

(No Model.)

F. RHIND.
HOLDER FOR BICYCLE LAMPS.

No. 555,183.

Patented Feb. 25, 1896.

Fig. 1.

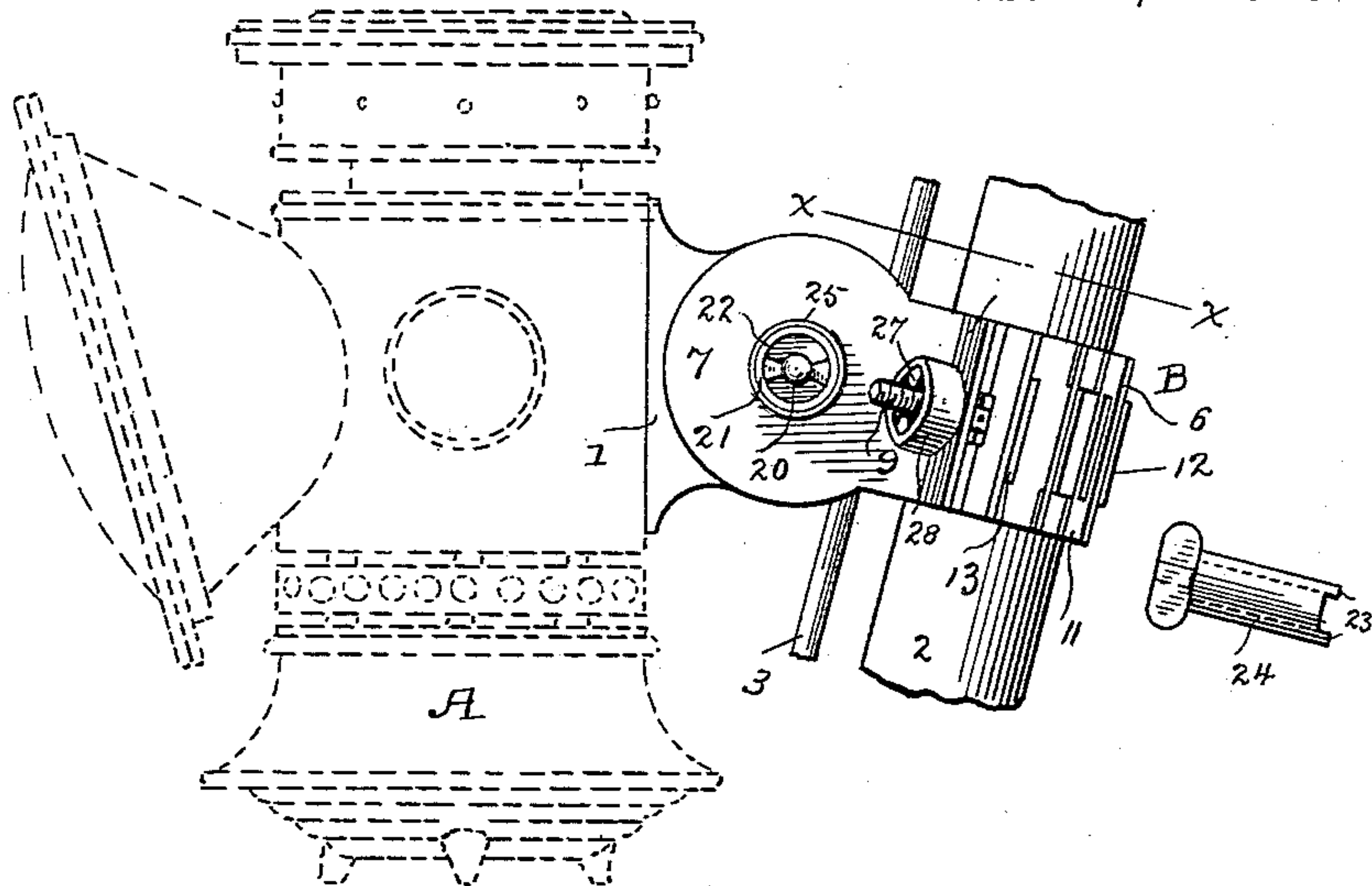


Fig. 2.

