

(No Model.)

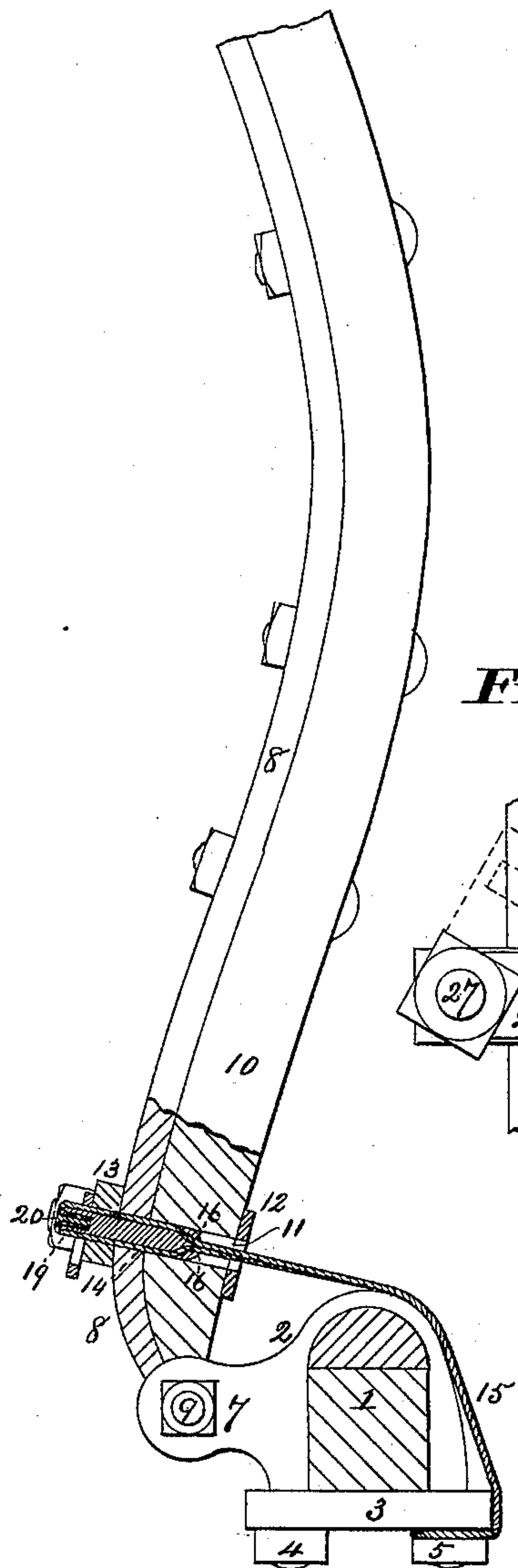
H. B. BUTTS.

THILL HOLDER.

