

F. O. JAQUES, JR.  
ALLIGATOR WRENCH.  
APPLICATION FILED JAN. 17, 1911.

990,050.

Patented Apr. 18, 1911.

Fig. 1.

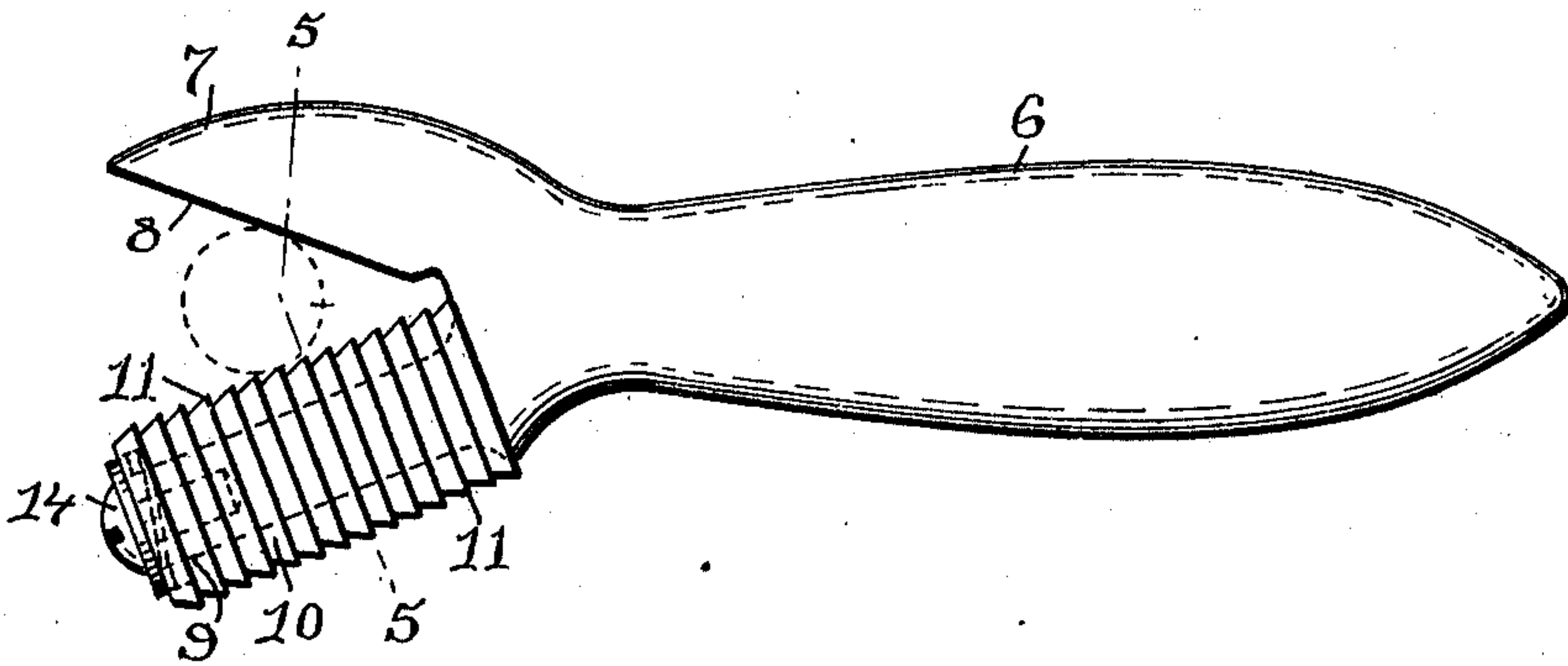


Fig. 2.