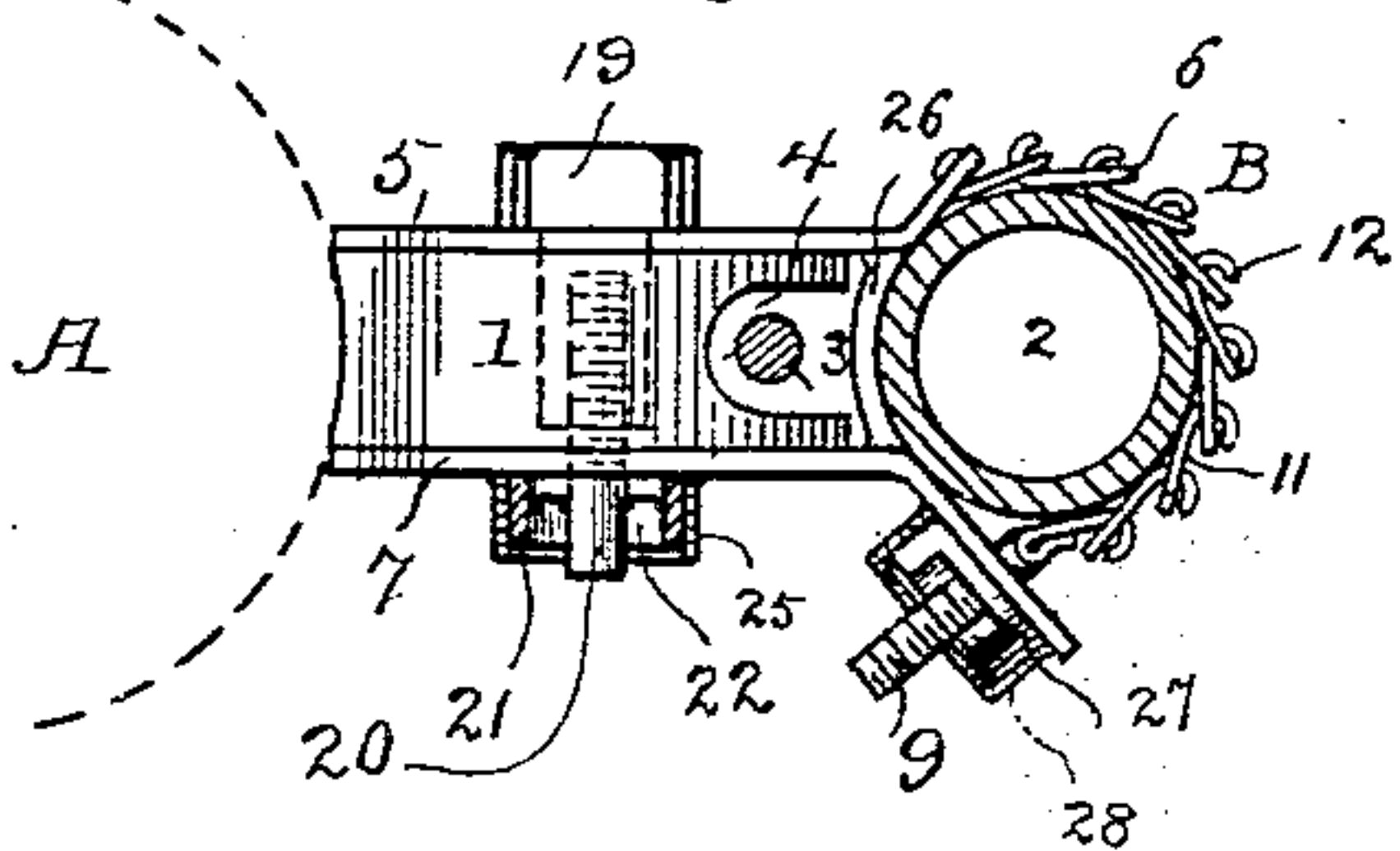


Fig. 3.

