

No. 844,886.

PATENTED FEB. 19, 1907.

F. P. MORRIS.
WRENCH.

APPLICATION FILED AUG. 17, 1906.

FIG. 1.

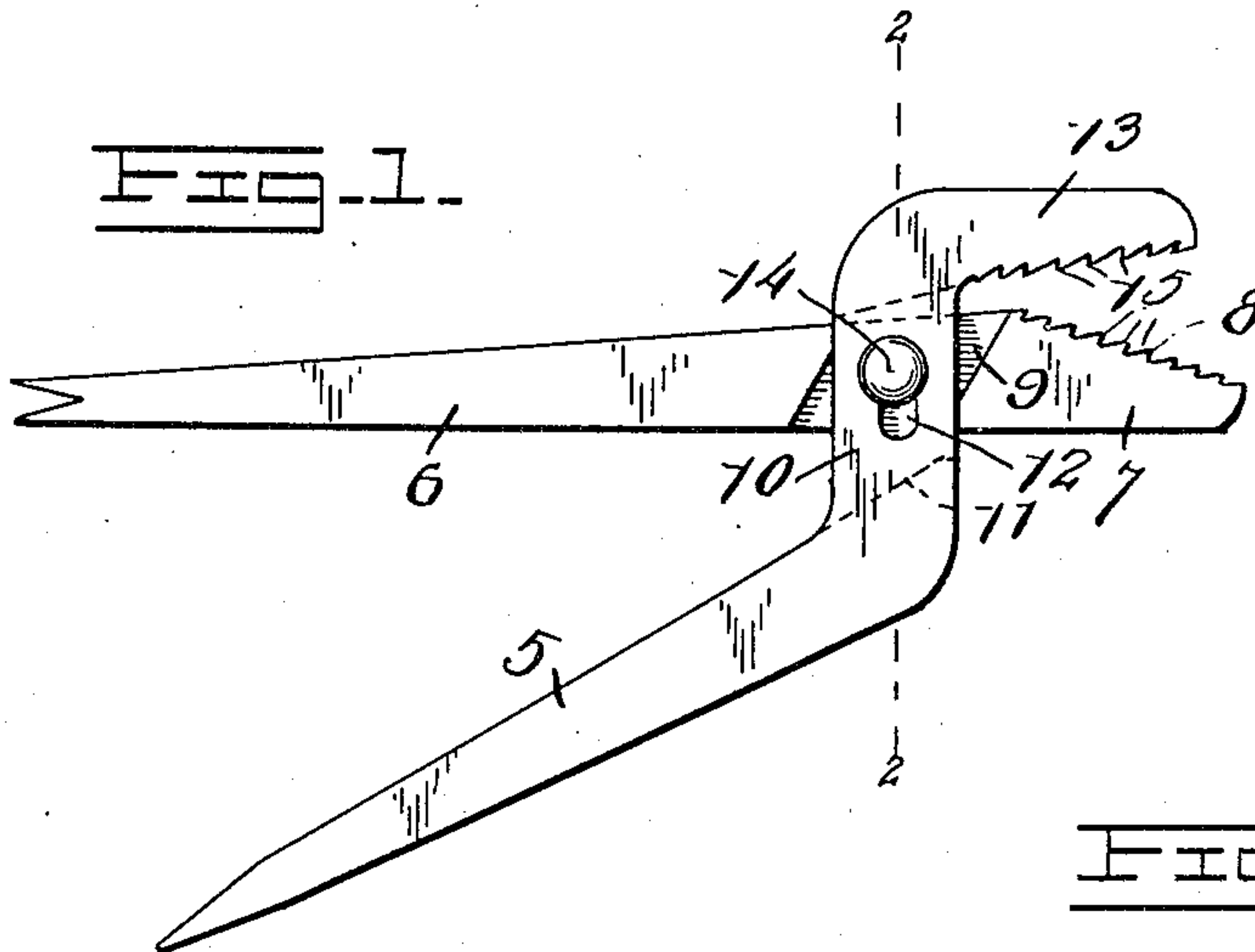


FIG. 2.