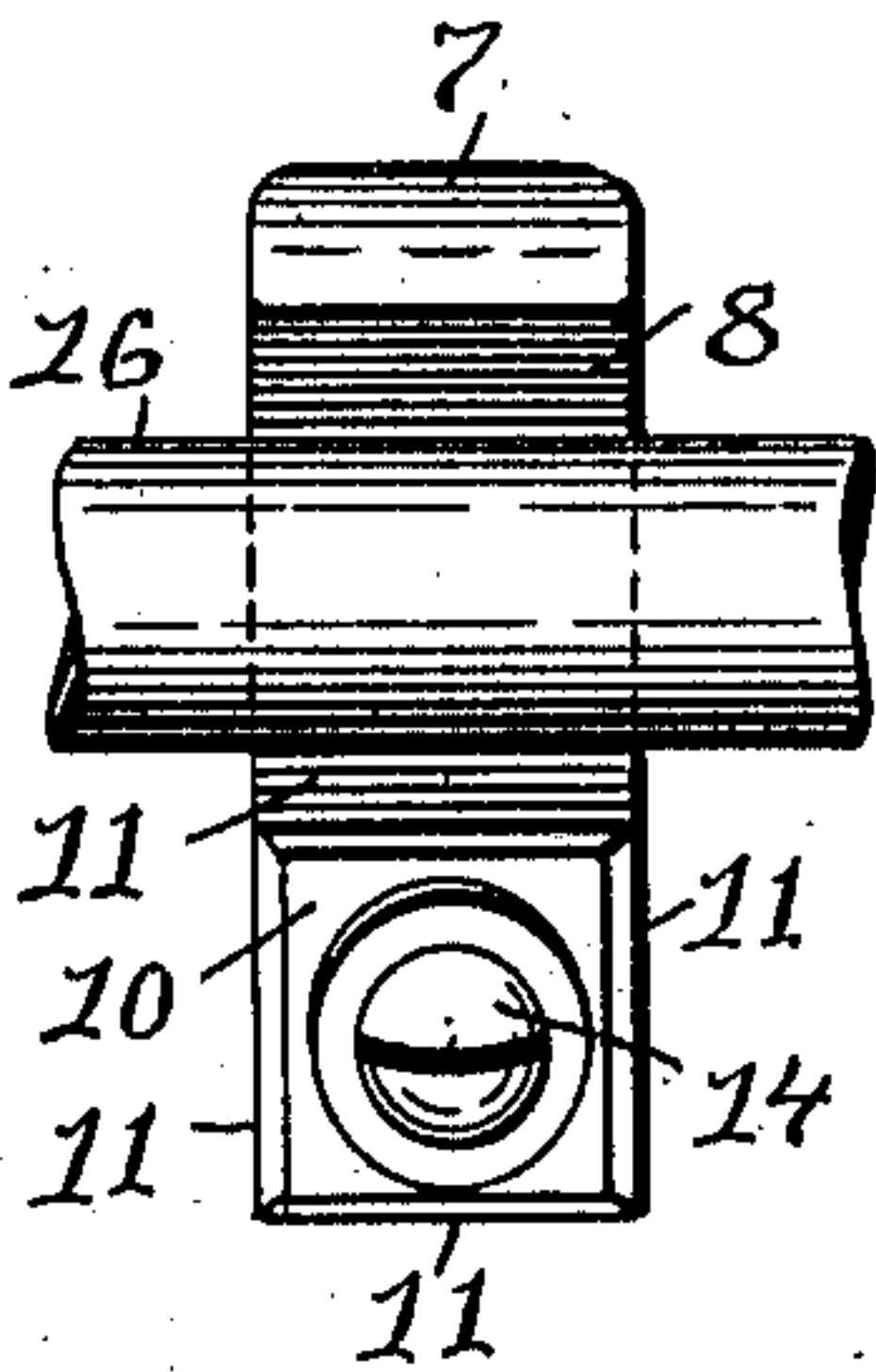
