

No. 662,715.

Patented Nov. 27, 1900.

J. B. FOOTE.
AXLE LUBRICATOR.

(Application filed Aug. 21, 1900.)

(No Model.)

Fig. 1.

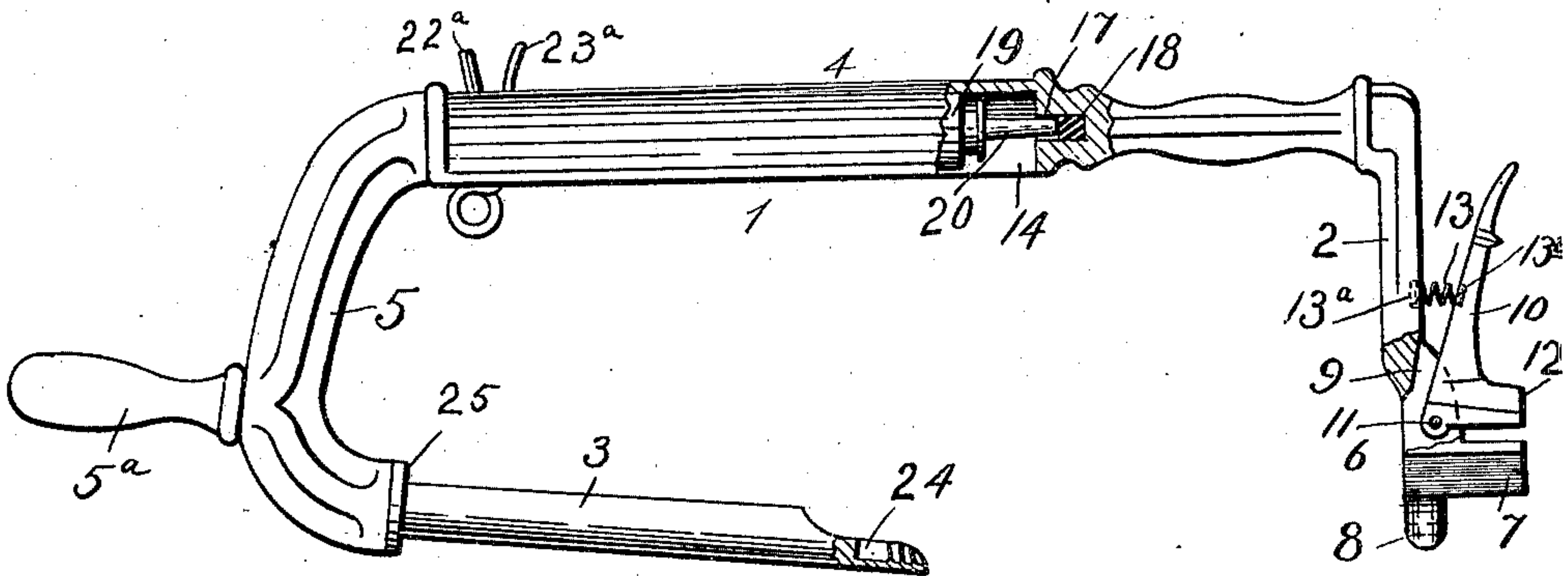


Fig. 4.

