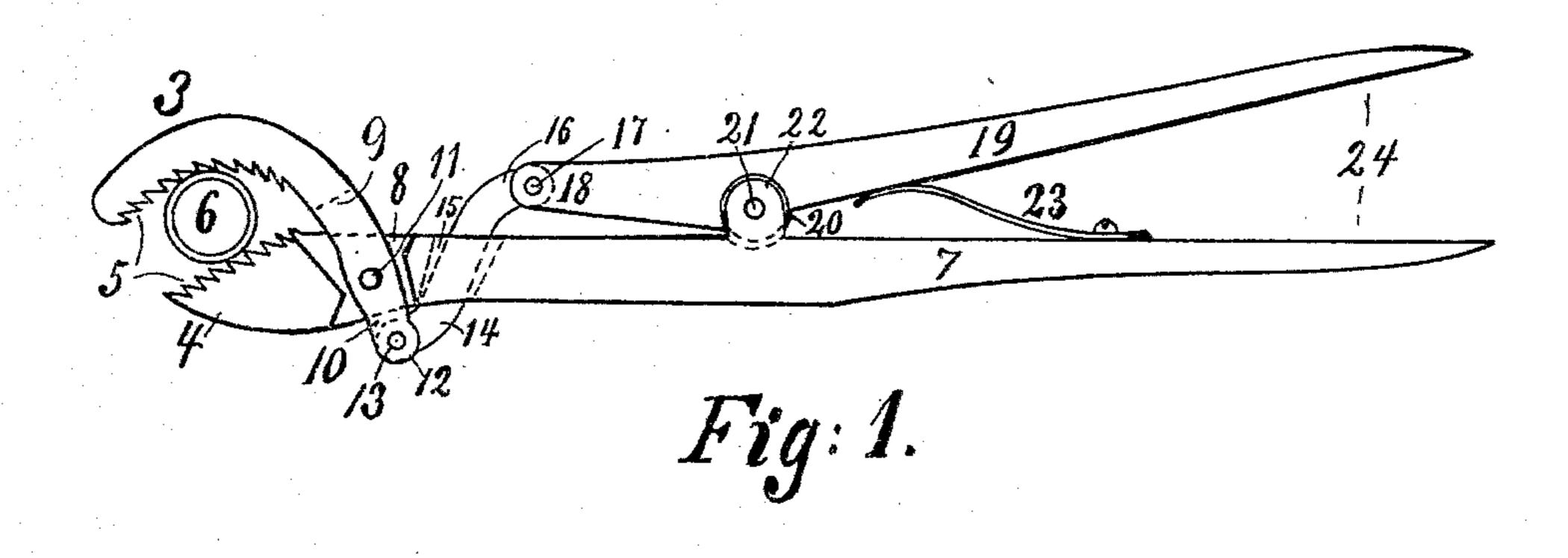
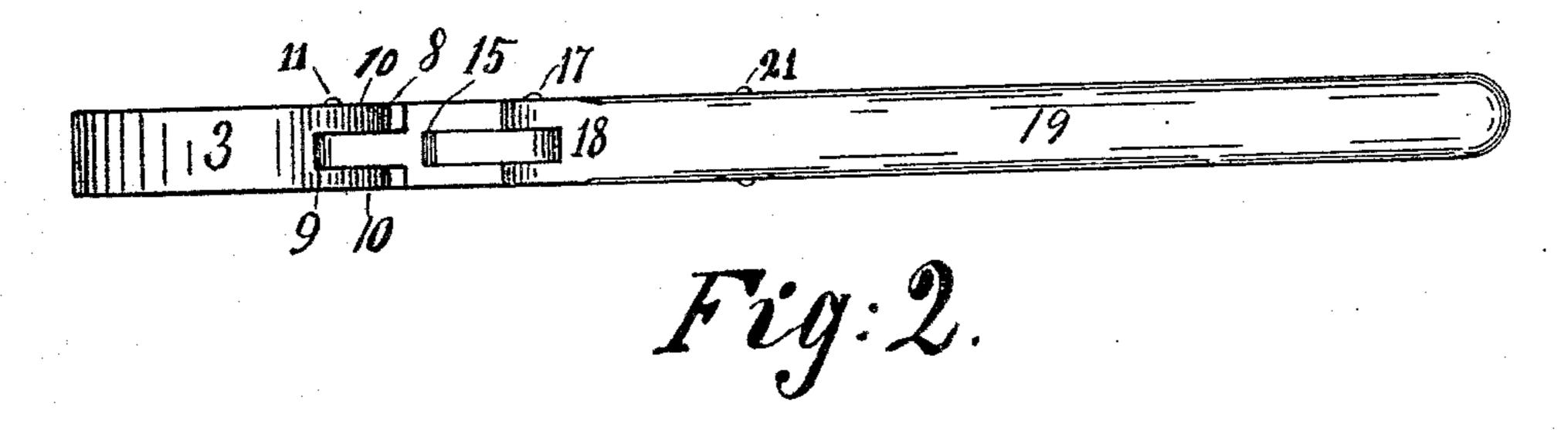
(No Model.)