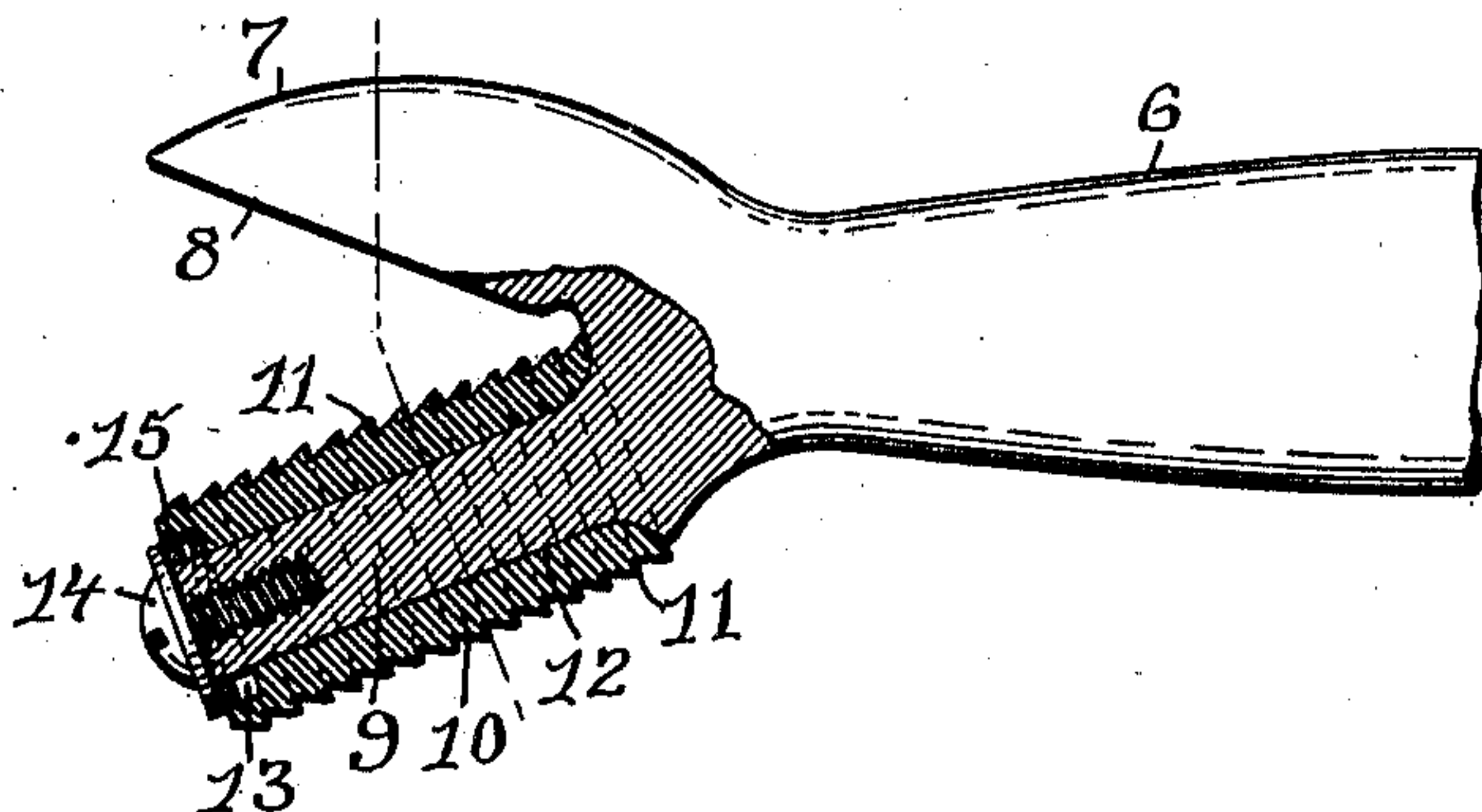


