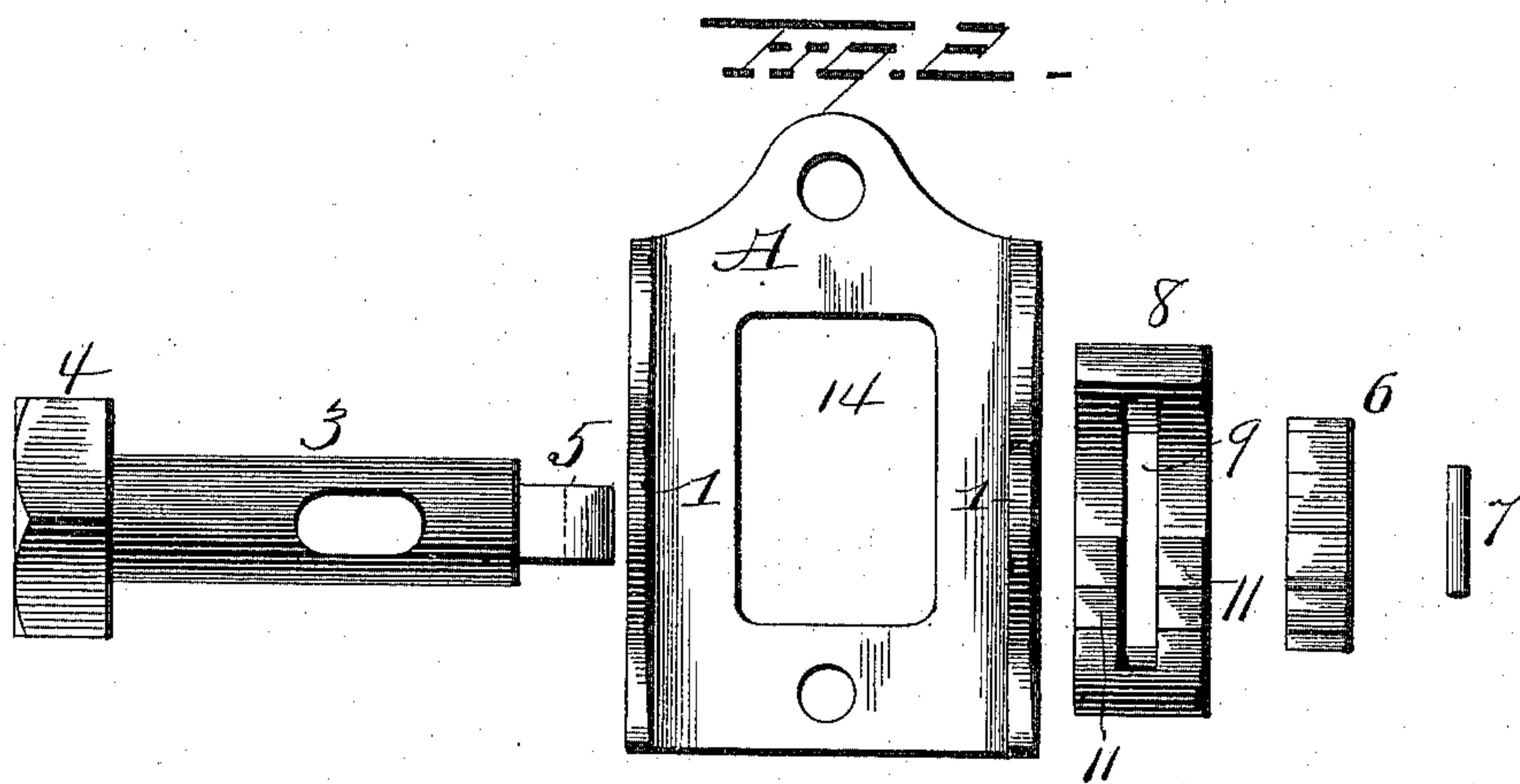