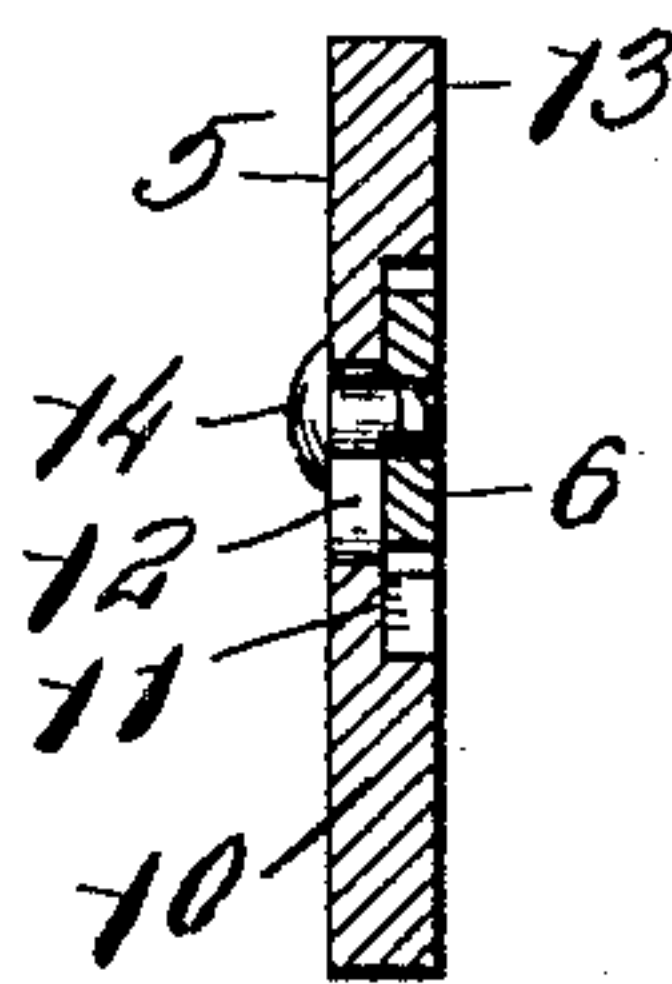


FIG. 3.