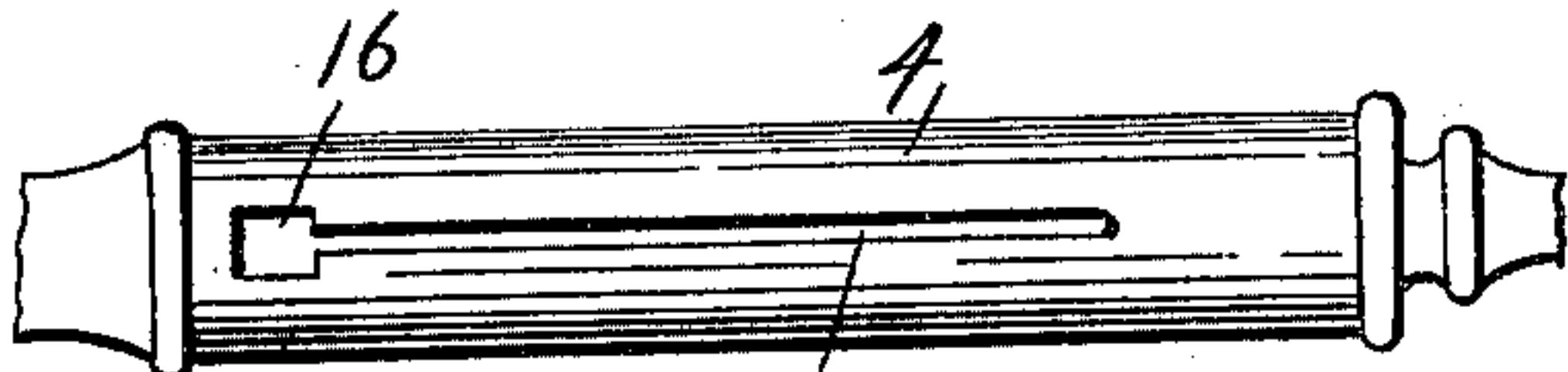


Fig. 2.

