

No. 896,696.

PATENTED AUG. 18, 1908.

J. W. LIND.
PIPE WRENCH.

APPLICATION FILED JULY 17, 1907.

Fig. 1.

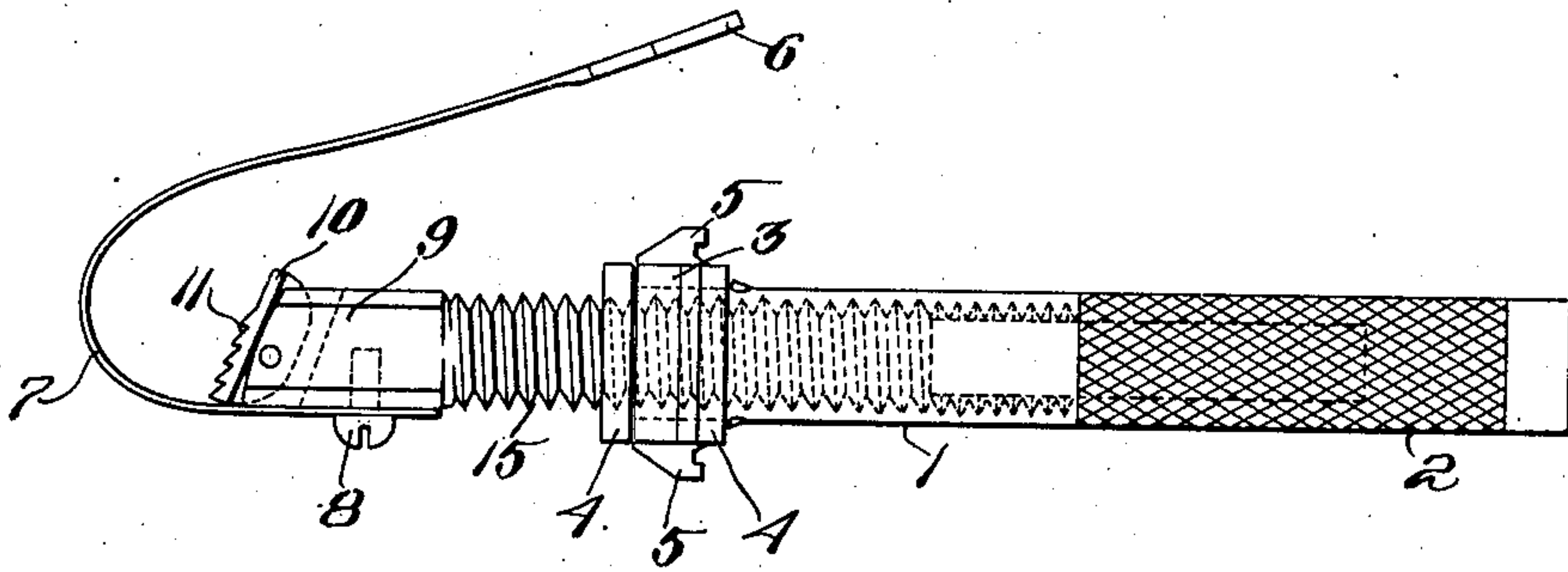


Fig. 2.

