

No. 864,710.

PATENTED AUG. 27, 1907.

C. S. VAUGHN.
WRENCH.

APPLICATION FILED DEC. 17, 1906.

2 SHEETS—SHEET 1.

Fig. 2.

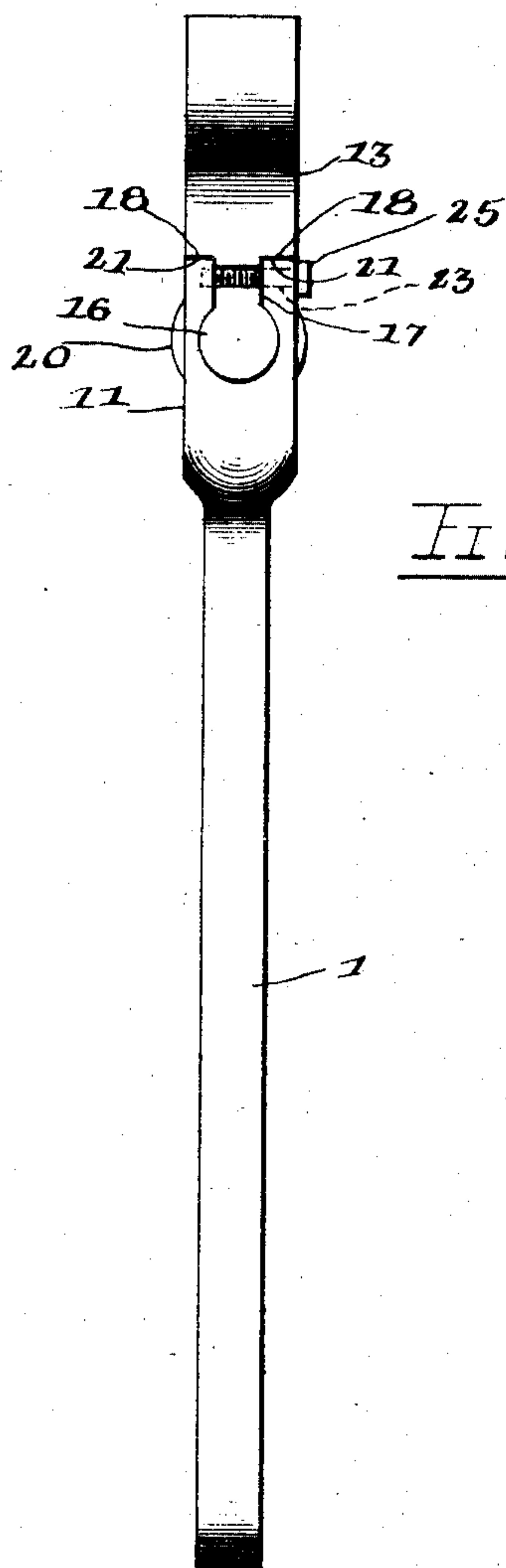
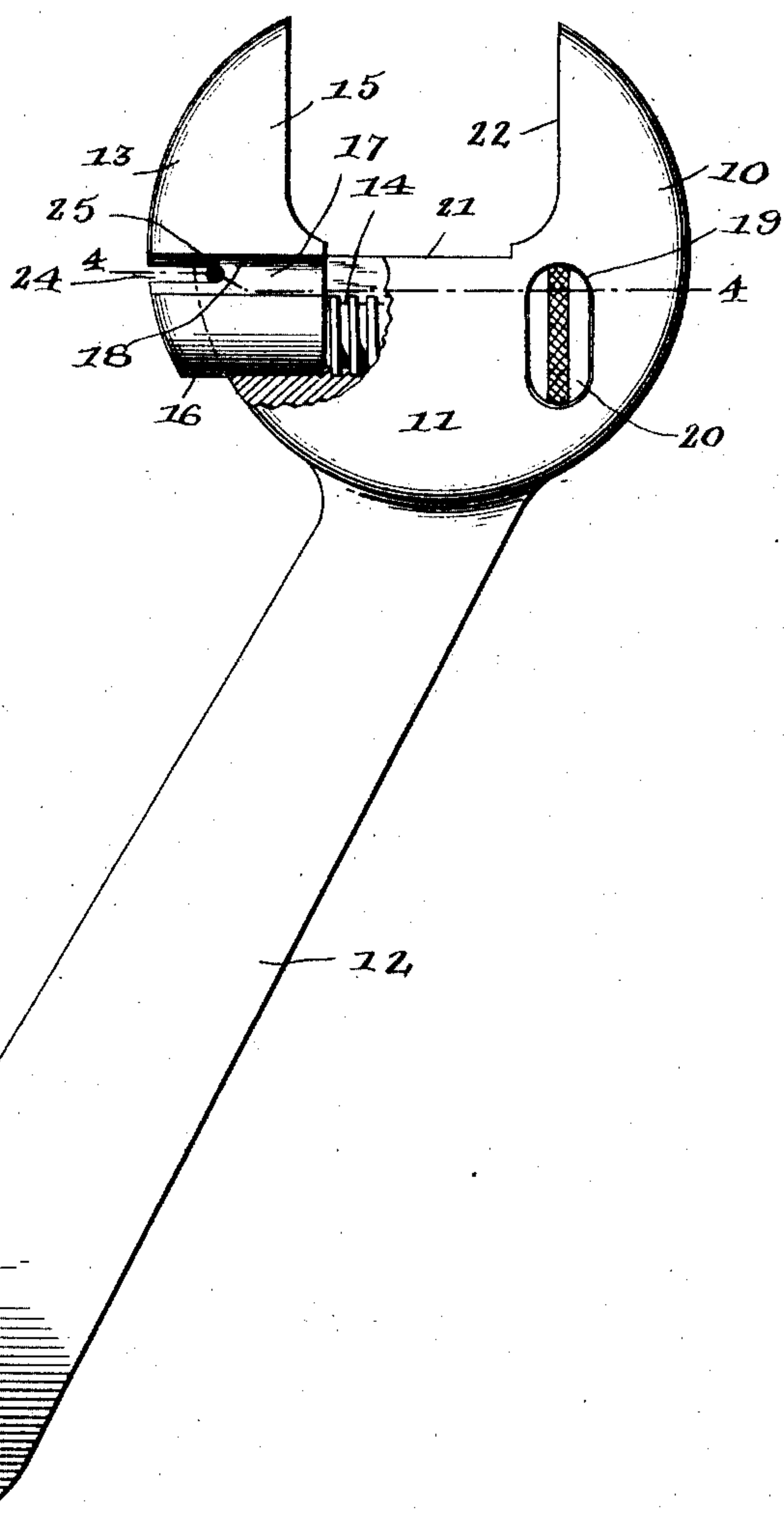