Fig. 4.



WITNESSES:

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Fig. 3.

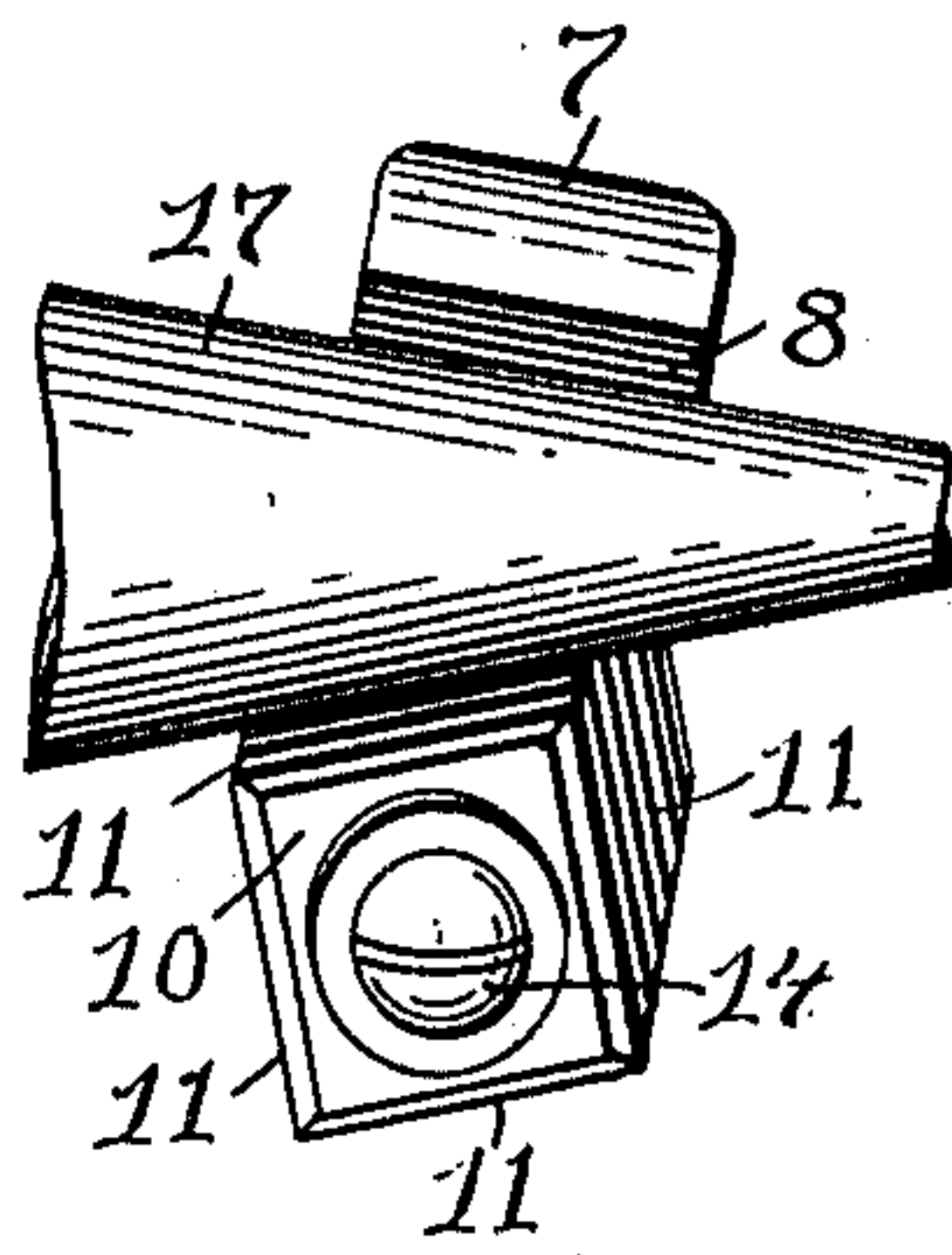
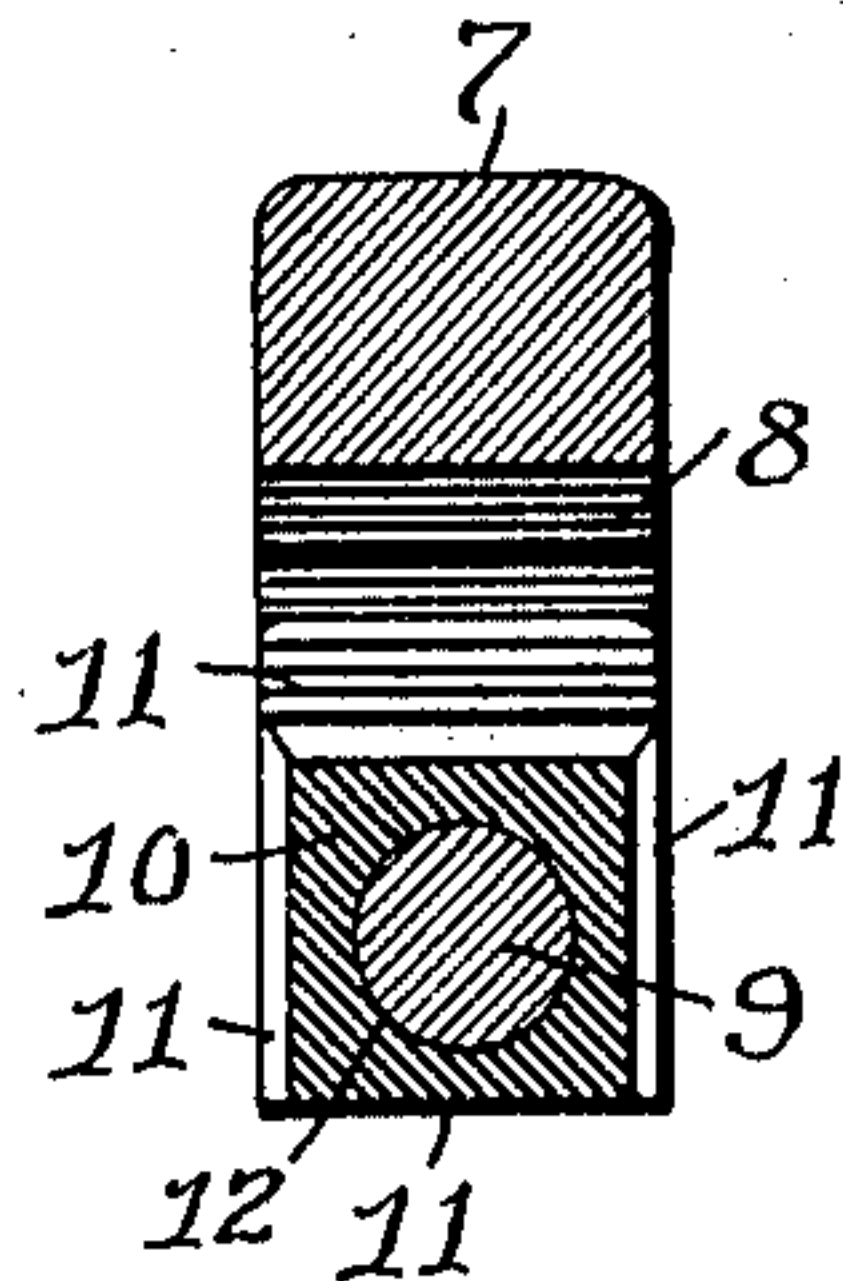