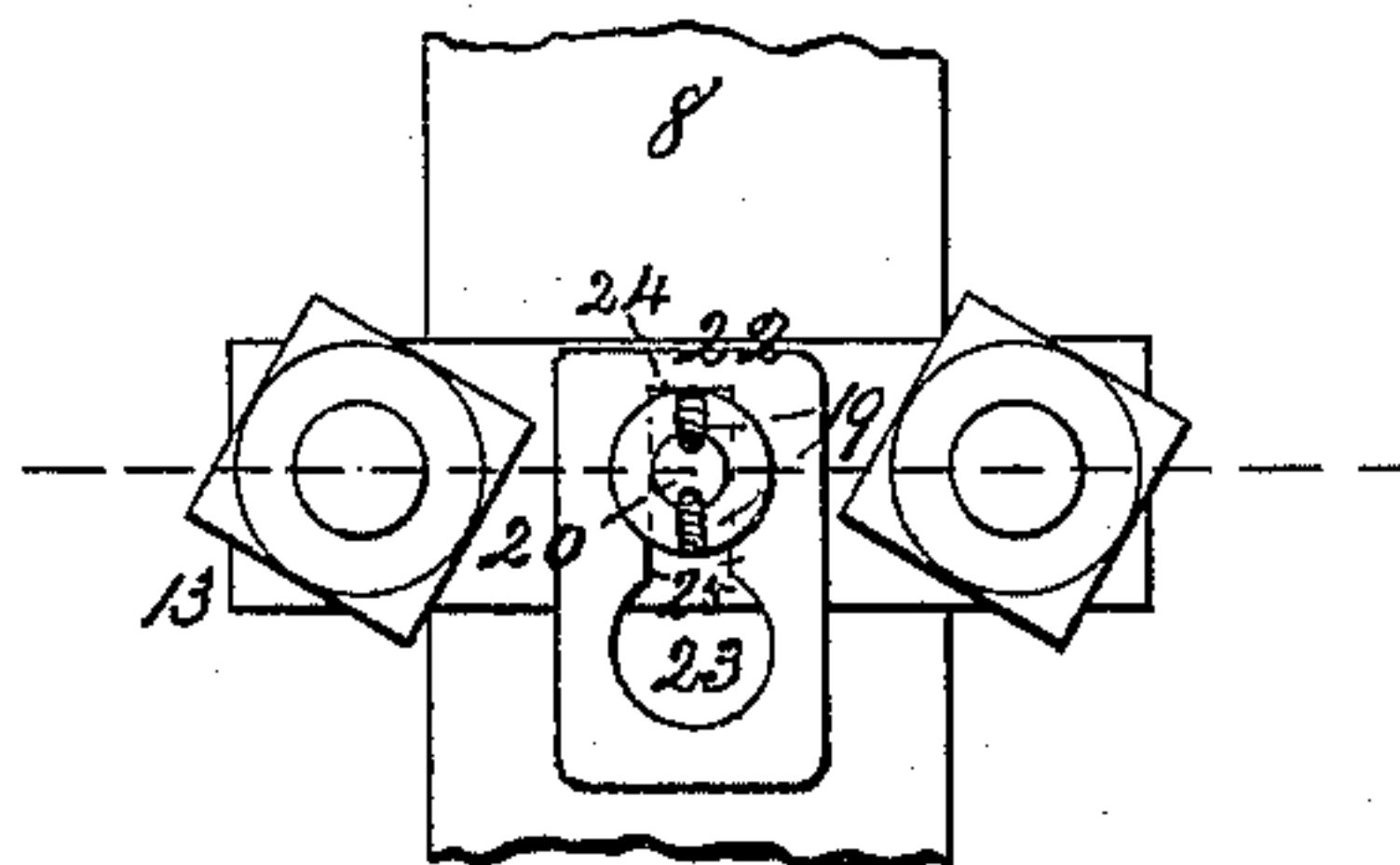
No. 390,566.

Patented Oct. 2, 1888.