Fig. 1.



Witnesses

W. S. Rockwell
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7"

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2 SHEETS—SHEET 2.

Fig. 4.

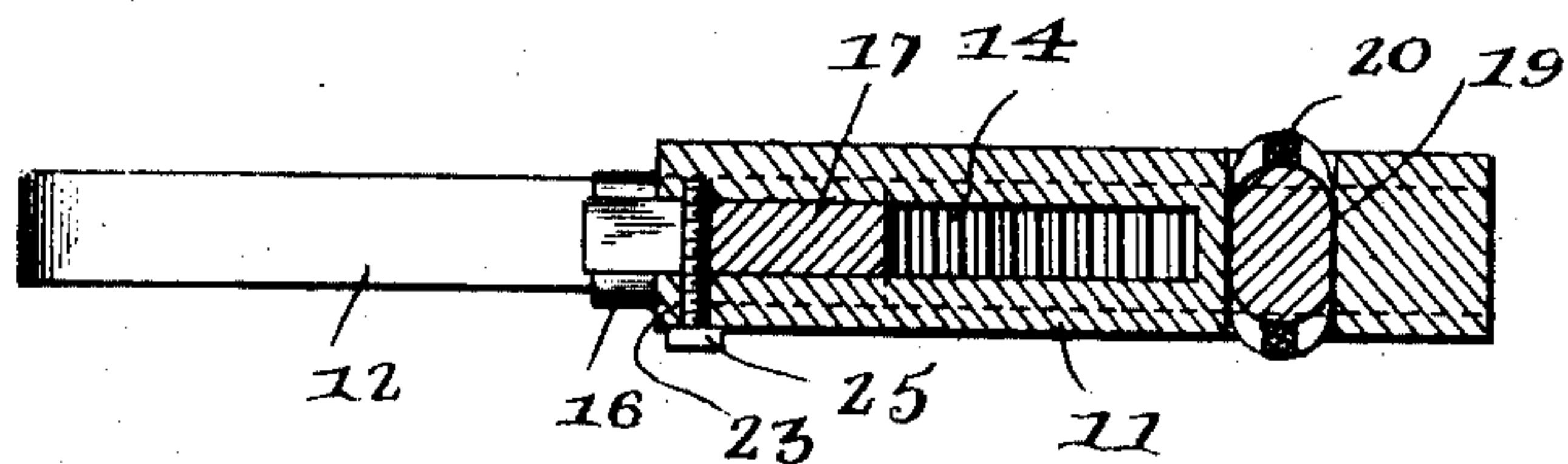
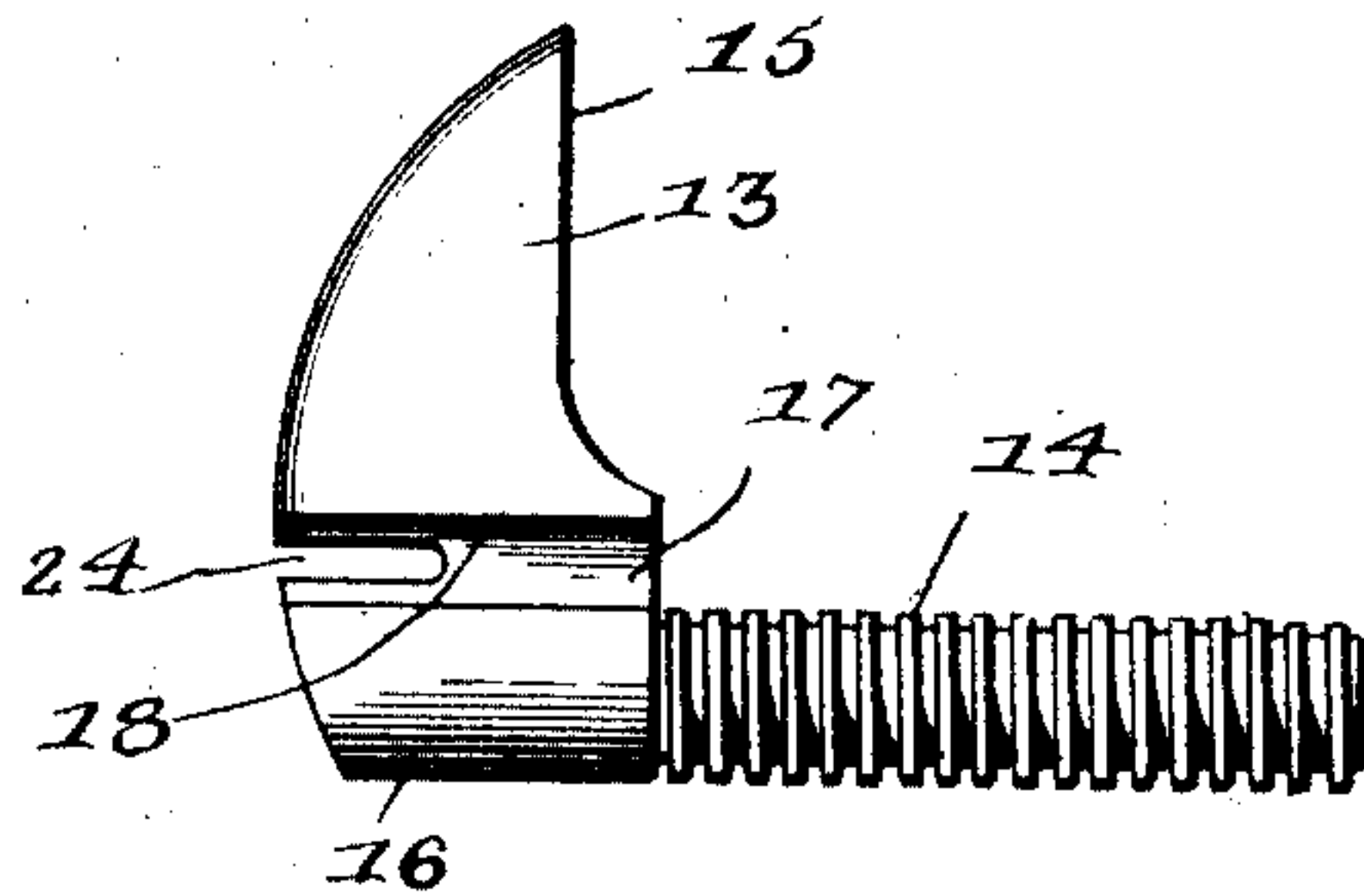


