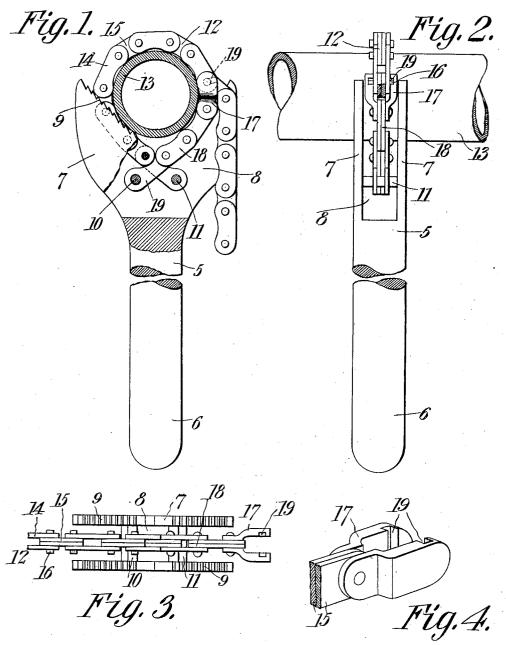
## E. L. FESLER. PIPE TONGS.

APPLICATION FILED OCT. 19, 1906



WITNESSES:

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## UNITED STATES PATENT OFFICE.

EDWARD L. FESLER, OF SANTA MARIA, CALIFORNIA.

## PIPE-TONGS.

No. 865,369.

Specification of Letters Patent.

Patented Sept. 10, 1907.

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To all whom it may concern:

Be it known that I, Edward L. Fesler, a citizen of the United States, residing at Santa Maria, in the county of Santa Barbara and State of California, have invented 5 a new and useful Pipe-Tongs, of which the following is a specification.

This invention relates to pipe tongs and has for its object to improve the construction and increase the utility and efficiency of devices of this character.

With these and other objects in view the invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, and illustrated in the accompanying drawings, it being understood that various changes in form, proportions, 15 and minor details of construction may be resorted to within the scope of the appended claims.

In the accompanying drawings forming a part of this specification: Figure 1 is a side elevation partly in section of a wrench constructed in accordance with my 20 invention. Fig. 2 is a front elevation of the same. Fig. 3 is a plan view showing the pipe detached and the gripping chains separated or in inoperative position. Fig. 4 is a perspective view of the locking link detached.

Similar numerals of reference indicate corresponding parts in all of the figures of the drawings.

The improved wrench comprises a stock or body portion 5 having one end thereof extended to form a handle 6 and its opposite end provided with spaced 30 plates 7 forming a socket 8.

The upper edges of the plates 7 are formed with  $\boldsymbol{V}$ shaped recesses adapted to receive a pipe or other object to be operated upon, said edges being provided with teeth or serrations 9 thereby to present a rough-35 ened surface for engagement with the pipe and thus prevent rotary movement of the latter.

The socket or recess 8 opens through the opposite sides of the stock and extending transversely across the chamber 8 and riveted or otherwise secured to the 40 walls of the plates 7 are spaced pins 10 and 11 preferably disposed in alinement with the serrated edges of the plates 7, as shown.

Pivotally mounted on the pin or rod 11 is one end of a chain or other flexible medium 12 adapted to embrace the pipe 13 and preferably formed of a plurality of pivotally united links 14 and 15. The links 14 are spaced apart for the reception of the links 15 to which they are pivotally united by connecting pins the opposite ends of which are extended laterally beyond 50 the outer faces of the links 14 to form study or lugs 16 adapted to engage the terminal link 17 of a similar chain 18 operatively connected with the pin 10. The inner or pivoted end of the chain 18 preferably consists of a single link 19 which intersects or passes between 55 the adjacent spaced links 14 of the chain 12 so as to permit the chain 18 to embrace a portion of the pipe.

The link forming the free end of the chain 18 consists of spaced plates or members 17 having their inner ends riveted or otherwise rigidly secured to the adjacent links 15 and having their inner faces at the outer ends 60 of the plates provided with vertically disposed co-incident recesses 19' adapted to receive the adjacent lugs or studs 16 on the chain 12 and thus lock the chains 12 and 18 in engagement with each other and also in engagement with the pipe.

In using the wrench the pipe or other object to be operated upon is positioned on the base 9 after which the free end of the chain is passed around the pipe and the lugs 16 on the adjacent link of said chain introduced in the locking recesses 19 thus effectually locking the 70 adjacent ends of the chain together and preventing accidental rotation of the pipe. In order to remove the wrench it is merely necessary to exert an upward pull on the free end of the chain 12 when the lugs 16 will become disengaged from the locking recesses 19 thus 75 permitting the chain 12 to be swung laterally so as to permit the removal of the pipe.