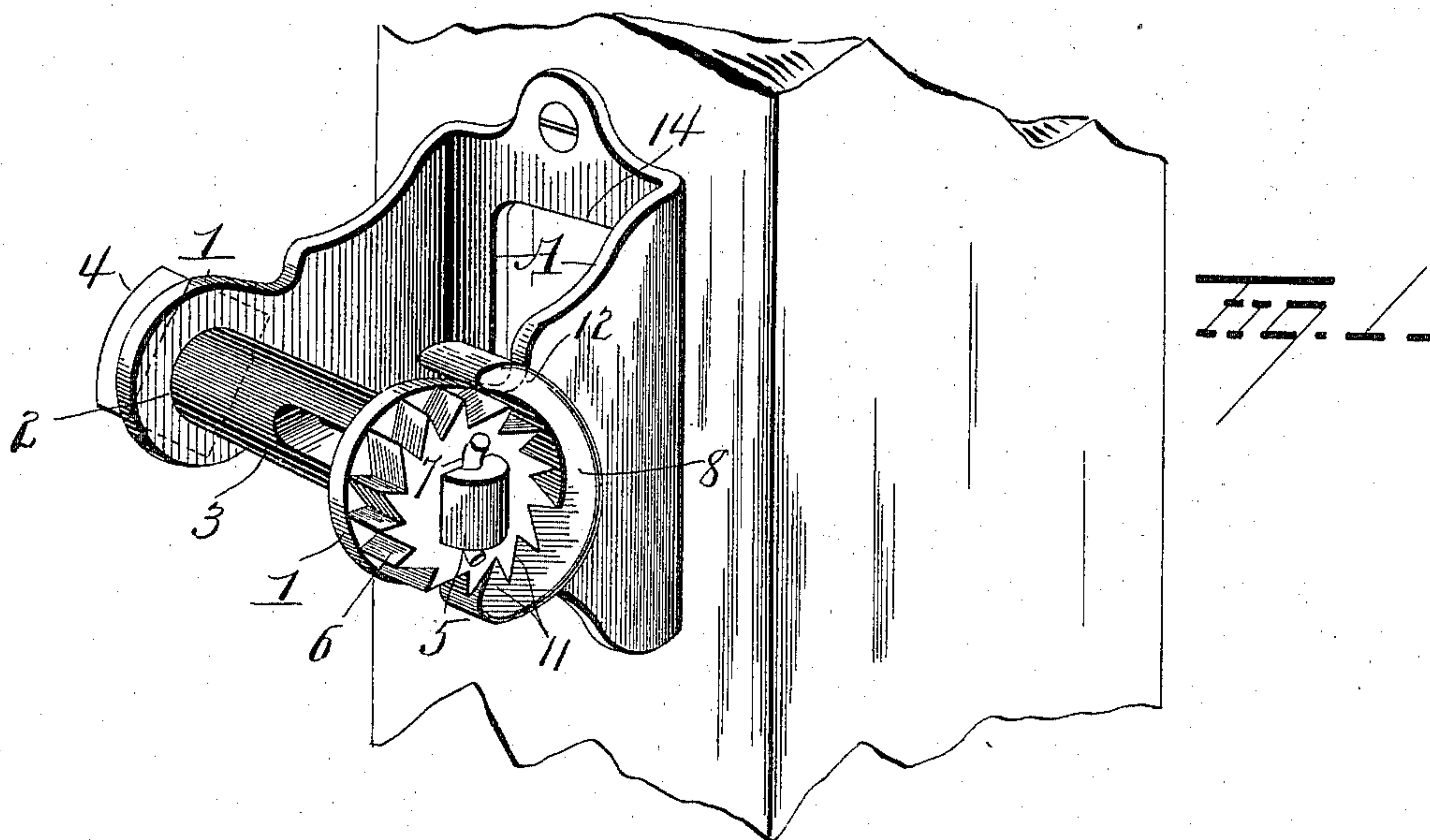