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

CYRUS S. VAUGHN, OF UNION HILL, NEW JERSEY.

WRENCH.

No. 864,710.

Specification of Letters Patent.

Patented Aug. 27, 1907.

Application filed December 17, 1906. Serial No. 348,229.

To all whom it may concern:

Be it known that I, CYRUS S. VAUGHN, a citizen of the United States, residing at Union Hill, in the county of Hudson, State of New Jersey, 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.

10 It is the purpose of this invention to provide improvements in open end wrenches in which the jaws are made adjustable.

15 The nature of the invention is clearly disclosed by the device portrayed in the annexed drawings, forming a part of this specification, in view of which the invention will first be described with respect to its construction and mode of use, and then be pointed out in the subjoined claim.

20 Of the said drawings—Figure 1 is an edge elevation. Fig. 2 is a side elevation, a part being represented as broken away. Fig. 3 is a side view of the adjustable jaw detached. Fig. 4 is a horizontal section in the plane 4 4, Fig. 2.

25 Similar numerals of reference designate similar parts or features, as the case may be, wherever they occur.

In the drawings 10 designates the fixed or rigid jaw on the head 11 with which the handle 12 of the wrench is integrally connected.

30 13 designates the adjustable jaw provided with a screw threaded shank 14 extending forward at an angle of ninety degrees to its face 15. The lower portion 16 of the jaw is rounded corresponding to the rounded form in cross section of the shank, and above said rounded portion the sides of the jaw are reduced so as to form a web, 17, with shoulders 18 at the sides thereabove. A hole is made through the head from edge to edge below the jaws to receive the shank 14 and rounded portion 16 of the adjustable jaw.

40 19 designates a recess formed through the head from side to side to receive the milled nut 20, having an interiorly threaded hole formed through it to receive the threaded shank 14, a slot being formed above the hole

made for said shank for the reception of the web 17 of the adjustable jaw, the shoulders 18 resting on the faces 21 of the head which lie at a right angle to the plane of the faces 15 and 22 of the jaws. Under this construction it will be seen that by turning the milled nut 20 the shank 14 and consequently the jaw 13 may be adjusted nearer to or farther from the fixed jaw 10, for reasons well understood.

50 An interiorly screw-threaded hole 23 is formed in the head near the outer edge at a point where it intersects the slot made for the reception of the web 17 of the movable jaw and the outlet portion of the latter is slotted from its outer edge inward, as at 24. A screw, 25, is tapped in the hole 23, the shank of which screw enters the slot 24 when the jaw 13 is adjusted outward or away from the jaw 10, and so limits the extent of the opening of the jaws. This is an important feature of the invention, since it not only prevents the adjustable jaw from being disengaged from the head but prevents it from being adjusted so far outward that its bearing in the head would be insufficient to sustain it if the use of the wrench were undertaken under the circumstances and considerable power were exerted on the handle.

What is claimed is—

70 An open-ended wrench comprising a head provided with a fixed jaw, an adjustable jaw having a shank extending at a right angle from its own face and toward the face of the fixed jaw, and movable in the head to adjust it with respect to the fixed jaw, the base of the adjustable jaw being reduced on its sides below the jaw proper and on a plane parallel with its shank, forming a web provided with a slot opening through the outer end of the web, a screw engaged in the slot to prevent the movable jaw and its head from being adjusted out of connection with the head, and a single handle integrally connected with the head and extending in a direction slightly inclined from the plane of the faces of the jaws.

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

CYRUS S. VAUGHN.

Witnesses:

CHAS. SINGER, Jr.,
AUSTIN M. HOPEY, Jr.