

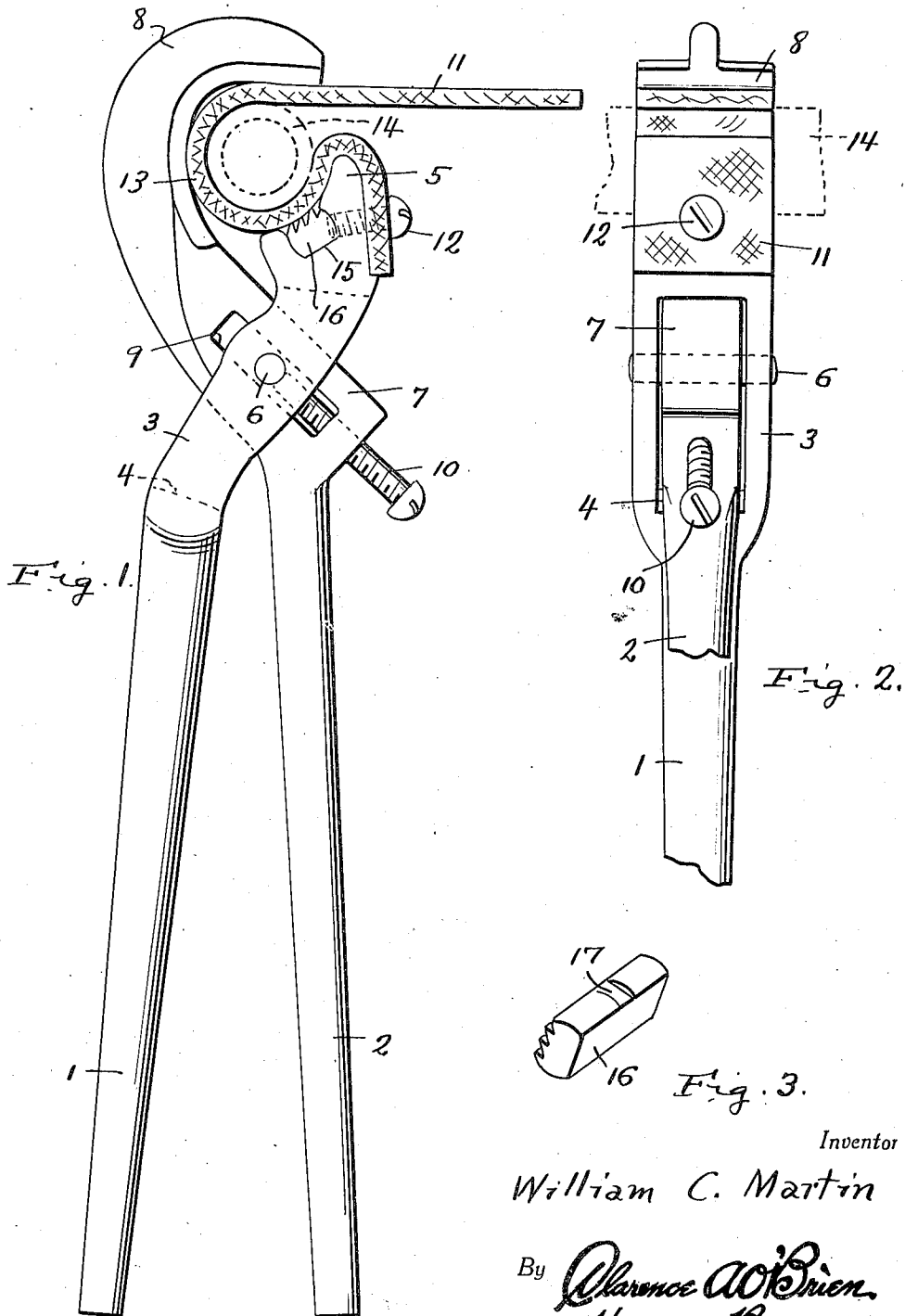
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PIPE WRENCH

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PIPE WRENCH

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3 Claims. (Cl. 81-64)

The present invention relates to new and useful improvements in pipe wrenches and has for one of its important objects to provide, in a manner as hereinafter set forth, a tool of this character embodying novel means for preventing marring of the work by the wrench.

Another very important object of the invention is to provide, in a pipe wrench of the type including a pair of handles and coacting jaws on one end thereof, novel means for pivotally and adjustably connecting said handles.

Still another important object of the invention is to provide a pipe wrench comprising a toothed plate removably mounted in one of the jaws thereof.

A still further important object of the invention is to provide a pipe wrench of the character described comprising common means for removably securing the aforementioned work protecting means and the toothed plate to the tool.