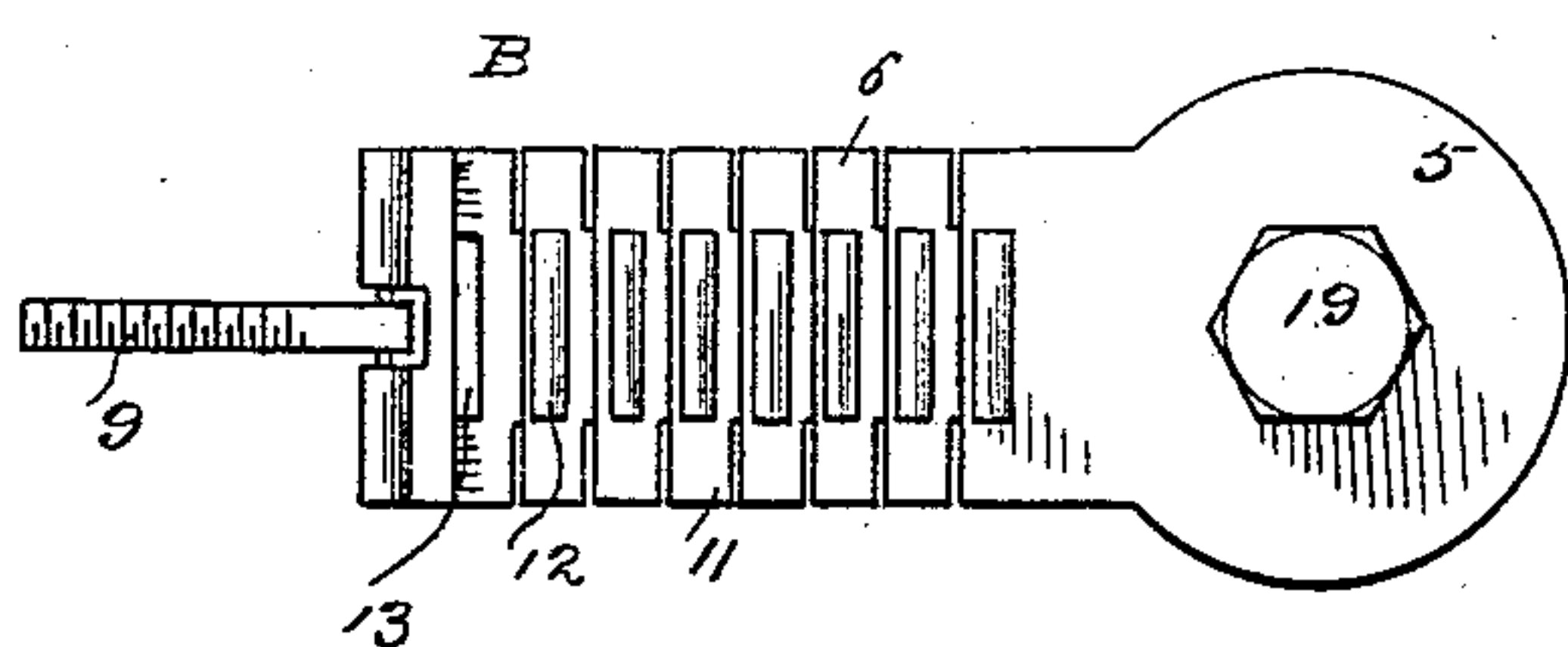


Fig. 4.