The disposition of the pins 10 and 11 with respect to the operating or serrated faces of the jaws is an important feature of the invention as by having the pins 80 so disposed the chains will embrace a greater surface of the pipe or rod and thereby increase the grip on said pipe, and being spaced equal distances from the longitudinal axis of the stock will cause the chains to operate on both sides of the pipe with equal facility and 85 thus produce an effective, double acting and combined right and left hand implement.

From the foregoing description it will be seen that there is provided an extremely simple, inexpensive and efficient device admirably adapted for the attain- 90 ment of the ends in view.

Having thus described the invention what is claimed

- 1. A wrench having angularly related jaws, said jaws being recesses, and flexible gripping elements, each having 95 one end secured to the wrench, said ends intersecting each other and the opposite ends of said flexible members being arranged to interlock.
- 2. A wrench having spaced jaws defining an intermediate chamber, and flexible gripping elements having inter- 100 secting end portions secured within the chamber, the opposite ends of said elements being provided with interlocking parts.
- 3. A wrench having spaced jaws defining an intermediate chamber, and flexible gripping elements of different 105 lengths secured within the chamber and having their free ends provided with interlocking parts, one of the gripping elements being extended beyond the interlocked portion thereof.
- 4. A wrench having spaced jaws defining an intermedi- 110 ate chamber, and intersecting flexible gripping elements each having one end thereof secured within the chamber and their free ends provided with interlocking parts, one of the gripping elements being extended beyond the interlocked portion thereof.
- 5. A wrench having spaced jaws defining an intermedi-

ate chamber, and flexible gripping elements pivotally mounted within the chamber and intersecting each other, such gripping elements having interlocking members at their free ends.

5 6. A wrench having a handle and provided with spaced jaws defining an intermediate recess, and flexible gripping elements secured within the chamber on opposite sides of the longitudinal axis of the handle and intersecting each other, the opposite ends of said elements being provided 10 with interlocking parts.

A wrench having spaced jaws defining an intermediate chamber, a gripping chain pivotally mounted within the chamber and provided with laterally extending lugs, and a second gripping chain also pivotally mounted within said chamber and provided with a terminal link the inner walls of which are formed with locking recesses adapted to receive the lugs for locking said chains in engagement with each other.

8. A wrench comprising a stock provided with spaced V shaped gripping jaws defining an intermediate chamber, a gripping chain pivotally mounted in said chamber and adapted to embrace the object to be operated upon, lugs extending laterally in opposite directions from the gripping chain, a locking chain intersecting the gripping chain, and spaced plates carried by the free end of the gripping chain and provided with coincident recesses adapted to receive the lugs for locking the chains in engagement with each other.

9. A wrench comprising a stock provided with spaced in-30 clined gripping jaws defining an intermediate chamber, pins extending transversely across the chamber and disposed to alinement with the gripping jaws, a gripping chain pivotally mounted on one of said pins and adapted to embrace the object to be operated upon, and a locking 35 chain pivotally mounted on the other pin and intersecting the gripping chain, said chains being provided with interlocking parts. 10. A wrench comprising a stock having one end thereof terminating in a handle and its opposite end provided with spaced V shaped gripping jaws defining an intermediate 40 chamber opening through the opposite side of the stock, pins extending transversely across the chamber and disposed in alinement with the active faces of the gripping jaws, a gripping chain pivotally mounted on one of the pins and adapted to embrace the object to be operated 45 upon, and a locking chain pivotally mounted on the adjacent pin and intersecting the gripping chain, said chains being provided with interlocking parts.

11. A wrench having a handle and provided with a gripping jaw, a chain carried by the jaw and formed of pivotally united links having laterally extending lugs, a second chain extending through the first mentioned chain and also formed of pivotally united links, there being recesses formed in the last mentioned chain for the reception of the lugs.

12. A wrench including spaced supporting jaws defining an intermediate chamber, a chain pivotally mounted within the chamber and adapted to embrace the object to be operated upon, said gripping chain being provided with laterally extending lugs, and a locking chain also pivotally mounted within the chamber and intersecting the gripping chain, and supporting plates carried by the free end of the locking chain and provided with coincident recesses adapted to receive the lugs for locking said chains in engagement with each other.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

EDWARD L. FESLER.

Witnesses:

JOHN E. WALKER,
THOS. PREISKER.