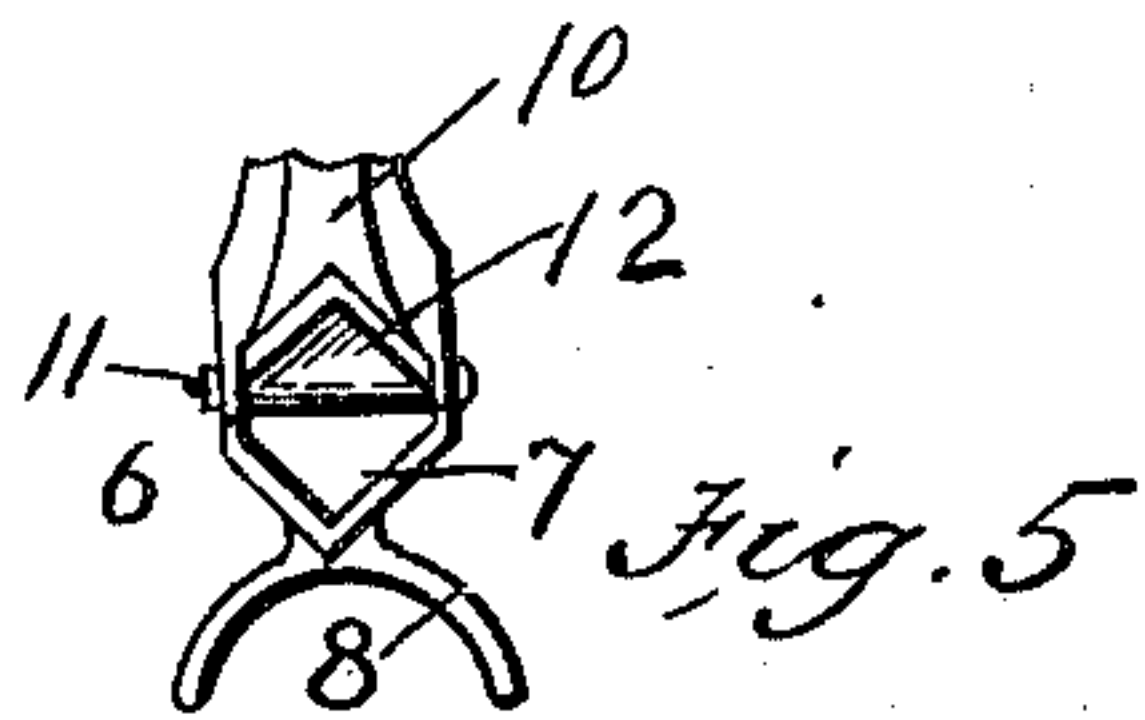
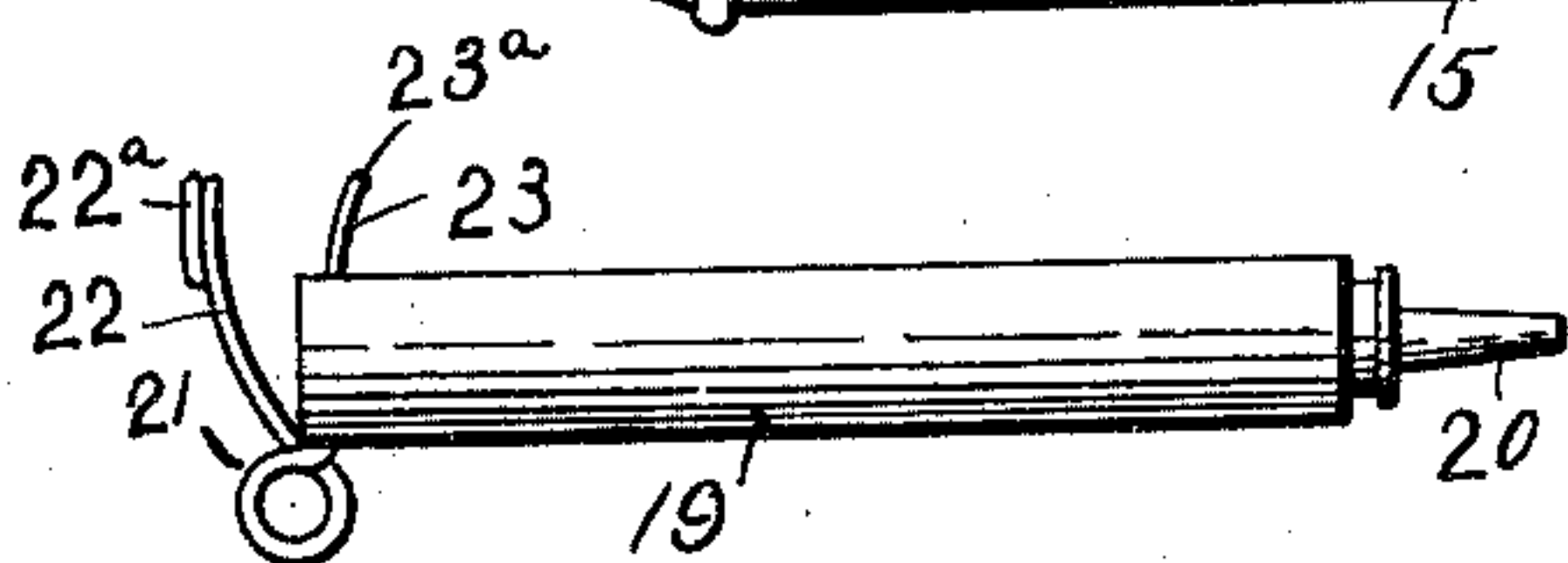
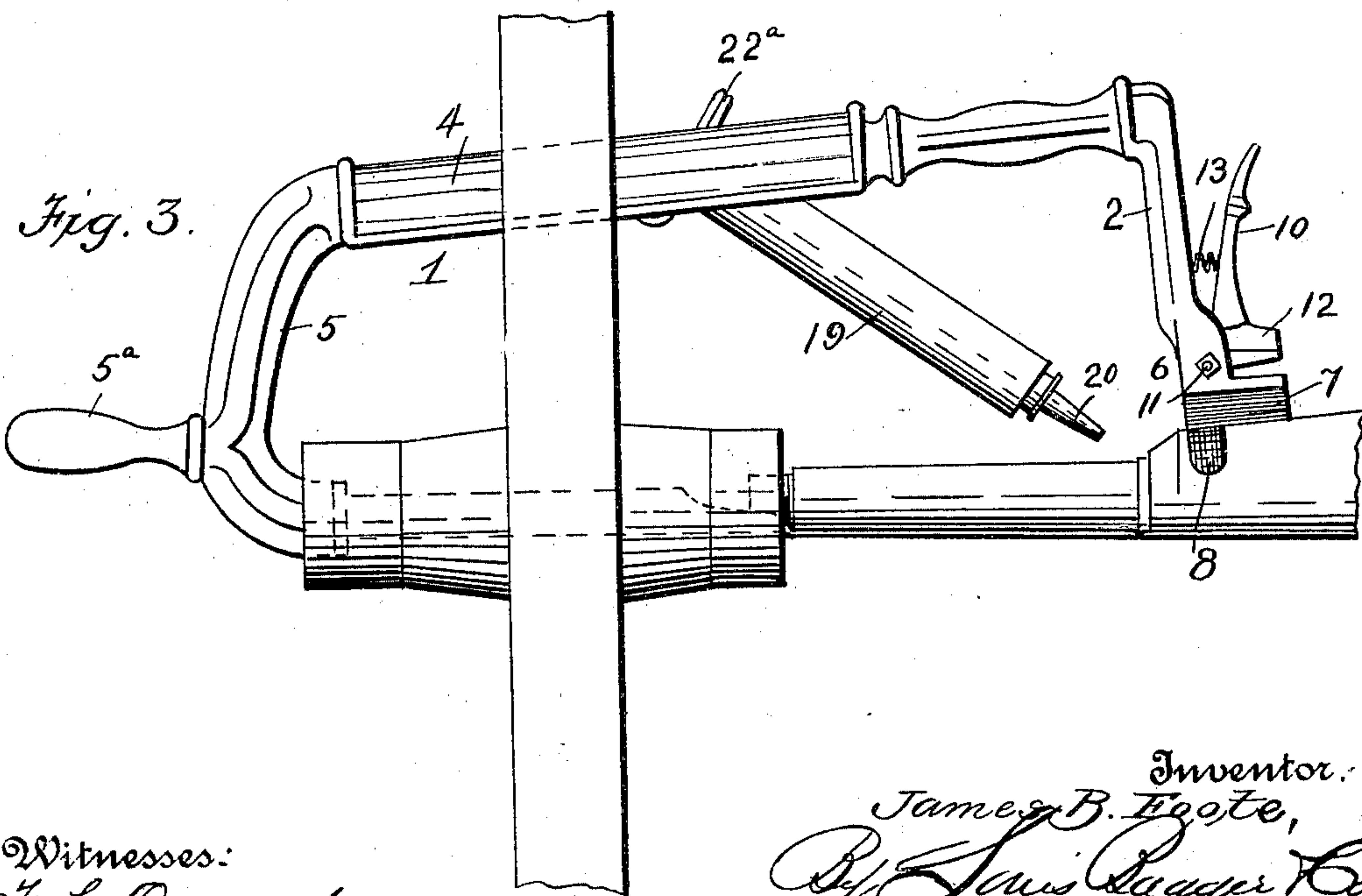