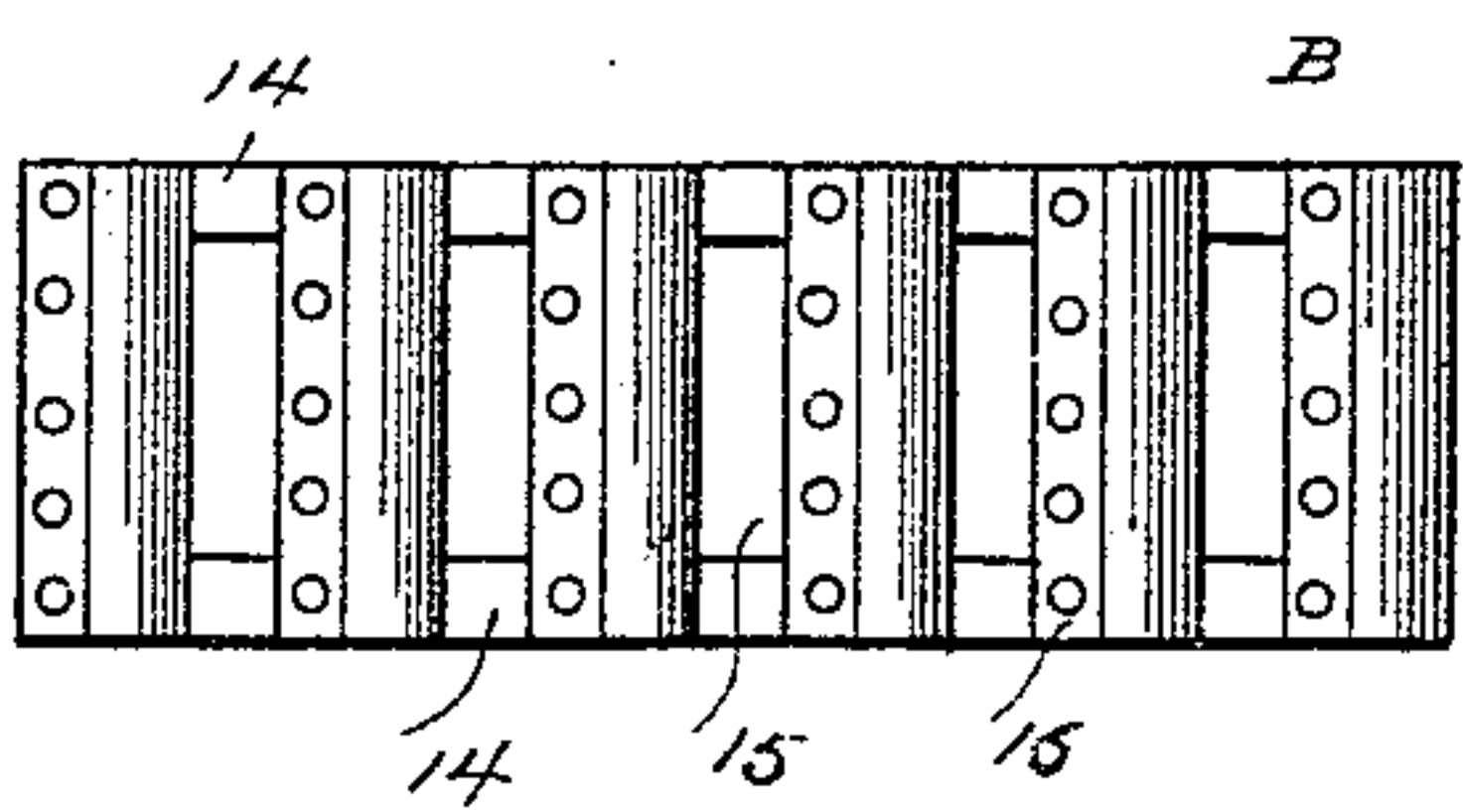


Fig. 5.

