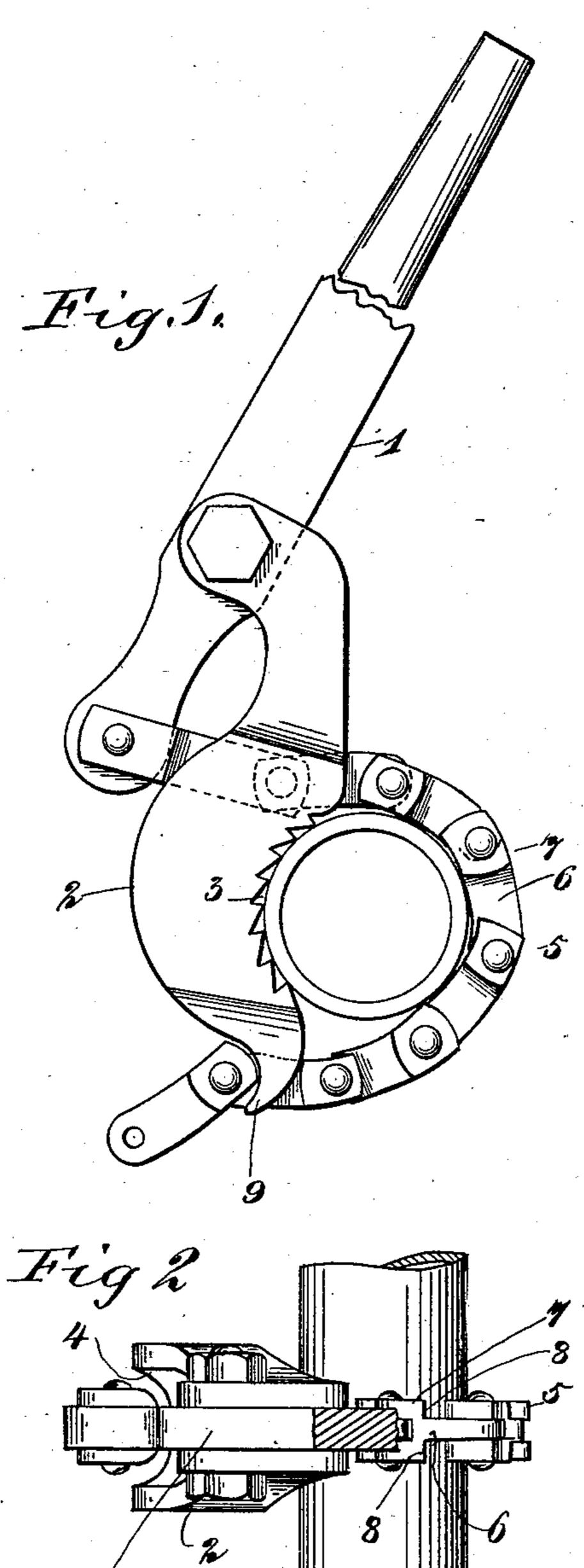
(No Model.)

## J. MUSGRAVE & W. COOK. PIPE WRENCH.

No. 567,492.

Patented Sept. 8, 1896.



WITNESSES:

L. N. Legendre. C. Rhyman INVENTORS
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BY
MMM
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## United States Patent Office.

JOSHUA MUSGRAVE AND WILLIAM COOK, OF AGUILAR, COLORADO.

## PIPE-WRENCH.

SPECIFICATION forming part of Letters Patent No. 567,492, dated September 8, 1896.

Application filed May 27, 1896. Serial No. 593, 294. (No model.)

To all whom it may concern:

Be it known that we, Joshua Musgrave and WILLIAM COOK, of Aguilar, in the county of Las Animas and State of Colorado, have in-5 vented certain new and useful Improvements in Pipe-Wrenches, of which the following is a full, clear, and exact description.

This invention relates to improvements in pipe-wrenches of the class having a chain to 10 engage around a pipe, and the object is to so construct the wrench that when in use an equal pressure will be exerted on substantially the entire circumference of a pipe, and thus obviate the danger of crushing in the 15 pipe.

We will describe a wrench embodying our invention, and then point out the novel fea-

tures in the appended claims.

Reference is to be had to the accompanying 20 drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in both the figures.

Figure 1 is a side view of a wrench embodying our invention, and Fig. 2 is a top view 25 thereof with a portion of the handle broken

away.

The wrench comprises a lever-handle 1, fulcrumed to a jaw 2, having a curved serrated inner surface 3. This jaw 2 has an opening 30 4 through its body portion, through which a chain 5 extends. This chain 5 is pivotally connected at one end to the end of the leverhandle.

As here shown, this chain consists of links 35 each having a body or stem portion 6 and a bifurcated portion 7, the stem portion of one link being pivoted between the bifurcated portion of another link. At the junction of the stem portion and bifurcated portion later-40 ally-extended shoulders 8 are formed and are designed to engage with fingers 9, formed on the free end of the jaw 2.

It is to be understood that we do not limit our invention to the particular form of chain

shown and described, but preferably the inner 45 edges of the links will be curved longitudinally, as shown, so as to conform somewhat to

the shape of the pipe.

In operation, the chain is to be engaged around the pipe and the shoulders 8 of the 50. link engaged with the fingers 9. A downward movement of the lever-handle will cause the chain and jaw to tightly engage the pipe so that it may be turned, and upon the reverse movement of the handle the chain will be 55 loosened, allowing the wrench to turn without turning the pipe.

Having thus fully described our invention, we claim as new and desire to secure by Let-

ters Patent—

1. A pipe-wrench comprising a lever-handle, a jaw pivoted to said handle at a point rearward from the front end, and a chain connected with the end of the handle in front of the pivot of the jaw, the said jaw having an 65 opening through which the chain adjacent to its connection extends and being formed with a concaved serrated surface on one edge for coacting with the chain, the jaw further having its front end adapted to engage the chain, 70 substantially as described.

2. A pipe-wrench comprising a lever-handle, a jaw pivoted to said handle at a point rearward from the front end, and a chain connected with the end of the handle in front of 75 the pivot of the jaw, the chain-links having their working edges curved, the said jaw having an opening through which the chain adjacent to its connection extends and being formed with a concaved serrated surface on 80 one edge for coacting with the chain, and jaw further having its front end adapted to engage. the chain, substantially as described.

> JOSHUA MUSGRAVE. WILLIAM COOK.

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m Witnesses:}$ FRED W. NOBLE, HARRY C. COSSUM.