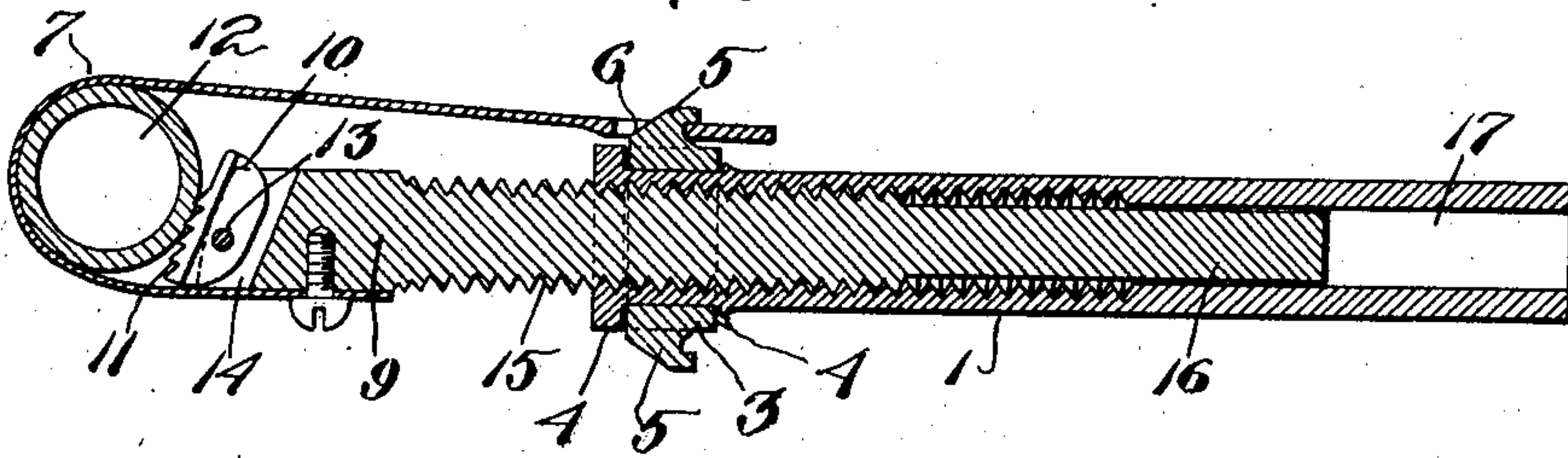
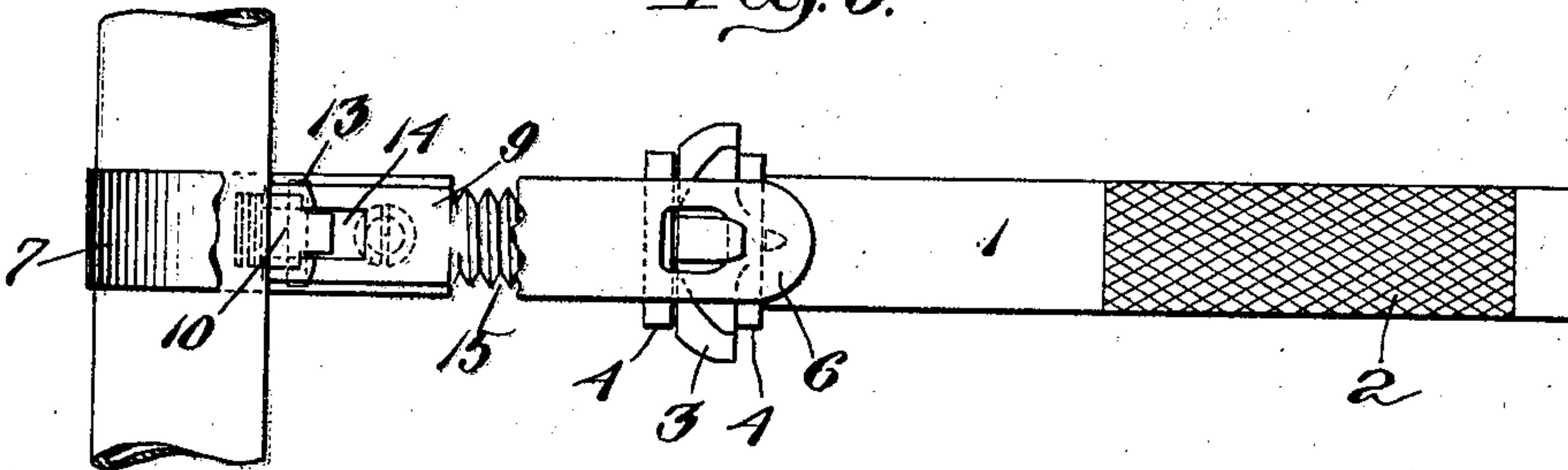


Fig. 3.



Witnesses:

Arthur Randall
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UNITED STATES PATENT OFFICE.

