(No Model.)

V. C. ROCHOLL.

PIPE WRENCH.

No. 538,745. Patented May 7, 1895.

Fig. 1

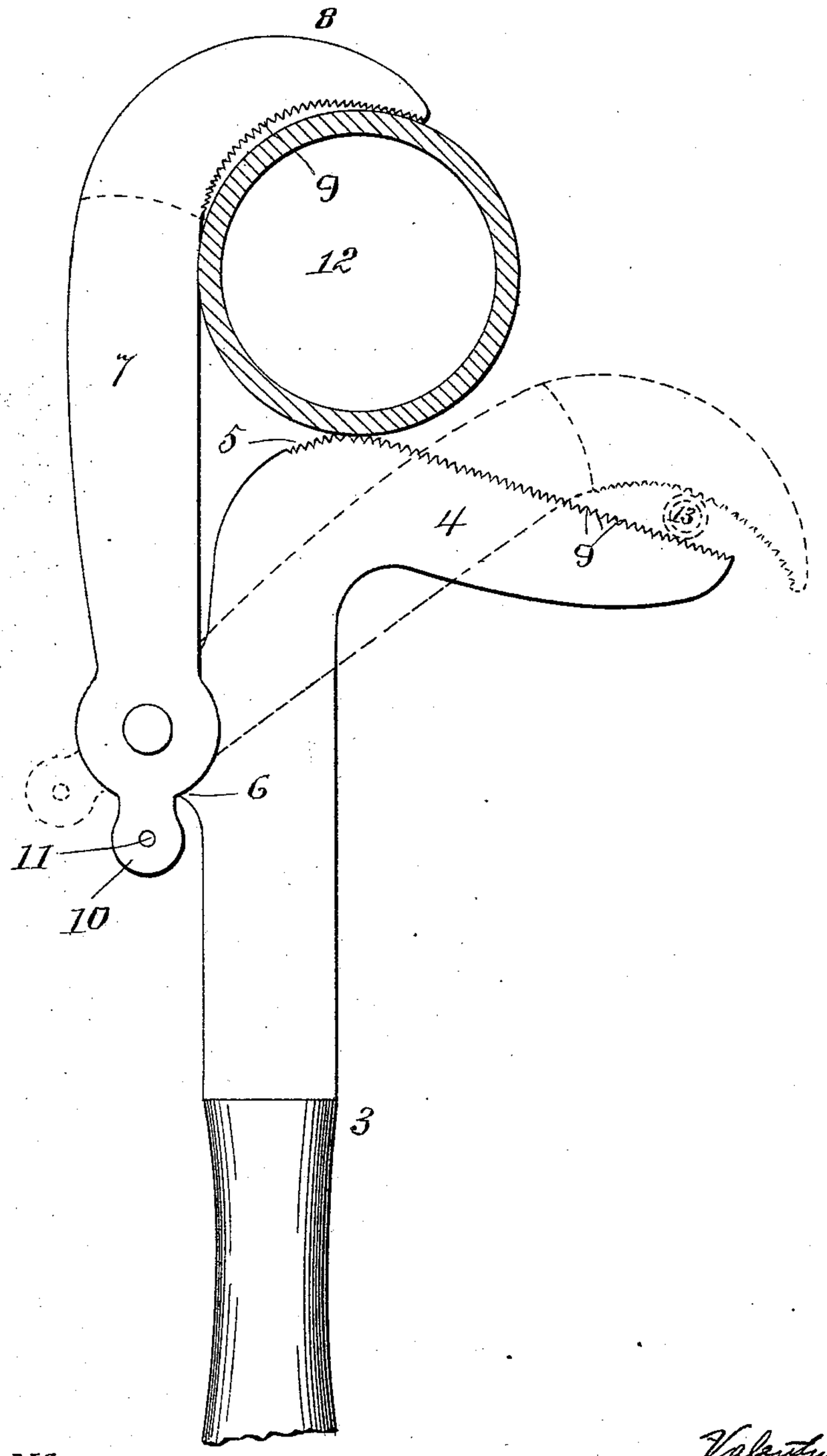
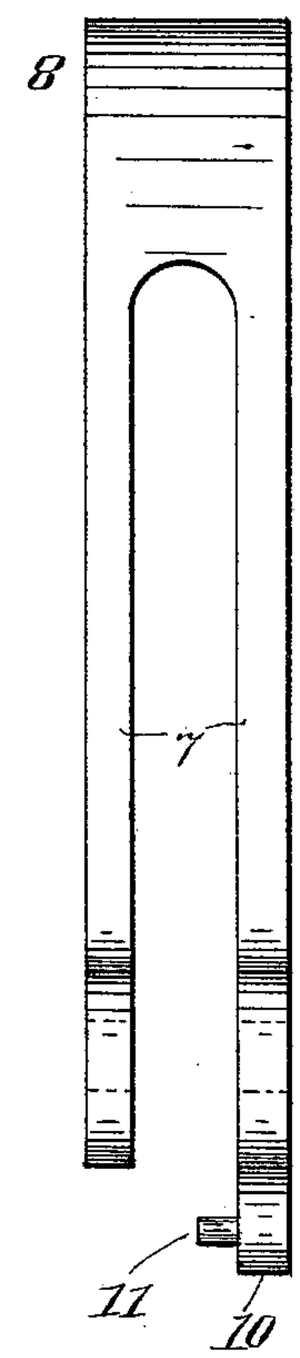


