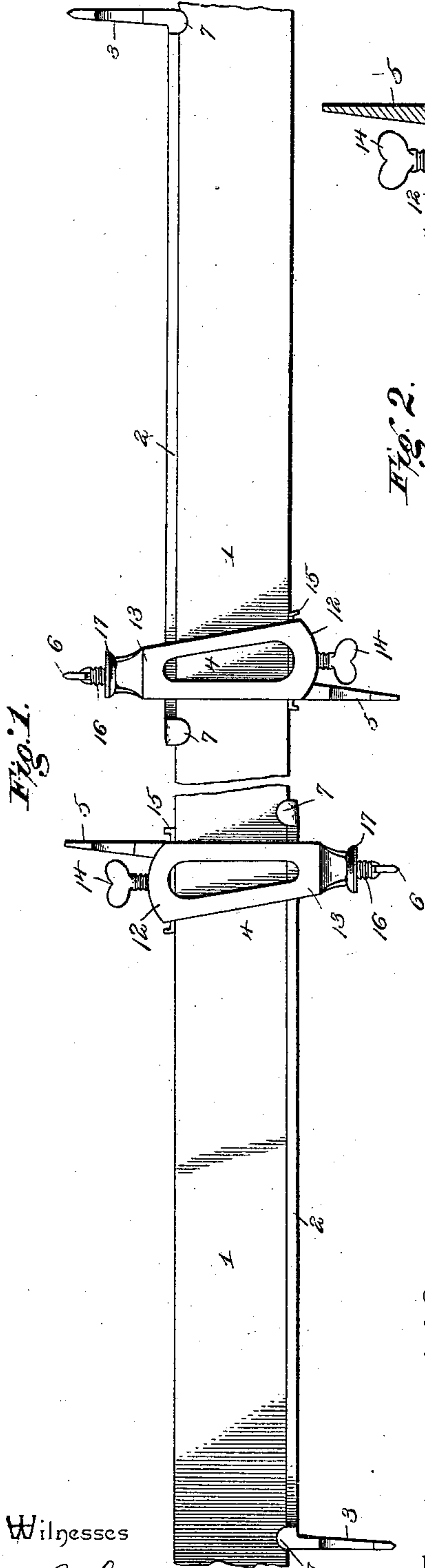


(No Model.)

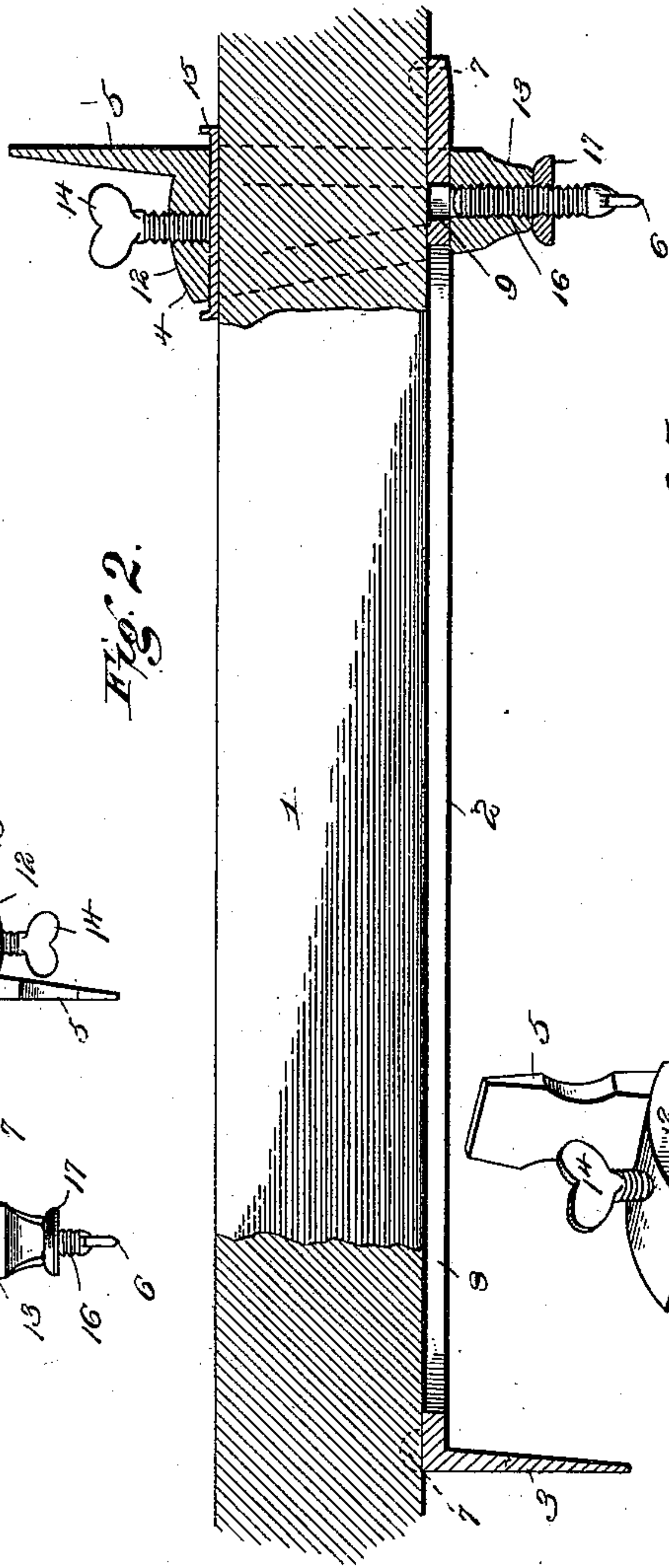
J. F. SHULTZ.  
AXLE SETTING DEVICE.