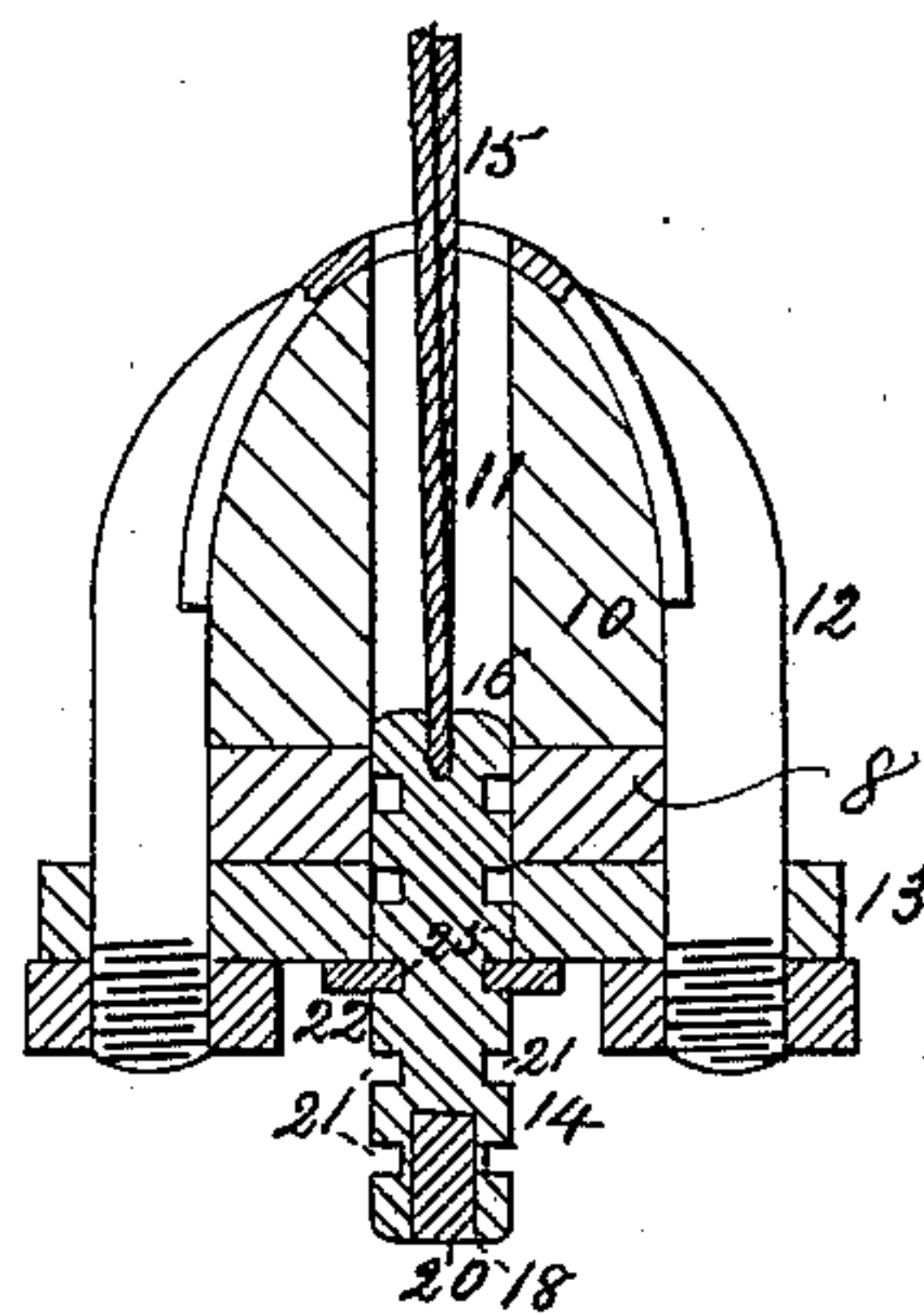
*Fig. I.*



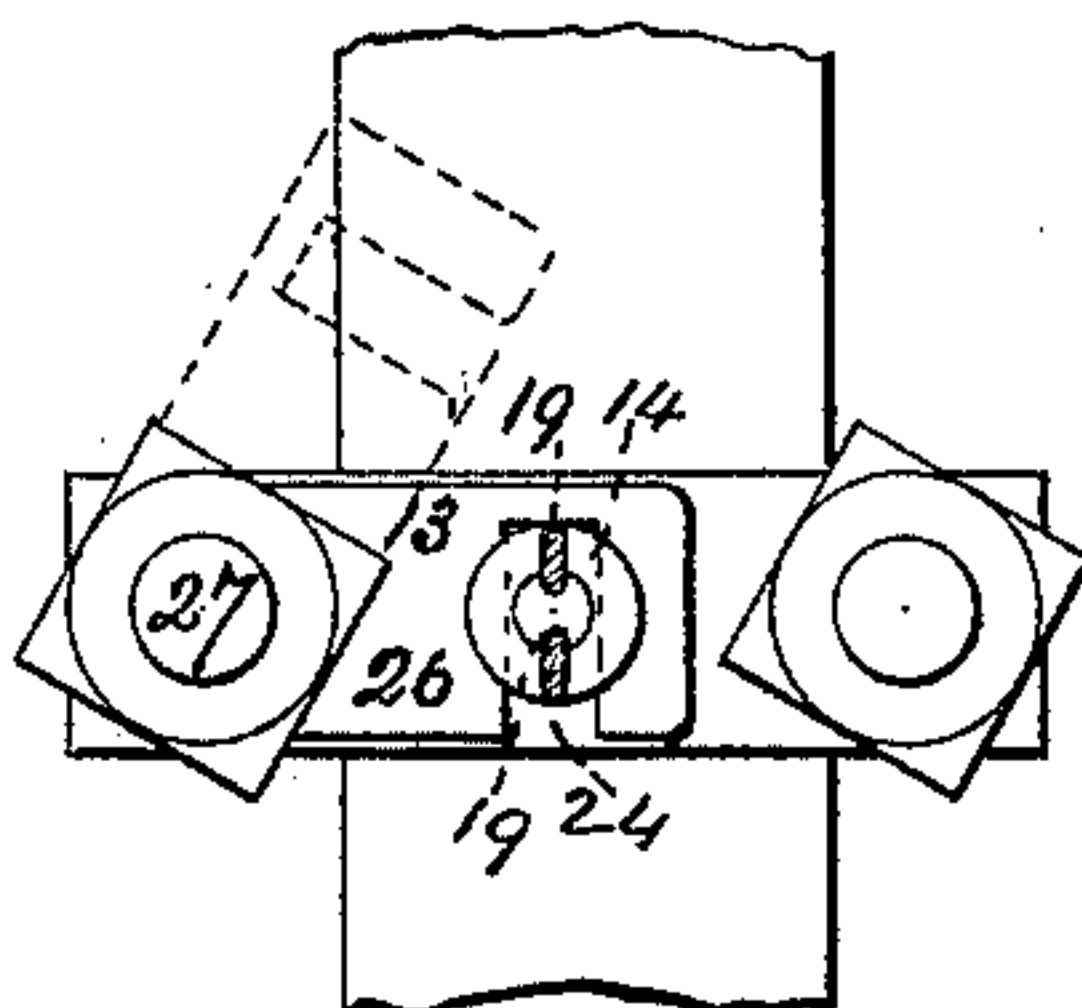
*Fig. II.*



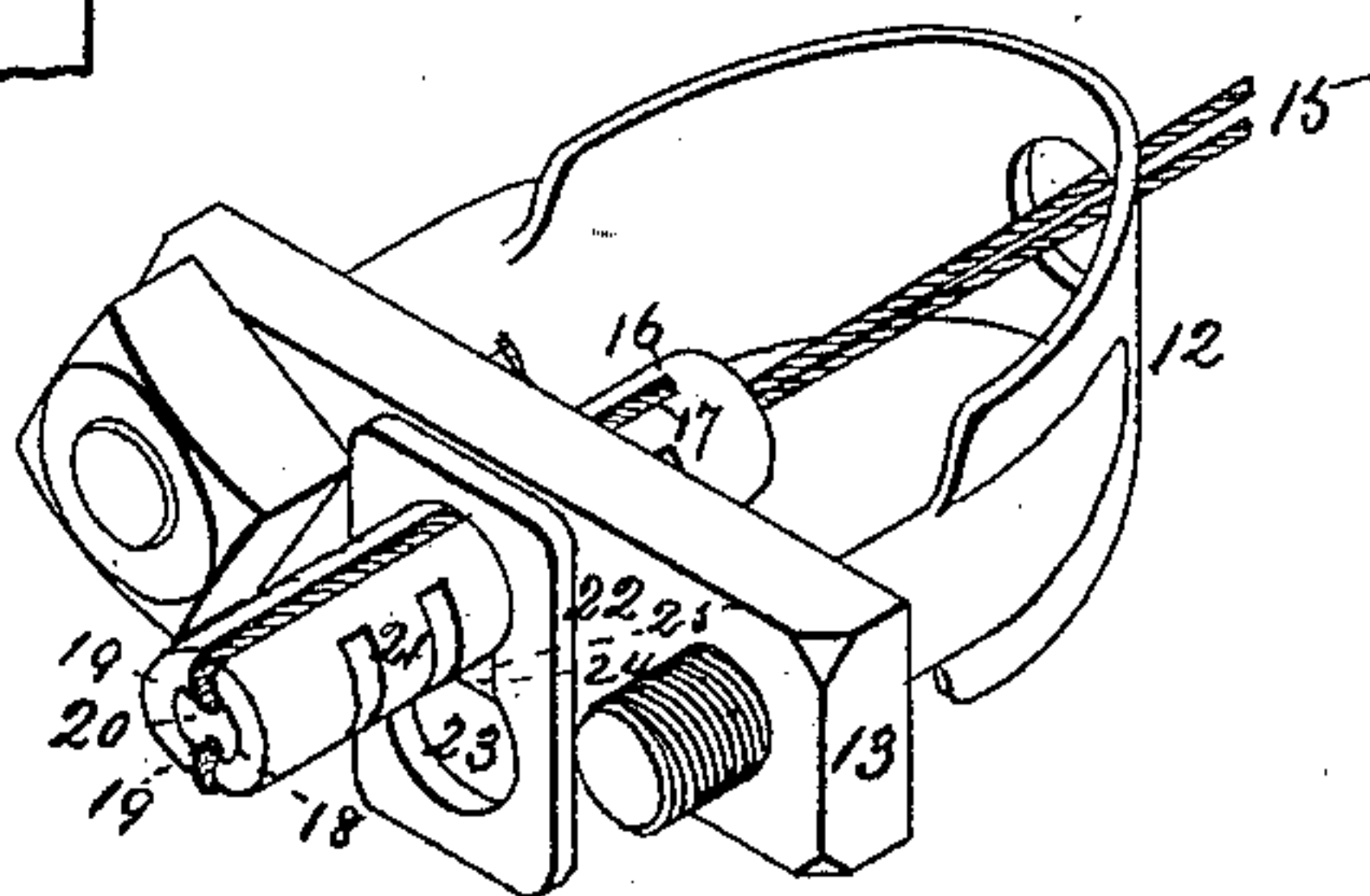
*Fig. III.*



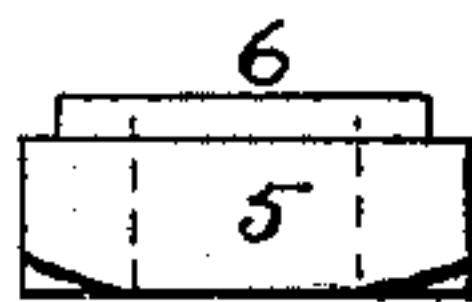
*Fig. VII.*



*Fig. IV.*

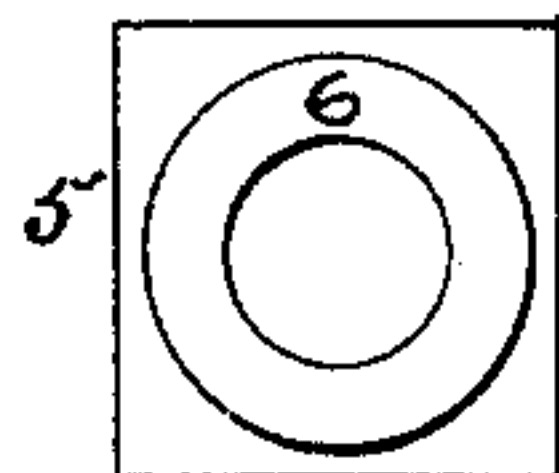


*Fig. V.*



*Attest:*  
*Emma Arthur*  
*Edward Steer*

*Fig. VI.*



*Inventor:*  
*Henry B. Butts*  
*By Smith & Bro.*  
*Attys*



# UNITED STATES PATENT OFFICE.

HENRY B. BUTTS, OF ST. LOUIS, MISSOURI, ASSIGNOR TO LUCINDA BUTTS,  
OF SAME PLACE.

## THILL-HOLDER.

SPECIFICATION forming part of Letters Patent No. 390,566, dated October 2, 1888.

Application filed February 27, 1888. Serial No. 265,385. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY B. BUTTS, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Thill-Holders, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

This is a removable device by which thills may be held in an upright position.

Figure I shows the part of the thill and axle to which the device is applied in vertical section, part of the device being shown also in section and part in side view. Fig. II is a front view showing the device in use. Fig. III is a section at III III, Fig. II. Fig. IV is a perspective view of the clip and part of the device. Fig. V is a side view of the nut upon which the loop is engaged, and Fig. VI is a top view of the same. Fig. VII is a front view of a modification.

1 is the fore axle of a vehicle.

2 is one of the thill-clips.

3 is the clip plate.

4 and 5 are the nuts screwing on the ends of the clip and bearing against the under side of the plate. The nut 5 has a circular projection, 6, on the upper part, which bears against the plate 3. The projection is smaller in diameter than the nut, so that there is a circular recess around the projection to receive the loop of the device.