Fig. 5.



INVENTOR:

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# UNITED STATES PATENT OFFICE

FERNANDO OSCAR JAQUES, JR., OF CRANSTON, RHODE ISLAND.

## ALLIGATOR-WRENCH.

990,050.

Specification of Letters Patent.

Patented Apr. 18, 1911.

Application filed January 17, 1911. Serial No. 603,076.

*To all whom it may concern:*

Be it known that I, FERNANDO OSCAR JAQUES, Jr., a citizen of the United States, residing at Cranston, in the county of Providence and State of Rhode Island, have invented a new and useful Improvement in Alligator-Wrenches, of which the following is a specification.

This invention has reference to an improvement in wrenches and more particularly to an improvement in alligator wrenches.

In the usual form of alligator wrenches, both jaws are formed integral or fixed and one of the jaws is supplied with integral teeth. When the integral teeth are worn out the utility of the whole tool is destroyed, also this form of a wrench having integral or fixed jaws, cannot be used to advantage on tapered work.

The object of my invention is to improve the construction of an alligator wrench, whereby the life of the wrench is materially increased.

A further object of my invention is to construct an alligator wrench so that the same may be used on either straight or tapered work.

Another object of my invention is to construct an alligator wrench so that the same will adjust itself automatically to different tapers of tapered work.

A final object of my invention is to simplify the construction and reduce the cost of manufacturing alligator wrenches embodying the above features.

My invention consists in the peculiar and novel construction of an alligator wrench having details of construction, as will be more fully set forth hereinafter and claimed.