J. E. NELSON.
PIPE TONGS.

No. 545,304.

Patented Aug. 27, 1895.





WITNESSES:

E. C. Carlson.

John & Melson

BY his ATTORNEY:

A.M. Carlsen

## United States Patent Office.

JOHN E. NELSON, OF EVANSVILLE, MINNESOTA.

## PIPE-TONGS.

SPECIFICATION forming part of Letters Patent No. 545,304, dated August 27, 1895.

Application filed January 28, 1896. Serial No. 536,462. (No model.)

To all whom it may concern:

Be it known that I, John E. Nelson, a citizen of the United States, residing at Evansville, in the county of Douglas and State of Minnesota, have invented certain new and useful Improvements in Pipe-Tongs; and I do declare the following to be 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, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in

pipe-tongs.

The object of my invention is to provide pipe-tongs in which but ordinary motion of the hands will close and open the jaws to an unusual extent, and thus take in a great variety of sizes of pipes without making the jaws long and thereby liable to spring or give in front of their fulcrum. I attain this object by the novel construction and arrangement of parts illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of my complete pipe-tongs. Fig. 2 is a top plan view of Fig. 1.

Referring to the drawings by reference30 numerals, 3 and 4 are the gripping-jaws, provided with the teeth or corrugations 5, between which the pipe is grabbed in the manner shown at 6. The jaw 4 is formed integral with the main or primary arm 7, is reduced at 8, slipped into the bifurcation 9 between the lips or arms 10 of the curved jaw 3, and secured by the pivot 11. Between the free ends 12 of the arms 10 I pivot at 13 the front end of a link 14, which extends through the slotted hole 15 in the arm 7 and has its rear end 16 pivoted at 17 to the front end 18 of a

secondary lever or arm 19, which is provided with a single lip 20, projecting in between and pivoted at 21 to two lips like 22, provided upon the arm 7.

23 is a spring tending to hold the arms 7 and 19, and thereby also the jaws 3 and 4, spread or open. Such opening is limited by the closing of the front end 18 of the arm 19 against the arm 7 between the pivots 17 and 21. 50

In operation the rear ends 24 of the arms 7 and 19 serve as handles, and by forcing them toward each other the jaw 3 closes toward the jaw 4 with a force that may be increased by making the corrugated surface of the jaw 4 55 more sloping downward toward its front end and curving the jaw 3 correspondingly, so that it acts to some extent like a hook in front of the jaw 4.

Having thus described my invention, what 60 I claim, and desire to secure by Letters Pat-

ent, is—

Pipe tongs consisting of the primary arm 7, having the lips 22, hole or slot 15, reduction 8, and slanting, corrugated jaw 4, a secondary 65 arm as 19, pivoted between the lips 22, and extending partly in front thereof, the bifurcated curved and corrugated jaw 3, pivoted upon and extending beyond the reduction 8, the link 14, extending through the hole 15, 70 and connecting the rear end of the swinging jaw with the front end of the short arm 19, on opposite sides of the primary arm and the spring 23, for throwing the arms apart when released, substantially as shown and described 75 and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN E. NELSON.

Witnesses:

O. KRON, HERMAN HOLMSTROM.