No. 543,059.

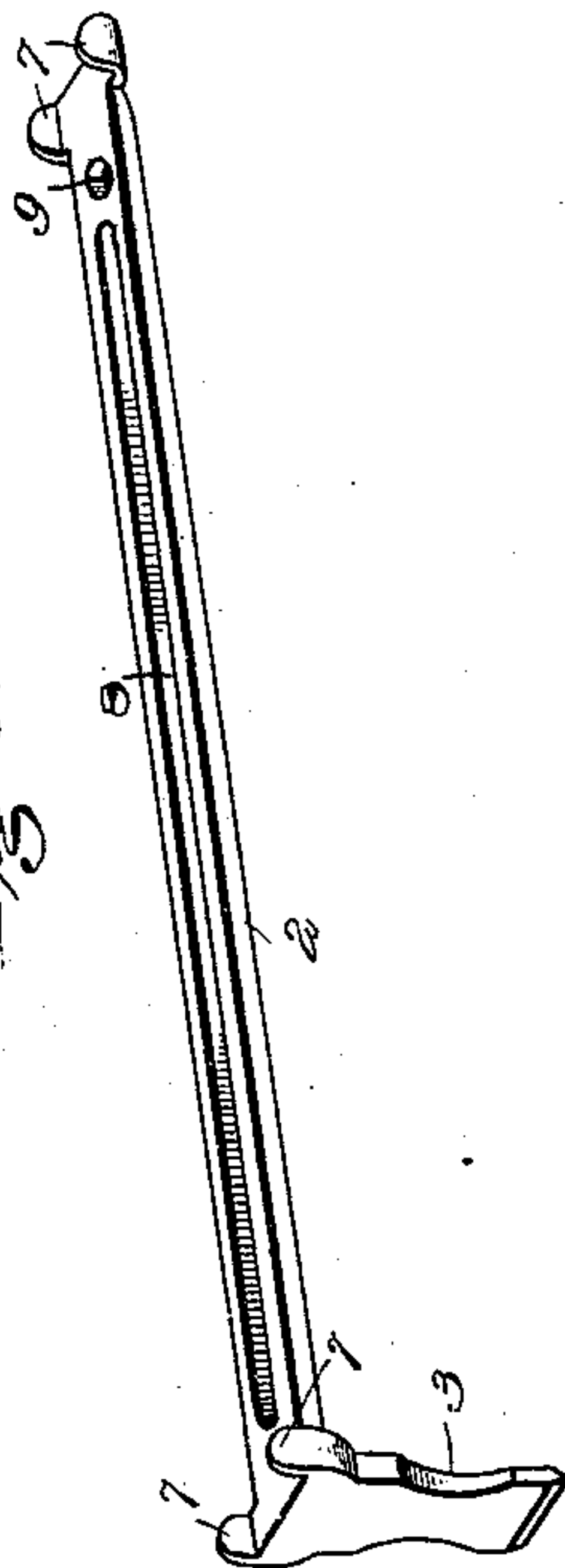
Patented July 23, 1895.