Figure 1. is a side view of an alligator wrench embodying my invention. Fig. 2. is an end view of the wrench showing the position the rotatable jaw member automatically assumes on straight work. Fig. 3. is an end view similar to Fig. 2. showing the position the rotatable jaw member automatically assumes on tapered work. Fig. 4. is a side view showing the integral round jaw and its rotatable jaw member, in section, and Fig. 5. is a transverse sectional view through the jaws of the wrench, taken on line 5. 5. of Fig. 1.

In the drawings 6. indicates the handle of the wrench which has on one end the usual conventional shape jaw 7. with a straight

face 8. at an angle to the center line of the wrench and a round jaw 9. at an oppositely disposed corresponding angle to the center line of the wrench, all formed integral, the angular jaws forming a V shape opening between the jaws. A square jaw member 10. having a series of teeth 11. 11. on each of its four sides, a central hole 12. for the round jaw 9. and a recess 13. in the outer end, is rotatably secured to the round jaw 9. by a screw 14. which screws into the end of the round jaw 9. A spring washer 15. in the recess 13. and bearing against the end of the jaw member 10. and the head of the screw 14. holds the jaw member 10. under spring tension, in its normal inward position, as shown in Figs. 1. and 2. By this construction one of the integral jaws of an alligator wrench is provided with a jaw member having a plurality of sides, each side having a series of teeth which when the jaw member is turned on the jaw, a series of teeth is brought into position to coact with the opposite jaw of the wrench.

When in use the jaw member 10. turns on the round jaw 9. and automatically adjusts itself to straight work 16. as shown in Fig. 2. or to tapered work 17. as shown in Fig. 3. The jaws are first forced over the work to be turned and with the wrench in the position as shown in Fig. 1., the handle 6. is moved upward. One or more of the teeth 11. 11. on the jaw member 10. now engage with the work and the jaw member 10. moves outward on the round jaw 9. to its limit, against the tension of the spring washer 15. This slight outward movement of the jaw member 10. (approximately the distance of one tooth) materially increases the bite or grip of the teeth on the work, thereby greatly increasing the holding power of the wrench.

My improved alligator wrench requires no adjustment, is always ready for use on either straight or tapered work, to which it adjusts itself automatically and by having four sets of teeth to one of the usual form, the life of the wrench is greatly prolonged, also the toothed jaw member when worn out may be renewed at a normal cost.

It is evident that the jaw member 10. could be any form in cross section and any means could be used for rotatably securing the jaw member 10. to the jaw 9. without materially affecting the spirit of my invention.



Having thus described my invention I claim as new and desire to secure by Letters Patent:—

- 5 1. An alligator wrench, comprising a handle member and angular jaws formed integral, a toothed jaw member rotatably secured to one of the angular jaws and means for rotatably securing the jaw member in its operative position.
- 10 2. An alligator wrench, comprising a handle member and two angular jaws all formed integral, a toothed jaw member rotatably secured to one of the angular jaws, means for rotatably securing the toothed jaw member
- 15 in its operative position and means for holding the toothed jaw member in its normal position under spring tension.
- 20 3. An alligator wrench, comprising an elongated handle member and two angular jaws on one end of the handle member, all formed integral, a toothed jaw member having a recess in one end and rotatably secured to one of the jaws, a spring member in the recess adapted to hold the jaw member
- 25 under spring tension and means for rotatably securing the jaw member to the jaw.
4. An alligator wrench, comprising an elongated handle member, an angular jaw of

conventional shape and an angular round jaw, all formed integral, a toothed jaw member having a plurality of sides, a series of teeth on each side, a longitudinal hole, a recess in its outer end, and rotatably secured to the round jaw, a spring washer or its equivalent in the recess in the jaw member and means for rotatably securing the jaw member to the round jaw. 30 35

5. An alligator wrench, comprising an elongated handle member, an angular jaw of conventional shape and an angular round jaw, all formed integral, a square jaw member having a series of teeth on each of its four sides, a longitudinal hole, a recess in its outer end and rotatably secured to the round jaw, a spring washer in the recess in the jaw member and a screw engaging with the spring washer and screw-threaded into the end of the round jaw. 40 45

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses. 50

FERNANDO OSCAR JAQUES, JR.

Witnesses:

JOHN H. McNULTY,  
CHAS. H. LUTHER.

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."

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