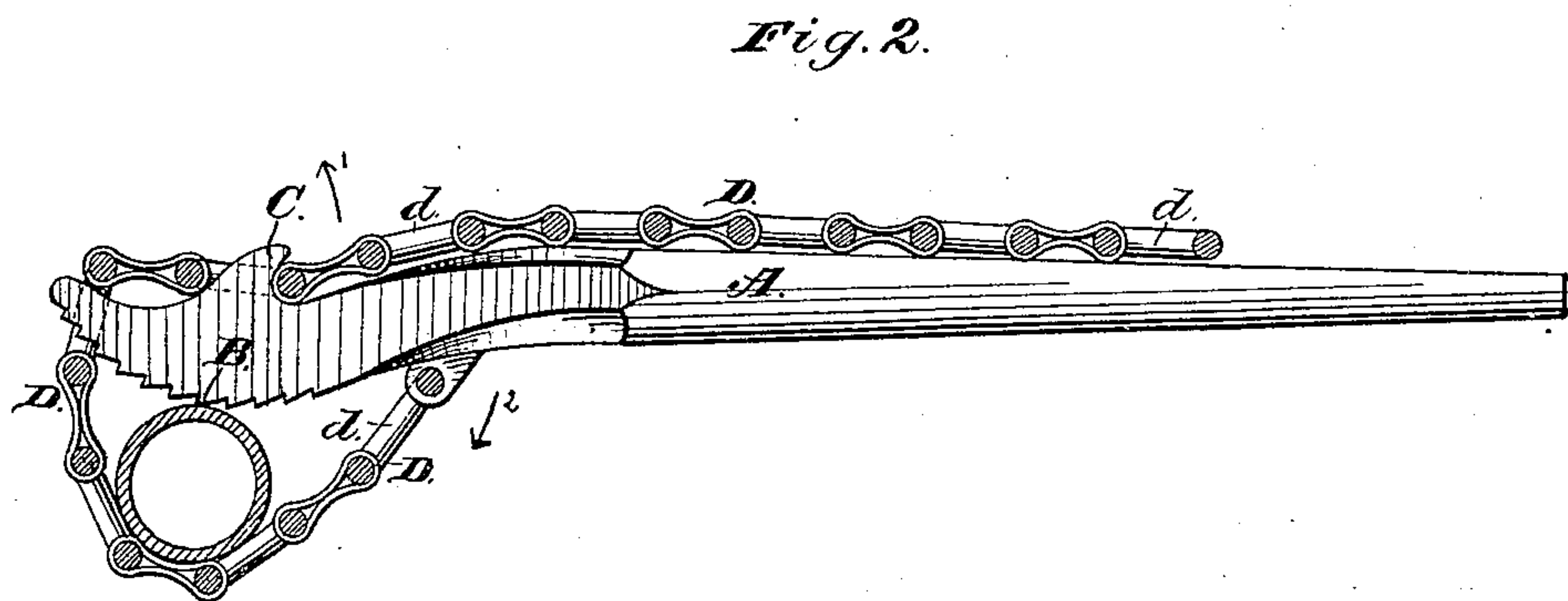
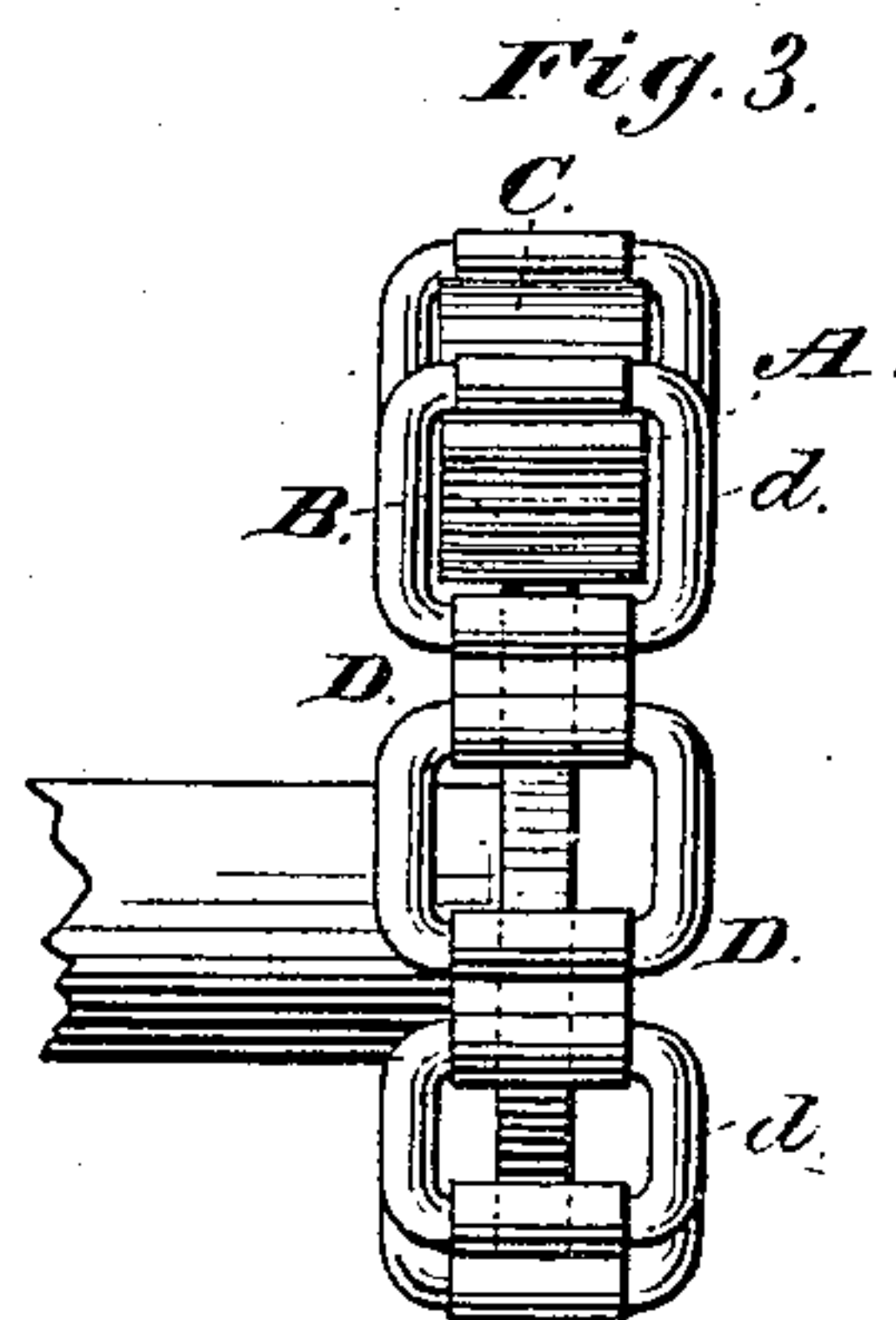