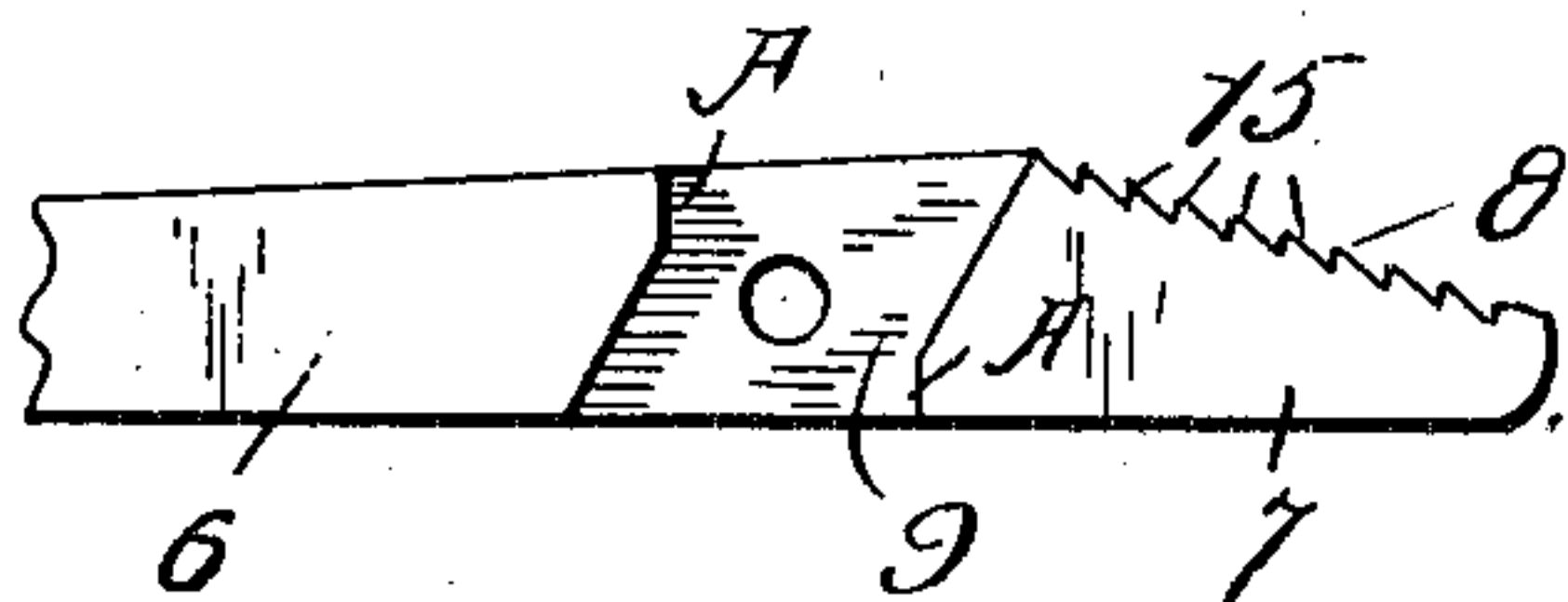
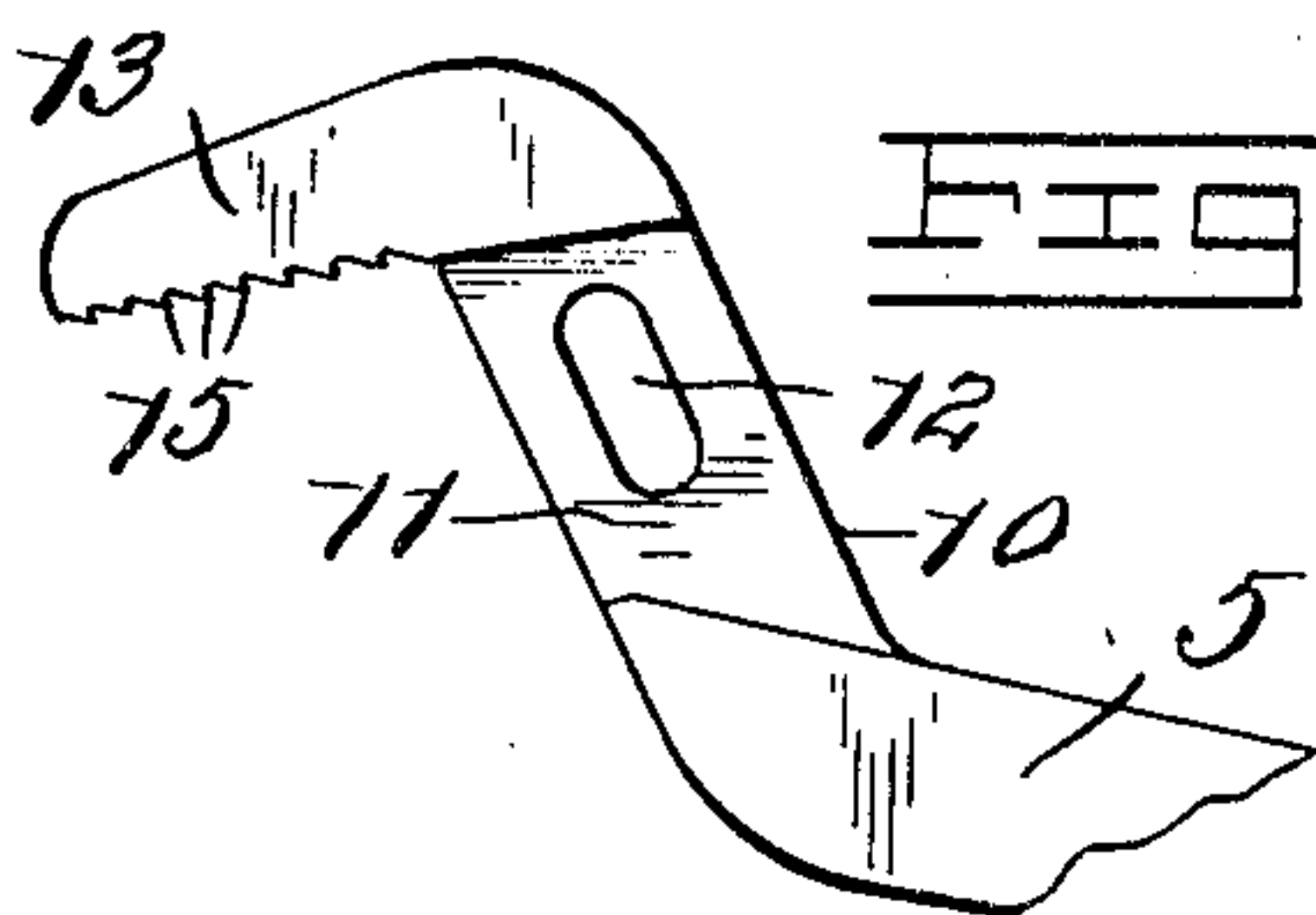


FIG. 4.