Other objects of the invention are to provide a pipe wrench of the character set forth which will be comparatively simple in construction, strong, durable, highly efficient and reliable in use, compact, light in weight and which may be manufactured at low cost.

All of the foregoing and still further objects and advantages of the invention will become apparent from a study of the following specification, taken in connection with the accompanying drawing wherein like characters of reference designate corresponding parts throughout the several views, and wherein:—

Figure 1 is a view in side elevation of a pipe wrench constructed in accordance with the present invention.

Figure 2 is a fragmentary view in front elevation, showing a portion of the invention.

Figure 3 is a detail view in perspective of the removable toothed plate.

Referring now to the drawing in detail, it will be seen that the embodiment of the invention which has been illustrated comprises a pair of handles 1 and 2, the former including an angularly extending end portion 3 having an elongated opening 4 therein and terminating in a jaw 5. A pin 6 traverses the opening 4.

The handle 2 is provided with an angularly extending enlargement 7 on one end which extends through the opening 4 and is shiftable therein, said enlargement 7 terminating in a jaw 8. The enlargement 7 of the handle 2 has formed therein a longitudinal slot 9 through which the pin 6 passes. Threadedly mounted for adjustment in the inner end portion of the enlargement 7 is a

screw 10 which extends longitudinally into the slot 9 for engagement with the pin 6 in a manner to permit adjustment of the pivotal connection of the handles 1 and 2 for setting the jaws 5 and 8 for different sizes of pipe.

The reference numeral 11 designates a work protecting shield in the form of a strap of suitable material which is detachably secured to the jaw 5 through the medium of a screw 12. As illustrated to advantage in Figure 1 of the drawing, the protecting shield or strap 11 is adapted to be tucked in between the jaws 5 and 8 in a manner to provide a loop 13 which substantially encircles the work 14 for preventing direct contact of said jaws therewith. It will be noted that one end of the protecting shield or strap 11 is free. This arrangement permits the protecting shield or strap to be readily applied to different sizes of pipes.

Removably mounted in a transverse channel 15 which is provided therefor in the jaw 5 is a toothed plate 16. As best seen in Figure 3 of the drawing, the toothed plate 16 has formed therein a notch or recess 17 for the reception of the screw 12 for releasably securing said plate in position. It will thus be seen that the screw 12 constitutes common means for detachably securing the strap 11 and the toothed plate 16 to the jaw 5.

It is thought that the manner of using the wrench will be readily apparent from a consideration of the foregoing. To adjust the tool for different sizes of work the screw 10 is threaded inwardly or outwardly in the slot 9. When the handles 1 and 2 are swung together for clamping the jaws 5 and 8 on the work the pin 6 bears against the inner end of the adjusting screw 10. When it is desired to prevent marring the surface of the work such as nickel-plated, brass or copper pipe, the protecting strap 11 is brought into use to prevent direct contact of the jaws 5 and 8 with said work. However, when it is not necessary to protect the pipe against marring, the strap 11 is not used and, if desired, may be removed. This permits the toothed plate 16 to function for assuring a good grip on the pipe. The strap 11 may be swung to an out-of-the-way position, also the toothed plate 16 may be removed, by merely loosening the screw 12.

It is believed that the many advantages of a pipe wrench constructed in accordance with the present invention will be readily understood and although a preferred embodiment of the tool is as illustrated and described, it is to be understood that changes in the details of construction and in the combination and arrangement of parts may

be resorted to which will fall within the scope of the invention as claimed.

What is claimed is:—

5 1. A wrench comprising a pair of pivotally connected handles, coacting jaws on one end of said handles, a toothed plate removably mounted on one of the jaws, a flexible element secured, at one end, to said one jaw and adapted for insertion between the jaws for protecting the work
10 therefrom, the other end of said element being free, and common means for securing the toothed plate and the flexible element to said one jaw.

15 2. A wrench comprising a pair of pivotally connected handles, coacting jaws on one end of said handles, a toothed plate removably mounted on one of the jaws, a flexible element secured, at one end, to said one jaw and adapted for insertion between the jaws for protecting the work therefrom, the other end of said element being free,

and common means for securing the toothed plate and the flexible element to said one jaw, the toothed plate having a notch therein, said common means comprising a screw inserted through the flexible element and threaded into said one jaw and engaged in the notch. 5

3. A wrench comprising a pair of pivotally connected handles, coacting jaws on one end of said handles, a toothed plate removably mounted on one of the jaws, a flexible element secured at one end to said one jaw and adapted for insertion between the jaws for protecting the work therefrom, the other end of said element being free, and common means for securing the toothed plate and the flexible element to said one jaw, 10 said means comprising a screw inserted through the flexible element and threaded into said one jaw into engagement with said plate. 15

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