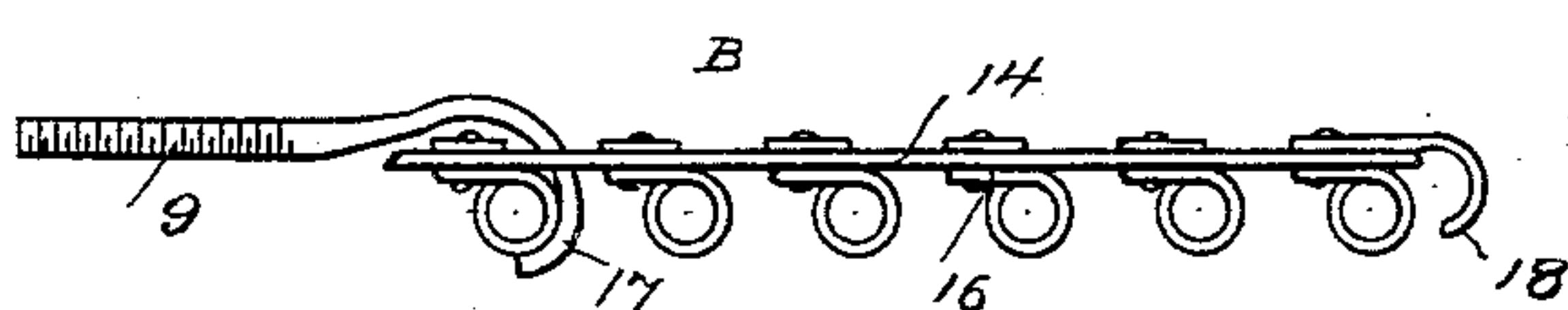
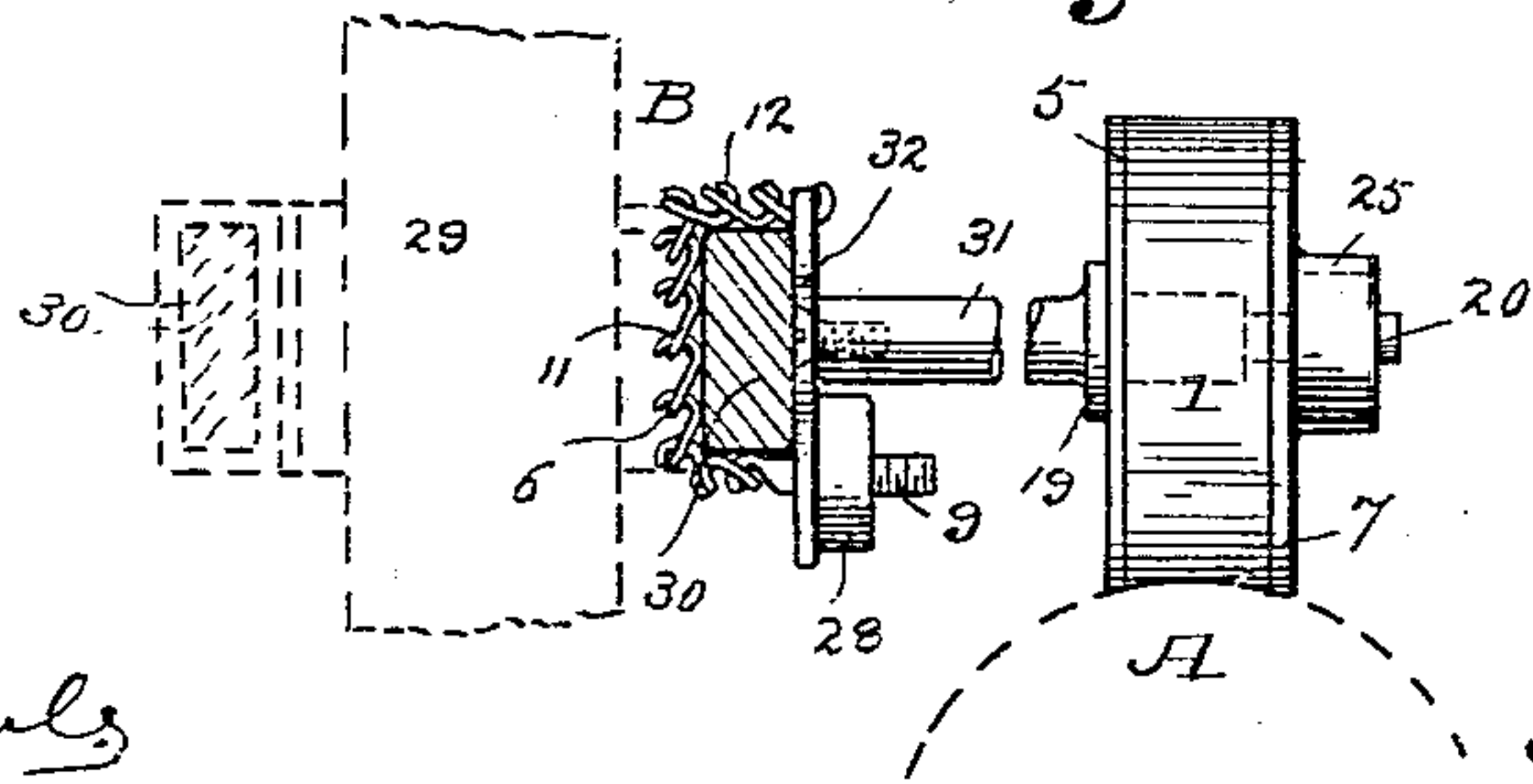


Fig. 6.