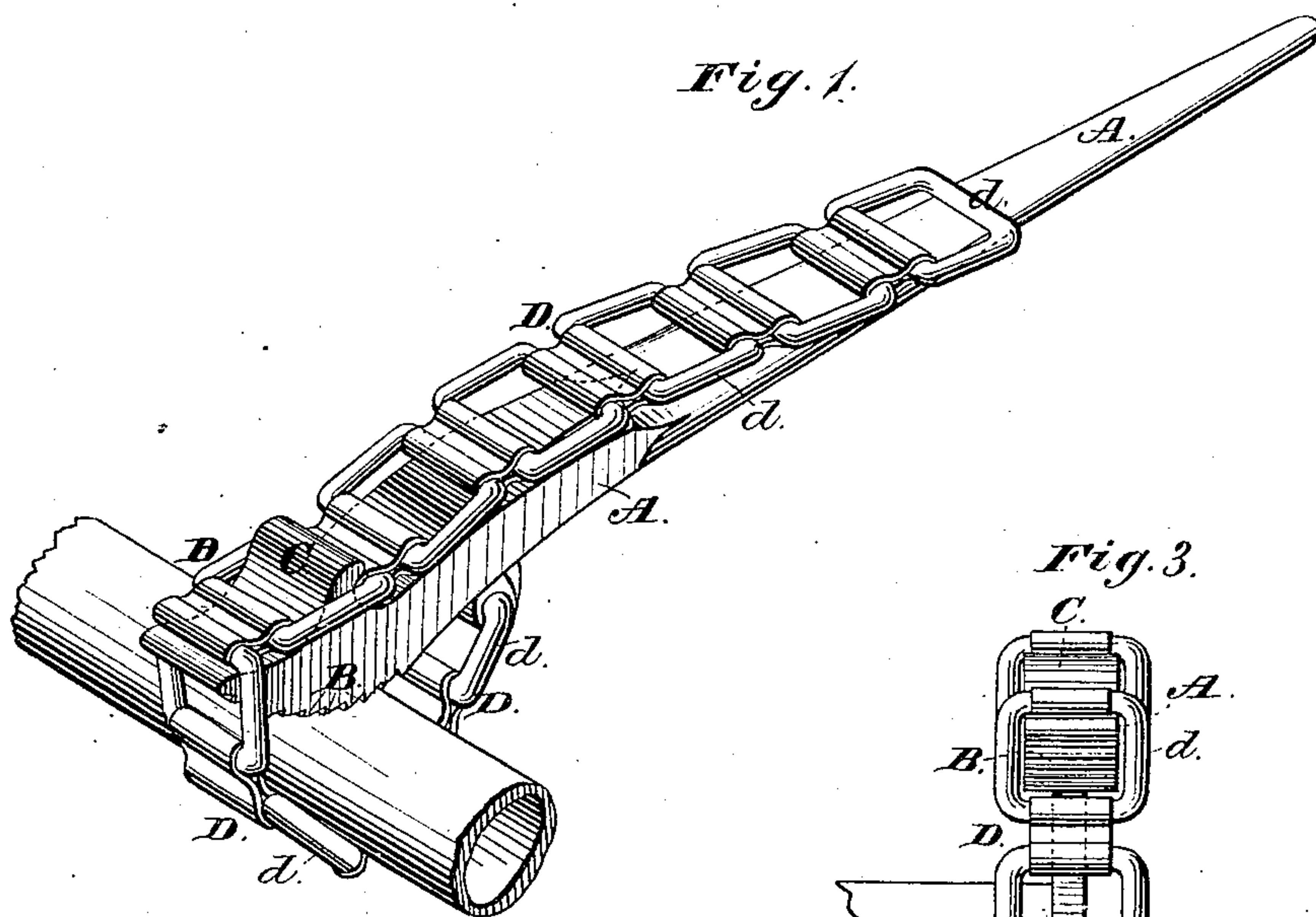