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WRENCH.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, FRANKLIN P. MORRIS, a citizen of the United States, residing at Murray, in the county of Woodward, Territory of Oklahoma, have invented certain new and useful Improvements in Wrenches; 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.

This invention relates to wrenches, and more particularly to adjustable wrenches, and has for its object to provide a wrench of the alligator type which when used will automatically adjust itself to suit the size of the body operated upon.

Another object is to provide a wrench which will be extremely simple and which may be manufactured at a low figure.

Other objects and advantages will be apparent from the following description, and it is to be understood that I do not desire to be limited to the exact details of construction shown and described, for obvious modifications will occur to a person skilled in the art.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is an elevational view showing the present wrench opened. Fig. 2 is a section taken longitudinally of the lateral handle portion on line 2 2 of Fig. 1. Figs. 3 and 4 are views showing the jaw portions of the two members detached and illustrating the recessed sides thereof.

Referring now to the drawings, the present invention comprises two handles 5 and 6, formed of suitable bar metal, the handle 6 having a jaw 7 at its forward end, provided with a bevel side face 8. Rearwardly of the jaw 7 the handle is reduced in thickness to form a transversely-extending recess 9 in one of its faces, having a diagonal trend and being inclined forwardly and toward that face of the handle which merges into the face 8 of the jaw, and the opposite ends of the walls of the recess are turned to extend at right angles to the adjacent faces of the handle, as shown at A, this portion A of the forward wall of the recess lying at the opposite face of the handle from the jaw 7.

The handle 5 has a portion 10 at its forward end which is turned laterally and diagonally forwardly and which is reduced in thickness to form a recess 11, extending

transversely of this portion 10 and longitudinally of the handle 5. This portion 10 is also provided with a longitudinal slot 12, communicating with this recess 11, and the forward end of the portion 10 carries a forwardly-extending jaw 13.

The two members are assembled by engaging the reduced portion of one member in the recess of the other, so that these recesses are interlocked, as it were, and a headed stud 14, carried by the handle 6 and engaged in the reduced portion thereof, projects through the slot 12 for sliding movement of the two members with respect to each other, the recess 11 being of a length to permit of such sliding movement, and the mutually adjacent faces of the jaws 7 and 13, one of which faces is the face 8, are provided with oppositely-inclined ratchet-serrations 15, the jaws being thus arranged for cooperation to grip a body.

By reason of the fact that the portions A of the walls of the recess 9 extend at right angles to the longitudinal axis of the handle 6 movement of the handles to bring the opposite faces of the portions 10 into engagement with the portions A brings the portions 10 transversely of the handle 6 and the jaw 13 longitudinally thereof and at an angle to the face 8 of the jaw 7 to form an alligator-wrench, and movement of the rearward ends of the handles toward each other reduces this angle, as will be readily understood, to fit the wrench for use in connection with smaller bodies. By reason of the slidability of the two members with respect to each other the jaws 13 and 7 may be brought toward and away from each other to suit bodies of different sizes, and it will be seen that when the jaws are engaged with a body and the handles move toward each other the wrench will be automatically adjusted to grip a body. It will of course be understood that the stud 14 forms a pivotal connection for the handle as well as permitting sliding movement thereof.

What is claimed is—

In a wrench, the combination with a straight handle having a jaw-face at one end and having a transverse diagonal recess in one face adjacent to its jaw, one end portion of each side wall of the recess being turned to extend at right angles to the longitudinal axis of said handle, said portions lying at opposite sides of the handle, of a headed stud carried by the handle centrally of the recess,

a second handle including a diagonal laterally-turned portion reduced in thickness and having its reduced portion engaged in the recess of the first-named handle, said reduced portion being slotted, said stud being slidably and pivotally engaged in the slot for pivotal movement of the handle to bring its edge faces at times into engagement with the slanting portions of the walls of the recess, and at times into engagement with the straight portions of said walls, and a jaw carried by the laterally-turned portion of the second handle, said jaw being arranged to lie in parallel relation to the jaw of the first-named handle when the angular portion of

the second handle is in engagement with the slanting walls of the recess, and to lie at an angle to the first-named jaw when said angular portion of the second handle is in engagement with the straight portions of said walls, said second handle being movable slidably upon the stud to move its jaw toward and away from the first-named jaw.

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

FRANKLIN P. MORRIS.

Witnesses:

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