Fig. 3.



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UNITED STATES PATENT OFFICE.

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AXLE-LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 662,715, dated November 27, 1900.

Application filed August 21, 1900. Serial No. 27,613. (No model.)

To all whom it may concern:

Be it known that I, JAMES B. FOOTE, a citizen of the United States, residing at Fredericktown, in the county of Knox and State of Ohio, have invented new and useful Improvements in Axle-Lubricators, of which the following is a specification.

My invention relates to axle-lubricators; and the object of the same is to construct a device of this character by which a buggy and wheel may be supported and the axle oiled without the use of a jack and without soiling the hands. Means are also provided for protecting the oil-can when not in use and of keeping the oil from spilling. A wrench is also formed on the frame of my lubricator; but this is not claimed as part of my present invention and is included for completeness only.

The novel construction used by me in carrying out my invention is described in the following specification and illustrated in the accompanying drawings, which form a part thereof, and in which—

Figure 1 is a side elevation of my tool, partially in section. Fig. 2 is a side elevation of the oil-can. Fig. 3 is a view of a portion of a buggy and my lubricator, illustrating the manner of supporting a wheel by means of the frame of my device. Fig. 4 is a fragmentary view showing the slot in the oil-can chamber. Fig. 5 is a fragmentary view showing the wrench and spanner.

Like numerals of reference designate like parts in the different views of the drawings.

The numeral 1 designates the frame of my device, which is brace or yoke shaped and comprising a back member 4, a head-bar 5, and an arm 2, all formed integral therewith and at right angles thereto, and an arm 3 integral with said head-bar and extending at right angles thereto, substantially parallel to the back member. A handle 5^a is also formed integral with the head-bar 5 and extends at right angles thereto. The outer end of the arm 2 has formed integral therewith an apertured head 6, having an angular portion 7, which is adapted to form one side of a wrench. Also formed integral with the head 6 is a curved bearing-plate or spanner 8, designed to fit over the axle of the buggy. A groove 9 cuts the arm 2 and connects with the aperture in the head 6, and seated in this

groove 9 is a lever 10, pivotally mounted in the head and secured by a cross-pin 11. This lever 10 has formed integral therewith an angular portion 12, which is designed to act in conjunction with the portion 7 and form a universal wrench adapted to fit nuts of different sizes. A spring 13 is seated in a recess 13^a in the arm 2 and extends up and fits into a recess 13^b in the lever 10. The location of this spring 13 enables it to hold the lever 10 against displacement and to restore it to its initial position after displacement. It also serves to hold the nut within the jaws of the wrench after it has been unscrewed.

