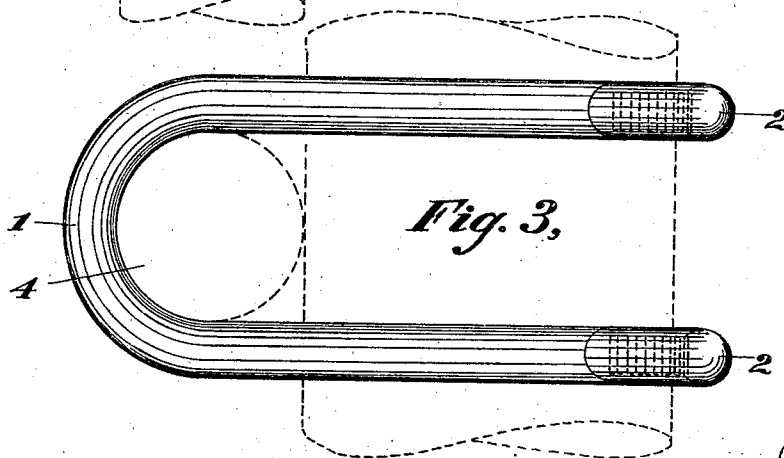
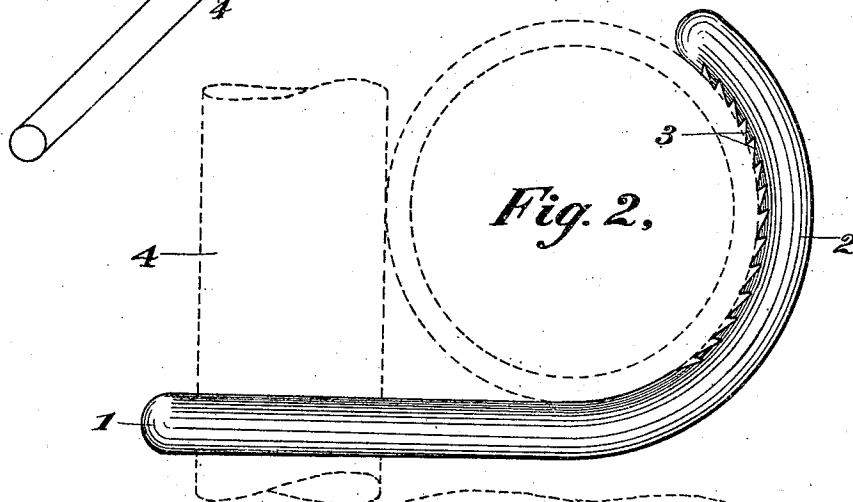
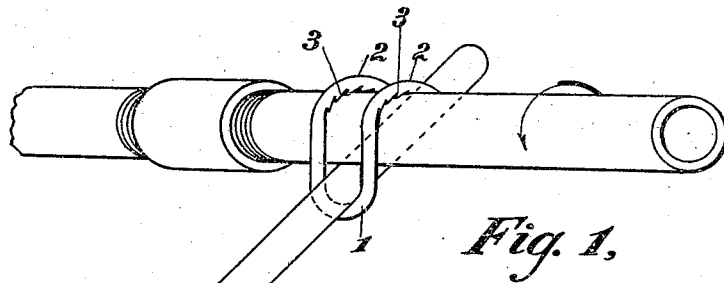


A. TRÉAND.
PIPE WRENCH.

APPLICATION FILED MAR. 26, 1909.

956,453.

Patented Apr. 26, 1910.



Witnesses:

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UNITED STATES PATENT OFFICE.

ALBERT TRÉAND, OF NOMININGUE, QUEBEC, CANADA.

PIPE-WRENCH.

956,453.

Specification of Letters Patent.

Patented Apr. 26, 1910.

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To all whom it may concern:

Be it known that I, ALBERT TRÉAND, a subject of the King of Great Britain, residing at Nominigue, county of Ottawa, in the Province of Quebec, Canada, have invented certain new and useful Improvements in Pipe-Wrenches; and I do hereby declare that the following is 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.

The invention to be hereinafter described relates to wrenches, and more particularly to the general class of wrenches known as pipe and rod wrenches.

Broadly speaking, it comprises a metallic yoke bent to present two parallel curved arms provided with gripping teeth, and a rod or handle adapted to be seated in the end of the yoke and used as a lever.

In order to more clearly disclose the construction, operation and use of the invention, reference should be had to the accompanying drawings forming part of the present application.

Throughout the several views of the drawings, like reference characters designate the same parts.

In the drawings: Figure 1 is a perspective of the invention, as applied; Fig. 2 is a side view of the same; and, Fig. 3 is a front view of the same.

In order to get a firm bite on the rod or pipe to be turned, it is necessary that the jaws of the wrench shall extend a considerable distance about the same, and it is also preferable to provide these jaws with gripping surfaces.

According to the preferred form of the present invention, the gripping jaws of the wrench are made by bending a single rod or bar 1 into a substantially U-shaped yoke so as to present two parallel arms 2, and then curving these two arms to a substantially semi-circular shape, their parallelism

being maintained in their curved position. The inner faces of these arms are provided with sharp inclined gripping teeth 3. To complete the wrench, a handle or lever is, of course, required. This takes the form of a rod 4, which may be passed through between the arms and seated in the end of the yoke. In this position, the short end of the lever will bear upon one side of the pipe, while the arms 2 grip the opposite side. The long arm will, of course, constitute the handle. According to this construction, the bite of the arms 2 on the pipe will be increased in proportion to the force exerted on the long arm of the lever 4.

In the drawings, the bar 4 and rod 1 are shown as totally separate and unconnected. It is obvious, however, that the rod 4 may be either pivotally or otherwise movably connected to the U-shaped yoke.

It is thought that the operation and use of the invention will be clear from the preceding detailed description.

Changes may be made in the construction, arrangement and disposition of the several parts of the invention, without in any way departing from the field and scope of the same, and it is meant to include all such within this application, wherein only a preferred form has been disclosed.

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

A wrench of the character described, comprising a single rod bent to U form and having the ends of its branches curved to fit the rounded surface of a pipe or rod and provided with gripping teeth, and a handle for operating said bent rod.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

ALBERT TRÉAND.

Witnesses:

LOUIS GAROCHÉ,
RAOUL LÉ GUION.