Fig. 2



Witnesses—
Claude Sunsford.
J. L. Ames.

Inventor:
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By Homer C. Hartman
Atty.

UNITED STATES PATENT OFFICE.

VALENTINE C. ROCHOLL, OF FORT WAYNE, INDIANA.

PIPE-WRENCH.

SPECIFICATION forming part of Letters Patent No. 538,745, dated May 7, 1895.

Application filed June 12, 1894. Serial No. 514,323. (No model.)

To all whom it may concern:

Be it known that I, VALENTINE C. ROCHOLL, a citizen of the United States, residing at the city of Fort Wayne, in the county of Allen, in the State of Indiana, 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, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to improvements in pipe wrenches, in which the jaws of the wrench adjust themselves automatically to the work to be done; and the objects of my improvements are, first, to provide an improved pipe wrench which shall be automatically adjustable to various sizes of pipe, and shall grasp the larger pipe at points of greatest strength of the wrench, and shall be easily operated and self-adjustable to the various sizes of pipe. I attain these objects by the mechanism shown in the accompanying drawings, in which—

Figure 1 is a side view of my improved wrench, and Fig. 2 is a front view of the clevis provided with a serrated jaw.

The construction is as follows: The lever handle 3 is formed or otherwise provided at one end with a serrated head or jaw 4, which projects to one side in curved form at the point 5 of bending, and in a straight line the rest of the distance, as shown in the drawings. Below this head and below its junction with the handle, a boss 6 is formed on the handle, to which the two arms 7 of the clevis are pivoted. The clevis is provided at its closed extremity with a curved jaw 8; both the head 4 and jaw 8 being provided with teeth or serrations 9. I also provide one of the arms of the clevis with a short projection 10 upon the rear of the pivoted end, and I place a pin 11 through, or make it integral with such projection 10, so that it will limit the motion of the clevis backward from the jaw 4. This, however, is merely a convenience and not essential to the operation of the wrench.

The operation is as follows: When the clevis 7 is drawn away from the head so that its arms 7 are in line parallel with the line of the handle 3 the serrated jaw 8 upon the end of the clevis 7 is at its greatest distance from the serrated head 4, and will therefore engage the largest sized pipe 12 when in such position. When the handle works the pipe, the point of leverage on the head is then in or very near in line with the lever 3 where it has the greatest possible strength. As the clevis 7 with its jaw 8 moves down to engage smaller sizes of pipe, the engagement is along down the extended head, so that the smallest pipe 13 is engaged when the clevis and head move down to the extreme end of the head 4, as shown by the dotted lines in Fig. 1. Thus the wrench operates at points of least strength upon the size of pipe furnishing the least resistance to turning, and at points of greater strength and leverage upon sizes of pipe furnishing larger resistance, and this is the essential characteristic of my invention.

Having thus described my invention, what I claim is—

A pipe wrench consisting of a lever handle provided at one end with a serrated head extending outwardly from one side and forming an acute angle with the lever handle, and having its face curved at its juncture with the other side of the handle: and a clevis provided at its closed end with a curved jaw and pivoted to the side of the lever handle opposite to the serrated head and below it.

In testimony whereof I hereunto subscribe my name, in the presence of two witnesses, this 5th day of June, A. D. 1894.

VALENTINE C. ROCHOLL.

Witnesses:
H. C. HARTMAN,
J. M. STOUDER.