JOHN W. LIND, OF DORCHESTER, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO JOHN J. MORRIS, OF BOSTON, MASSACHUSETTS.

PIPE-WRENCH.

No. 896,696.

Specification of Letters Patent.

Patented Aug. 18, 1908.

Application filed July 17, 1907. Serial No. 384,223.

To all whom it may concern:

Be it known that I, JOHN W. LIND, a citizen of the United States, residing at Dorchester, in the county of Suffolk and State of Massachusetts, have invented an Improvement in Pipe-Wrenches, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

In various situations a peculiarly small and yet powerful pipe wrench is desirable, particularly in connection with automobiles, where the machinery is very compact and usually under a seat or in a confined space, difficult to get at.

Accordingly my invention provides a wrench having few movable parts or separate elements and occupying exceedingly little space, being in fact in its smaller sizes not larger than a lead pencil.

In its simplest form my wrench consists of a tubular handle internally threaded to receive at one end a threaded jaw-member and provided with a hook to engage the free end of a web or strap secured at its opposite end to the outer end of the jaw-member.

Further constructional details and advantages of my invention will appear more at length in the course of the following description taken with reference to the accompanying drawings, in which I have illustrated a preferred embodiment of the invention.

In the drawings, Figure 1 is a side elevation of the wrench ready to engage with a pipe; Fig. 2 is a central longitudinal section thereof, showing the wrench in operative engagement with a pipe; and Fig. 3 is a plan view thereof partly broken away for clearness of illustration.

I provide a handle member consisting of a simple tube 1 preferably having its outer end 2 knurled to constitute a hand-hold, and provided at its inner end with a hook device, preferably consisting of a ring 3 free to turn between shoulders 4 and provided with hooks 5 to engage removably with the end 6 of a weblike strap member 7, preferably made of spring steel secured at 8 to the head 9 of a jaw-member. The jaw-member has a hardened steel jaw 10 provided with usual teeth

11 for biting into a pipe 12 or other article which is to be turned by the wrench, said jaw 10 being preferably pivoted at 13 in a transverse recess 14 in said head. The jaw-member adjacent its head is threaded as indicated at 15 and has a length approximately corresponding to the length of the handle member 1, the stem portion 16 thereof extending into the outer unthreaded portion 17 of the handle for giving strength and bracing effect.

In use the strap 7 is carried around the pipe 12 and its apertured end 6 hooked over one of the hooks 5 of the handle member, whereupon the handle is rotated over to the left, which results in quickly lengthening the wrench and correspondingly tightening the strap 7. As soon as the strap 7 and jaw 10 are brought into pinching engagement with the pipe the wrench is ready to turn the pipe. One hook 5 will answer but I prefer to provide a number of hooks for greater convenience. Also it is unnecessary to provide a separate jaw 10 but the latter is preferable as it enables me to secure better results in operation and also to provide a hardened jaw of more expensive material than the carrying member 9. The long length of engaging threaded portions of the handle and contained jaw-member give great strength of resistance and render the wrench durable. One great advantage of my wrench is that there are no pivoted levers and no cranks or divergently movable parts, but on the contrary it consists simply of telescoping tubular members having a small head and strap. While the strap may be of any material, I prefer that it should be stiff and spring-like.

I am aware that various changes may be made over the embodiment herein shown without departing from the spirit and scope of my invention as defined in the following claims.

Having described my invention, what I claim as new and desire to secure by Letters Patent is,

A pipe wrench, consisting of two telescoping members, one being a tubular handle and the other a contained rod having threaded engagement with each other, each normally projecting at one end beyond the other, a

hook mounted to rotate on the forward end
of said handle, said hook being immovable
longitudinally thereof, a jaw pivoted in-
termediate its length at the forward end of
5 said rod, and a flexible band secured to the
forward end of the rod and provided with
means for detachably engaging said hook to
form a loop.

In testimony whereof, I have signed my
name to this specification, in the presence of 10
two subscribing witnesses.

JOHN W. LIND.

Witnesses:

GEO. H. MAXWELL,
EDWARD MAXWELL.