7 is one of two lugs upon the clip 2, to which the thill-strap 8 is connected by a bolt, 9, in the usual or any suitable way.

10 is one of the thills. The ordinary bolt, nearest the end of the thill, may be removed, leaving a hole, 11, passing straight through the thill 10 and strap 8, or a special hole, 11, may be made through them. In order to hold the parts together at this point and to increase the strength of the thill, I prefer to place a clip, 12, around the thill and strap 8, 13 being the clip-plate, said clip and plate being bored through in line with the hole 11, which hole thus extends through them.

14 is a pin fitting the hole 11 easily and having attached to it a loop, 15. This loop may very properly be made of wire cord. As a means of attachment to the pin, I drill diago-

nal holes in the pin at 16, through which the cord passes. The holes lead from the center of the pin at its rear end outwardly and forwardly to grooves 17, made in the sides of the pin. The grooves have sufficient size to admit the whole of the cord, so that it does not project beyond the circumference of the pin. The forward end of the pin has an axial recess or socket, 18, into which the ends 19 of the loop are inserted and fastened by a plug, 20, which is driven in between them.

I do not confine myself to the described means of locking the loop to the pin, for it is obvious that it may be done in a number of ways without the exercise of any special inventive faculty. The loop is of such length that when the pin is in the hole 11 and the thills raised, as seen in Fig. I, the loop will extend behind the axle and engage on the nut 5, as shown, and if the pin is locked in the hole 11 the thills will thus be held up in the position shown.

As a means of locking the pin, I have formed in its sides notches 21 to receive the edges of a lock-plate, 22. The lock-plate has a hole, 23, made through it of equal diameter with the pin, so that the pin will easily pass through it when the plate is applied to the pin. On one side of the hole 23 is a slot, 24, whose edges 25 enter the transverse notches 21 made in the sides, of the width of the slot, and is equal to the distance through the pin from a notch, 21, to the notch on the opposite side, so that when the locking-plate is in the position shown in Figs. I, II, III, and IV, and bearing against the clip-plate 13, the pin cannot be drawn backward in the hole 11, and consequently the thills are sustained in their upright position.

As a modification of the lock-plate 22, I show in Fig. VII a latch, 26, pivoted to the plate 13 or 27, and having a slot, 24, whose edges engage in the notches 26 of the pin to hold it in substantially the same manner as the plate 22.

When it is desired to lock the thills in their upper position, they are raised, and the loop having been engaged on the nut 5, the pin 14 passes through the hole 11 from the rear. Then the pin is engaged by the lock-plate.

To lower the thills, the lock-plate is disengaged from the pin 14, and the latter will be



drawn from the thills as the latter are lowered down. The loop may now be disengaged from the nut 5, and the device is free to be put in any suitable place.

5 The device may obviously be applied to the holding up of a tongue, where it is arranged to couple to the same clips, the tongue having at the rear end bars occupying the same place as the rear ends of the thills.

10 Any projection on the axle may be made to engage the loops in place of the nut 5.

I claim—

1. The combination, in a thill-holder, of a pin adapted to pass through a hole in the thill, a loop attached to the pin and adapted to en-  
15 gage a projection upon the axle, and a device to lock the pin in the thill, substantially as set forth.

2. The combination of a pin having notches  
20 in its sides, the thill provided with a hole, 11, adapted to receive the pin, a lock-plate adapted to engage in the notches of the pin and bear against the thill, and a loop attached to the

pin adapted to engage on a projection of the axle, substantially as and for the purpose set  
25 forth.

3. The combination of the thill and a clip on the thill, both traversed by a hole, 11, a pin fitting said hole and having notches in its sides, a locking-plate adapted to embrace the pin  
30 and engage in said notches, and a loop attached to the pin and adapted to engage on a projection of the axle.

4. The combination of the thill having on it a clip with a hole, 11, traversing both thill and  
35 clip, a pin fitting the hole 11 and having side notches, a locking-plate engaging the side notches and bearing against the clip-plate, a clip-nut, 5, with a circular recess and a loop fixed to the pin and adapted to engage in the  
40 recess of the nut 5, substantially as set forth.

HENRY B. BUTTS.

Witnesses:

SAML. KNIGHT,

EDWD. S. KNIGHT.