Formed in the back member 4 is a cylindrical chamber 14, having one side cut away. The back of this chamber 14 is cut through the greater portion of its extent by a narrow slot 15, having an enlarged portion 16. The length of the slot 14 is equal to the length of the ordinary buggy-spindle, for a purpose which will appear. The upper head of the cylindrical chamber 14 is bored at 17, and seated in the bottom of this recess is a piece 18 of cork or other elastic material. Seated within this chamber 14 is an oil-can 19, which fits the transverse dimensions snugly, but room remains for longitudinal displacement. The spout 20 of the can extends within the recess 17 and abuts the cork 18. The oil is thereby prevented from spilling. This oil-can 19 is held against displacement by a spring-clamp 21, secured to its bottom. This clamp 21 is constructed of a single piece of resilient wire and has two diverging arms 22 and 23, secured together by an eye at their lower ends and extending through the slot in the back, one through the narrow portion 15 and the other through the portion 16. The outer end of the arm 22 is coiled around at 22^a to form a stop to prevent the withdrawal of the arm. The protruding ends 23^a and the coil 22^a form thumb-pieces, by the use of which the spout can be withdrawn from the recess 17 and the can left suspended by the coil or stop 22^a and free to slide in the slot 15, which thus forms a guide.

The arm 3 is cut on the inner side of its outer end at 24 and fitted with threads to provide a good bearing-surface when the wheel is being lifted up, and thus prevent slipping. It is also provided with a shoulder 25, formed

integral therewith, which serves as a stop to limit the movement of the wheel.

A summary of the complete operation of my lubricator in oiling a carriage can now be given. The device is grasped by the handle 5^a and back 4 just below the chamber 14. This portion is shaped to provide a handle. The nut is then engaged by the jaws of the wrench formed by the members 7 and 12 and unscrewed by operating the tool like a brace. After the nut leaves the threads the action of the spring 13 will prevent its being released by the jaws to drop in the dirt. The nut having been removed, the outer end of the arm 3 is placed within the hub of the wheel under the screw, the head 5 inserted between the upper spokes, and the portion 8 rested on the axle. The handle 5^a is now raised and the wheel simultaneously pulled forward by grasping the top of the rim with one hand, when it will slide up the arm 3 and abut the shoulder 25. The tool will now be held in place by the weight of the wheel, and both hands can be disengaged, if desired. The spout of the oil-can is next disengaged by the use of the thumb-pieces 22^a and 23^a previously described, and the oiler reciprocated back and forth in the slot 15 and oil distributed uniformly over the spindle. The wheel can now be pushed back on the spindle after lifting slightly the handle 5^a and the nut or bur then replaced.

It will be obvious from the foregoing that the carriage and wheel will be firmly supported by the frame of my lubricator, which will extend parallel to the axle and the walls of the chamber 14, and the slot 15 serves as a guide to direct the oil-can in the operation of oiling. In this manner all of the oil is applied centrally to the axle without waste or danger of soiling the hands.

I do not wish to be limited to the details of construction, as these may be modified in many particulars without departing from the spirit of my invention.

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

1. In an axle-lubricating device, the combination, substantially as described, of a brace-shaped frame, an inwardly-disposed arm substantially parallel to the back of said brace-shaped frame, a guide formed in the back member of said frame, an oil-can mounted to slide back and forth in said guide and constructed to be inclined downward to distribute oil on an axle.

2. In a lubricating device, the combination, substantially as described, of a chamber having one side cut away and a recess in one end, a piece of elastic material seated in said recess, an oil-can having a spout, seated in said chamber with its spout extending into said recess, and a clamp constructed to hold said oil-can in the position with its spout in said recess and to be operated to retract said spout.

3. In a lubricating device, the combination, substantially as described, of a guide member, means for holding said guide member parallel to an axle, an oil-can mounted to slide in said guide and constructed to be reciprocated back and forth in said guide to distribute oil on the axle.

4. In a lubricating device, the combination, substantially as described, of a guide member, an oil-can, and a clamp comprising two divergent arms secured together at one end and mounted to project through said guide, one of said arms being fitted with a stop on its free end to prevent its withdrawal from said guide, and the other arm being secured to said oil-can.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JAMES B. FOOTE.

Witnesses:

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