(No Model.)

J. J. CARMODY.
Pipe Wrench.

No. 238,761.

Patented March 15, 1881.



Attest.

*Jas. E. Hutchinson.
 J. A. Rutherford.*

Inventor:

*Jeremiah J. Carmody,
 by James L. Norris.
 Atty.*

UNITED STATES PATENT OFFICE.

JEREMIAH J. CARMODY, OF BROOKLYN, NEW YORK.

PIPE-WRENCH.

SPECIFICATION forming part of Letters Patent No. 238,761, dated March 15, 1881.

Application filed January 26, 1881. (No model.)

To all whom it may concern:

Be it known that I, JEREMIAH J. CARMODY, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented new and useful Improvements in Pipe-Wrenches, of which the following is a specification.

This invention relates to an improvement in tools for turning pipes, rods, and bars, as turned by pipe-tongs, its object being to obtain upon the article to be turned a firm purchase throughout the greater portion of its perimeter, whatever may be its shape, and to provide for tightening the gripe of the tool by the application of force to turn the article.

In the accompanying drawings, Figure 1 is a perspective view of my improved wrench as applied to a pipe. Fig. 2 is a side view, partially in section. Fig. 3 is an end view of the tool applied to the flange of a pipe.

The letter A designates an iron lever or bar, having its end curved and serrated, as at B, or its end may be straight, if desired, and not serrated.

C is a strong hook projecting from one side of the lever, near its end, and D is the flat chain firmly secured to the opposite side of the lever. This chain may be of any desired length, and is composed of rectangular links *d*, connected together by thimbles, the sides of which are pressed inwardly toward each other, so that two edges of each thimble will be in contact with a pipe or curved article upon which the tool is used.

The tool, as described, is used by placing the side of the end portion of the lever, from which the chain leads, upon the article to be turned—say upon the flange of a pipe—as shown in Fig. 1, and then stretching the chain around the article, and hitching one of its links to the hook C. The lever being then moved in the direction in which the hook projects, or as indicated by the arrow No. 1, the pipe can be turned. The end of the lever is preferably so curved and tapered that it may extend into the links, and when thus used the bar may be moved in the direction of the chain, as indicated by the arrow No. 2.

There is but little liability of bruising articles turned by my improved wrench, as the chain embraces it so snugly and in contact with such an extent of surface that the strain is very much distributed.

A pipe-wrench somewhat similar in construction to that described has been heretofore in use, but it is provided with an ordinary cable-chain—that is, a chain having its alternate links in planes at right angles to each other—so that only one edge of every other link can touch the article griped. Another wrench has been provided with a chain composed of links formed of flat plates, pivoted flatwise together, so that their edges only can come in contact with the article griped, and only every other link-edge, even then, can touch the periphery of an article narrower than the edges of the plates. Such wrenches are obviously unfitted for grasping narrow articles, as flanges, disks, and the like. There has also been used a pipe-wrench in which the handle is provided with a clasp composed of two jaws pivoted together and curved to fit around a pipe, one of the jaws being pivoted to the handle near its end, and the other at its free end provided with a head to engage with the hooked end of the lever. Such a wrench has a very limited range of use, being without means of adjustment to suit articles of various sizes.

What I claim is—

1. The combination, with the lever provided near one end with a laterally-projecting stud or hook, of the chain leading from the opposite side of said lever, and composed of the flat links connected by the thimbles, the opposite sides of which are bent inwardly toward each other between the links, substantially as and for the purpose set forth.

2. The combination, with the lever, provided with the laterally-projecting hook, and having its end curved and tapered, of the chain leading from the side of said lever, near its end, in the opposite direction to the curve in said end, and provided with flat links adapted to fit over either said curved end or the hook projecting from the lever, substantially as described, whereby the lever may be hitched to turn in either direction.

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

JEREMIAH J. CARMODY.

Witnesses:

H. G. HINTON,
GEO. H. BENTON.