WITNESSES

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FRANK RHIND, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR TO THE
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HOLDER FOR BICYCLE-LAMPS.

SPECIFICATION forming part of Letters Patent No. 555,183, dated February 25, 1896.

Application filed September 10, 1895. Serial No. 562,036. (No model.)

To all whom it may concern:

Be it known that I, FRANK RHIND, a citizen of the United States, residing at Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Holders for Bicycle-Lamps; 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.

My invention has for its object to provide an adjustable holder for attaching lamps to bicycles which will dispense with the use of spring connections of any form and with the use of lamp-brackets, which will not interfere with the operation of the brake-rod, will permit variation within reasonable limits in the size of the part to which the lamp is attached, and which will permit convenient adjustment of the lamp in the vertical plane without removal from the bicycle. With these ends in view I have devised the novel adjustable holder of which the following description, in connection with the accompanying drawings, is a specification, letters and numbers being used to designate the several parts.

Figure 1 is a side elevation illustrating the use of my novel holder in attaching a lamp to the head or the handle-bar rod of a bicycle, my novel holder appearing in full lines and the bicycle-lamp in dotted lines; Fig. 2, a section on the line $x-x$ in Fig. 1; Fig. 3, a view of one form of clamp in the extended position; Fig. 4, a side elevation, and Fig. 5 an edge view, illustrating another form of clamp; and Fig. 6 is a plan view illustrating a form of my novel holder which is used in attaching a lamp to the fork of a bicycle.

A denotes a bicycle-lamp, which appears only in dotted lines, and B my novel holder.

1 denotes a block permanently fixed to the back of the lamp. The shape of this block is wholly unimportant so far as the principle of my invention is concerned. It is, however, preferably made of sheet metal and hollow on account of lightness.

2 denotes either the head or the handle-bar rod of a bicycle, and 3 the brake-rod, a recess 4 being provided in block 1 of ample size to permit movement of the brake-rod without contact with the block. The clamp consists

essentially of side plates 5 and 7 and a flexible strap 6, which is attached to plate 5 by means of a hook or in any suitable manner and carries at its other end a threaded rod 9, which is adapted to engage plate 7, as will be more fully explained.

In Figs. 1, 2, and 3 I have shown the flexible strap as consisting of a series of metal links 11, each of which is provided with a hook 12 and an opening 13 of suitable size and shape to receive the hook of the next link. These links are readily attachable or removable and permit the adjustment of the strap to any size of head or handle-bar rod without necessitating the use of tools or the services of a skilled mechanic.

In Figs. 4 and 5 I have illustrated a form of flexible strap consisting of a strip 14 of leather, which is provided with openings 15 and has riveted thereto metallic strengthening-plates 16, which are adapted to be engaged by a hook 17. This hook may be passed through either of the openings 15 and will bear upon the strengthening-plate placed at that opening. The other end of hook 17 consists of a bolt 9, as in Figs. 1, 2, and 3, said bolt being adapted to be locked in position the same as in the other form. When this form of flexible strap is used, the strips will be made of ample length for any possible use and will be provided at one end with a hook 18, adapted to engage side plate 5. After the other end has been placed in engagement with hook 17 the superfluous end of the strap may be cut off.

Side plates, 5 and 7, are pivotally secured on opposite sides of block 1 and are clamped against the block, so as to hold the lamp at the required adjustment in the vertical plane by means of any simple locking device which may or may not be operated by a key, and which will permit the block to be oscillated when the pressure is relieved. In the present instance I have shown a nut 19, which extends within the block passing through one of the side plates and is internally threaded to receive a threaded rod 20 passing through the other side plate, which is provided with a head 21, having recesses 22 adapted to receive corresponding projections 23 on a key 24. Head 21 is socketed in a casing 25 on the outer side of side plate 7.