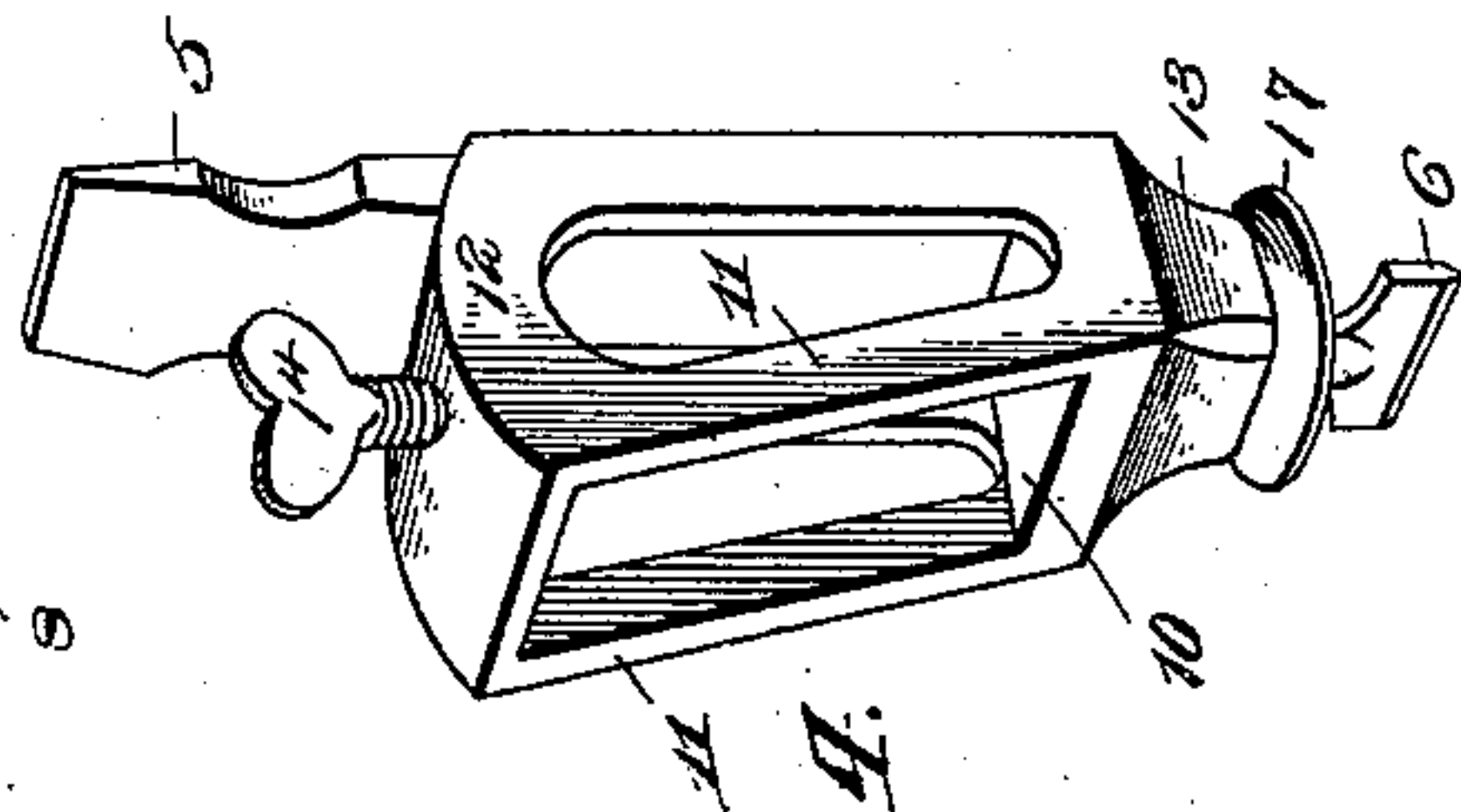
*Fig. 2.*



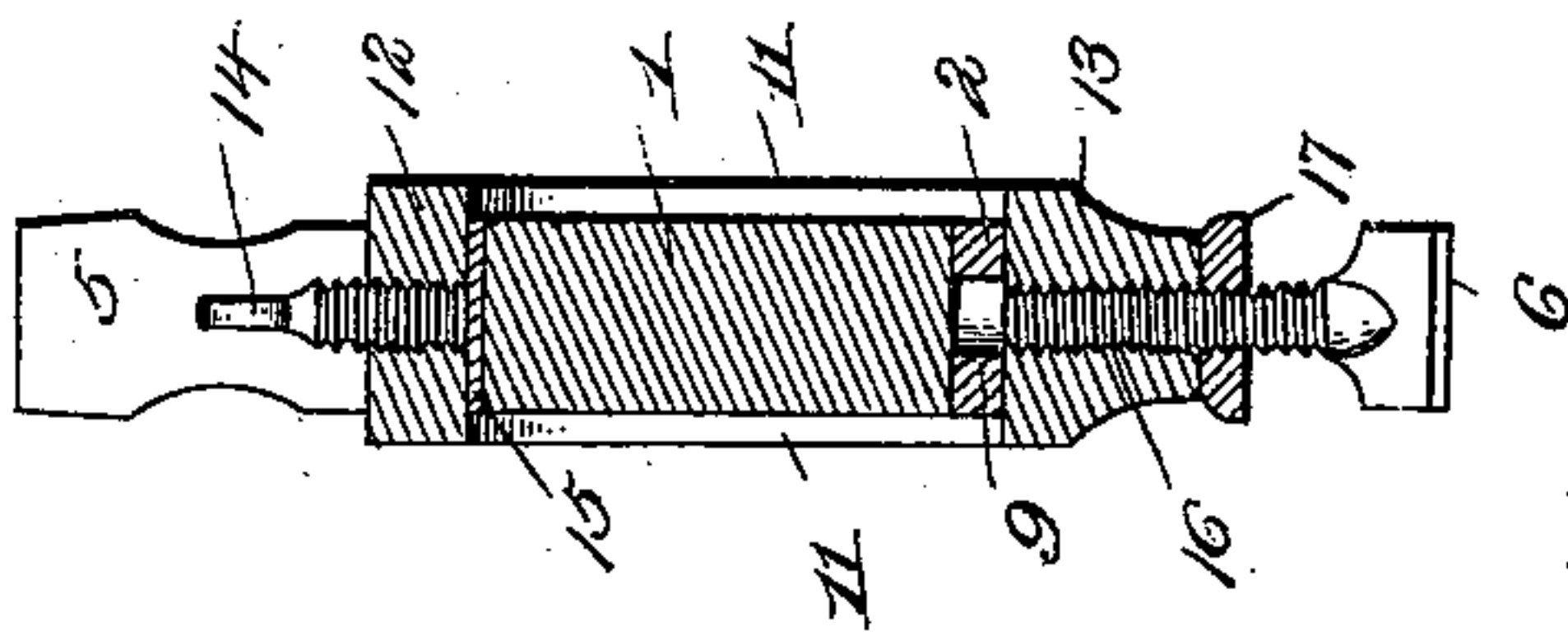
*Fig. 5.*



*Fig. 4.*



*Fig. 3.*



Inventor

Witnesses

*John C. Shaw*  
*J. F. Piley*

By *his* Attorneys,

*Jacob F. Shultz,*

*C. A. Snow & Co.*



# UNITED STATES PATENT OFFICE.

JACOB F. SHULTZ, OF SAN JACINTO, CALIFORNIA, ASSIGNOR OF ONE-HALF  
TO E. B. KNAPP, OF SAME PLACE.

## AXLE-SETTING DEVICE.

SPECIFICATION forming part of Letters Patent No. 543,059, dated July 23, 1895.

Application filed October 20, 1894. Serial No. 526,491. (No model.)

*To all whom it may concern:*

Be it known that I, JACOB F. SHULTZ, a citizen of the United States, residing at San Jacinto, in the county of Riverside and State of California, have invented a new and useful Axle-Setting Device, of which the following is a specification.

The invention relates to improvements in axle-setting devices.

The objects of the present invention are to improve the construction of axle-setting devices and to provide a simple and inexpensive one which will enable the proper set and gather of an axle to be readily gaged.

The invention consists in the construction and the novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a side elevation of an axle-setting device constructed in accordance with this invention. Fig. 2 is a longitudinal sectional view of one end of the axle-setting device. Fig. 3 is a transverse sectional view of the same. Fig. 4 is a detail perspective view of the gage-head. Fig. 5 is a similar view of the adjustable gage-bar.

Like numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates a longitudinal bar or straight-edge, which is of a length substantially that of the axle to be gaged, and upon each end of which is mounted an adjustable gaging mechanism comprising a gage-bar 2, provided at its outer end with a rigid gage-point of blade 3 and an adjustable or sliding gage-head 4, receiving the longitudinal bar or straight-edge 1, and also the adjustable gage-bar 2, and provided at one end with a rigid gage point or blade 5 and at the other end with an adjustable gage-point 6. These gage-points extend outward at right angles from the longitudinal edges of the bar 1 or straight-edge, and it will be seen that the gaging mechanism of each end presents two gage-points at one side of the bar 1 and one gage point or blade at the other side, and the gaging mechanism of one end of the bar is disposed the reverse of the gaging mechanism of the other end, as will be seen from Fig. 1 of the accompany-

ing drawings, whereby three gage-points are provided at each edge of the longitudinal bar 1 for enabling the proper set and the proper gather of an axle to be obtained.