(No Model.)

T. C. GREENE.
WIRE STRETCHER.

No. 580,393.

Patented Apr. 13, 1897.



Witnesses
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UNITED STATES PATENT OFFICE.

THOMAS C. GREENE, OF TREMONT, ILLINOIS.

WIRE-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 580,393, dated April 13, 1897.

Application filed June 30, 1896. Serial No. 597,628. (No model.)

To all whom it may concern:

Be it known that I, THOMAS C. GREENE, of Tremont, in the county of Tazewell and State of Illinois, have invented certain new and
5 useful Improvements in Wire-Stretchers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

10 My invention relates to an improvement in wire-stretchers, the object being to provide an inexpensive but effectual device for stretching and securing the wire in wire fences; and it consists in a drum or shaft
15 supported in suitable bearings and adapted to receive and have wound thereon the wire to be stretched and means in connection therewith for locking the drum or shaft against retrograde movement.

20 It further consists in certain novel features of construction and combinations of parts which will be hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is
25 a view of one form of wire-stretcher in position on a wooden post. Fig. 2 shows the parts dismembered, and Fig. 3 is a view of a modified form in which provision is made for securing the device to an iron post.

30 A represents a plate or casting of metal, the ends 1 1 of which extend out at right angles thereto, so that the whole constitutes a frame for the support of the winding drum or shaft. In the ends 1 1 bearing-holes 2 2
35 are formed, and the numeral 3 indicates the winding drum or shaft, which extends through and is adapted to turn in these bearing-holes 2 2. This drum or shaft has an angular head 4, formed at one end as a convenient means
40 whereon to receive a wrench or instrument for turning the drum or shaft in stretching and winding the wire. The other end 5 is also preferably angular, and on it the ratchet-toothed wheel 6 is removably secured by
45 means of the pin 7. The object of making this wheel 6 removable is to provide for reversing the parts, as this provision renders it a very simple matter to do so when the occasion for such reversal arises, as it not in-
50 frequently does in cramped positions and corners. It may be added right in this con-

nection that the location of the ratchet-toothed wheel is not necessarily confined to this end, although this arrangement is preferable. It might, however, be adjacent to
55 the head 4 or at some other convenient point.

Coöperating with the ratchet-toothed wheel 6 is a locking-dog 8. A simple construction of dog is that shown, in which a curved casting is employed, with a slot 9 therein to re-
60 ceive and by means of which it straddles one of the ends 1, the one adjacent to the wheel 6. This dog is provided with teeth 11 11 in position to drop into engagement with the teeth on the wheel, whereby to automatically
65 lock it against reverse movement. In the most approved form and arrangement of this dog it rests at its upper end upon an incline 12 on the end piece 1, and in consequence of its curved formation and the preponder-
70 ance of the weight of the lower toothed end the latter normally rests against the teeth of the wheel, from which the dog is easily pushed aside by the teeth in turning forward as the wire is being stretched and wound upon it
75 and is in readiness to lock the wheel and drum immediately upon a reversal of the movement thereof, which would take place as soon as the power applied in stretching and winding the wire was removed. In this
80 form of construction the stretcher is placed against the post on the side opposite from the direction in which the wires come, a hole is made through the post, and the wire is passed through that hole in the post, thence through
85 the hole 14, formed for its entrance in the back plate or frame of the stretcher, after which the end is passed into a hole in the drum or shaft. The drum or shaft is then turned, and the wire is drawn, stretched, and
90 wound upon the drum or shaft.

From the construction it will be observed that the device may not only have its parts reversed, but also the device itself may be
95 turned and used in different positions, although it may require some slight manipulation of the dog when the device assumes other positions to cause it to lock the drum or shaft against retrograde movement.

In the modified form of construction shown 100 provision is made for attachment to a metal post, more especially a round one. The frame

in this case is in the form of a band 18, which is adapted to encircle the post. Otherwise this construction is substantially the same as the other.

5 It is evident that other slight changes might be made in the form and arrangement of the several parts described without departing from the spirit and scope of my invention, and hence I do not wish to limit myself to the
10 precise forms shown; but,

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

1. A wire-stretcher comprising a frame hav-
15 ing ends 1, 1, and bearings in said ends, a drum or shaft adapted to turn in the bearings, said drum carrying teeth, and a dog straddling one of the ends and having a tooth in position to engage the teeth and lock the
20 drum or shaft against reverse movement, substantially as set forth.

2. The combination with a frame having ends 1, 1, a drum or shaft supported and capable of turning in the ends, and a ratchet-
25 toothed wheel on the drum or shaft, of a dog straddling one of the ends, said dog having a curved inner face and a tooth thereon in

position to engage the teeth of the wheel, substantially as set forth.

3. The combination with a frame having 30 ends 1, 1, said ends having inclines formed on an edge thereof, of a drum or shaft revolvably supported in the ends, and a dog normally resting on the incline in position to descend by gravity thereon in position to engage the 35 teeth of the wheel, substantially as set forth.

4. The combination with a frame, and a drum revolvably supported therein and having removable teeth thereon, of a dog straddling a portion of the frame, said dog pro- 40 vided with a tooth to engage the teeth on the drum, and having a curved inner surface around the drum, whereby to bind the more rigidly and tightly upon the surface of the drum as the tensile strain of the wire is in- 45 creased, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

THOMAS C. GREENE.

Witnesses:

G. F. DOWNING,
S. W. FOSTER.