It will be readily understood from Fig. 2 that by turning threaded rod 20 backward by means of the key the pressure of the nut upon side plate 5 and of head 21 upon side plate 7 will be relieved, so that the block and with it the lamp may be adjusted in the vertical plane—i. e., swung upward or downward as may be required—and that the block and lamp may be locked in position after adjustment by turning the threaded rod inward, which presses the nut against one side plate and head 21 against the other side plate, causing the side plates to clamp the block firmly and lock the lamp in the position to which it has been adjusted. This enables the rider to place the lamp in a vertical position, no matter at what angle the head or handle-bar rod of the machine may lie, or to change the position of the lamp, if necessary, so as to throw the beam of light to a greater or less distance from the bicycle.

The flexible strap is clamped about the head or handle-bar rod by a locking device substantially the same as the one used to clamp the side plates to the block and which is operated by the same key. I have shown the ends of both side plates as turned outward, so as to adapt the clamp for adjustment to any sized head or handle-bar rod and have also shown a cross-piece 26 as secured between the side plates to prevent them from spreading. These details of construction, however, are not of the essence of my invention and can be varied to an almost unlimited extent without departing from the principle of my invention. As already stated, the flexible strap is attached to one of the side plates. The locking device for the strap which I have shown in the present instance consists of a nut 27 lying within a casing 28 on the outer side of side plate 7. This nut is provided with recesses 22, corresponding with the recesses in head 21 and adapted to receive the projections 23 on the key.

In attaching the lamp to a bicycle the flexible strap is placed about the head or handle-bar rod. The end of threaded rod 9 is passed through an opening (not shown) in side plate 7 and is placed in engagement with nut 27. The nut is then rotated by means of the key and draws the threaded rod inward, clamping the flexible strap about the head or handle-bar rod, as will be readily understood from the drawings.

It will of course be apparent that my novel holder may be used in attaching a lamp to other portions of a bicycle as well as to the head or handle-bar rod.

In Fig. 6 I have illustrated my novel holder in use in attaching a lamp to the fork of a bicycle.

29 denotes the front wheel of a bicycle, and 30 the fork, these parts appearing in dotted lines only. In this form nut 19 is formed upon a standard 31, the operation of adjusting the lamp in the vertical plane being precisely the same as is clearly illustrated in

Fig. 2. At the opposite end of the standard is attached a plate 32. One end of the flexible strap is attached to this plate in the same manner that it is attached to plate 5 in the other form. The other end of the flexible strap carries a threaded rod 9 which passes through an opening (not shown) in plate 32 and is engaged by a nut 27 lying within a casing 28 and adapted to be operated by the key, as in the other form.

Having thus described my invention, I claim—

1. The combination with a bicycle-lamp provided with a block 1, of side plates lying on opposite sides of the block, means for clamping the side plates to the block which will permit the block to oscillate when the pressure is relieved, a flexible strap attached to one of the side plates and adapted to inclose a part of a bicycle, and means for adjustably locking said strap to the other side plate, said strap consisting of separable sections one or more of which can be disconnected for varying the length of the strap.

2. The combination with a bicycle-lamp provided with a block 1, of side plates lying on opposite sides of said block, a flexible strap adapted to inclose a part of a bicycle, means for pivotally securing the side plates to the block and for locking the parts in position after the lamp has been adjusted in the vertical plane and means for locking the flexible strap to the side plates so as to retain the lamp in position, said strap consisting of separable sections one or more of which can be disconnected to vary the length of the strap.

3. The combination with a bicycle-lamp provided with a block 1 having a recess 4 to receive the brake-rod of a bicycle, of side plates lying on opposite sides of said block, a flexible strap adapted to inclose a part of a bicycle, means for pivotally securing the side plates to the block and for locking the parts in position after the lamp has been adjusted in the vertical plane and means for locking the flexible strap to the side plates so as to retain the lamp in position.

4. The combination with a bicycle-lamp having a block 1, side plates lying on opposite sides thereof, and means for pivotally securing the side plates to the block and for locking the block in position after adjustment, of a flexible strap adapted to inclose a part of a bicycle, one end of said strap being connected to one of the side plates and the other provided with a threaded rod 9 and means for locking the threaded rod to the other side plate, said strap consisting of separable sections one or more of which can be disconnected to vary the length of the strap.

In testimony whereof I affix my signature in presence of two witnesses.

FRANK RHIND.

Witnesses:

A. M. WOOSTER,
S. V. RICHARDSON.