The adjustable gage-bar 2 is provided with inward-extending lips 7, which embrace the side faces of the bar 1 and form a guide or way to facilitate accurate longitudinal adjustment of the gage-bar 2. The rigid gage point or blade 3 of the bar 2 is preferably formed integral therewith, and the bar 2 is provided with a longitudinal opening or slot 8 and has adjacent to the inner ends thereof a perforation 9.

The sliding gage-head 4 is slightly tapering and is provided with an opening 10, formed by opposite sides 11 and ends 12 and 13, and the said opening 10 receives the bar 1 and the gage-bar 2. The gage point or blade 5 is located at one edge of the end 12 of the gage-head and is preferably formed integral therewith, and this end 12 of the gage-head is provided with a threaded perforation, in which is arranged a set-screw 14 for clamping the head at any desired adjustment and for securing the longitudinal bar or straight-edge, the gage-bar, and the gage-head together. The sides 11 conform to the configuration of the longitudinal bar 1, and the lips 7 of the gage-bar project laterally sufficiently to form stops for limiting the sliding movement of the gage-bar to prevent the same from accidentally leaving the gage-head. In order to prevent the set-screw 14 from injuring the edge of the bar 1, a wear-plate 15 is interposed between the end 12 of the gage-head and the bar 1, and it has its ends bent outward at an angle for retaining it in position.

The end 13 of the gage-head is provided with a threaded socket, in which is fitted a threaded shank 16 of the adjustable gage point or blade 6, which is adapted to be moved inward or outward, according to the taper of the spindle, and a jam-nut 17 is mounted on the threaded stem for engaging the gage-head to check the inward movement of the adjustable gage-point 6.

The gage-bar 2 is capable of longitudinal adjustment to bring the gage point or blade 3 in proper relation with the points of the gage-head, and both the gage-bar and the gage-



head are capable of adjustment together on the longitudinal bar or straight-edge 1.

It will be seen that the axle-setting device is simple and comparatively inexpensive in construction, the clamping or set screw 14 serving to retain all the parts in their adjustment, and that it may be readily arranged to obtain the proper set and gather of an axle.

The longitudinal slot or opening of the gage-bar and the perforation 9 permit the inner end of the threaded shank of the adjustable point 6 to be moved inward beyond the outer edge of the gage-bar.

Changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

What I claim is—

1. In an axle setting device, the combination with a longitudinal bar, of the gaging mechanism located at each end thereof and comprising the adjustable gage bar provided at its outer end with a gage point, and the adjustable gage head receiving said bars, and provided at one end with a rigid gage point, and having at the opposite end an adjustable gage point located at the same side of the longitudinal bar as the gage point of the adjustable gage bar, substantially as described.

2. In an axle setting device, the combination of a longitudinal bar, an adjustable gage bar provided at its outer end with a gage point located at one side of the longitudinal bar, a gage head slidingly mounted on the longitudinal bar and receiving the gage bar and provided at one end with a rigid gage point located at the opposite side of the longitudinal bar, an adjustable gage point mounted on the other end of the gage head located at the same side of the longitudinal bar as the gage point of the gage bar, and a set screw mounted on the gage head and arranged adjacent to the rigid gage point thereof and securing the parts in their adjustment, substantially as described.

3. In an axle setting device, the combination of a longitudinal bar, an adjustable gage

bar slidingly mounted on the longitudinal bar and disposed longitudinally thereof and provided at its outer end with a gage point located at one side of the longitudinal bar, a gage head having an opening receiving the said bars, said gage head being provided at one end with a rigid gage point and having at the opposite end a threaded socket located at the same side of the longitudinal bar as the point of the gage bar, and the said rigid point of the head being located at the opposite side of the longitudinal bar, a set screw mounted on the gage head adjacent to the rigid gage point thereof and securing the parts in their adjustment on the longitudinal bar, an adjustable gage point having a threaded shank arranged in the socket of the gage head, and a nut mounted on the threaded socket for checking the inward movement of the adjustable gage point, substantially as described.

4. In an axle setting device, the combination of a longitudinal bar 1, a gage bar disposed longitudinally of the bar 1 and slidingly arranged thereon and provided with inward extending lips and having a longitudinal opening, a rigid gage point 3 located at the outer ends of the gage bar, a gage head receiving said bars and located at one side of the longitudinal bar and composed of opposite sides, the end 13 having a threaded socket located at the same side of the longitudinal bar as the point 3 and the end 12 having a threaded opening and provided with a rigid gage point located at the opposite side of the longitudinal bar, a set screw arranged in the threaded opening, an adjustable gage point having a threaded shank fitted in the socket of the gage head, and the wear plate interposed between the set screw and the bar 1, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JACOB F. SHULTZ.

Witnesses:

BUSHROD B. TAYLOR,  
WILLIAM VAWTER.