

(No Model.)

W. E. GOODNOW & H. R. MARGASON.
PIPE WRENCH.

No. 446,547.

Patented Feb. 17, 1891.

FIG. 1.

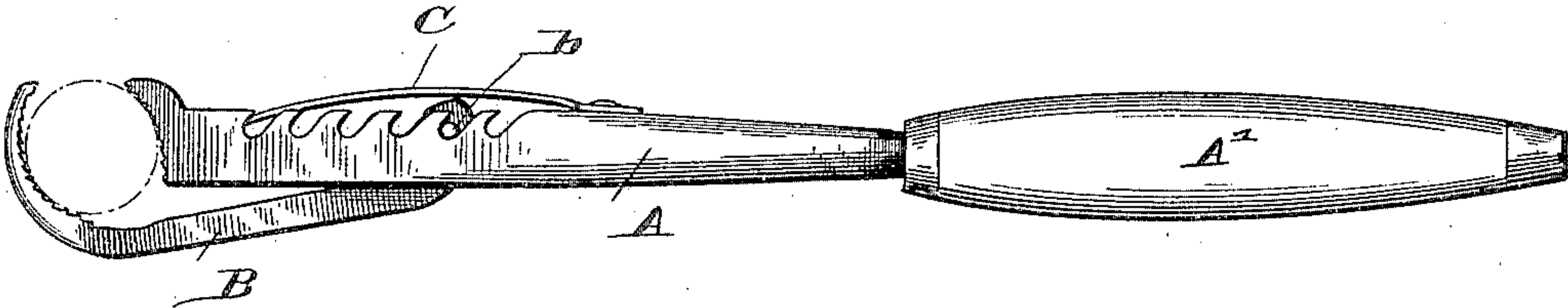


FIG. 2.

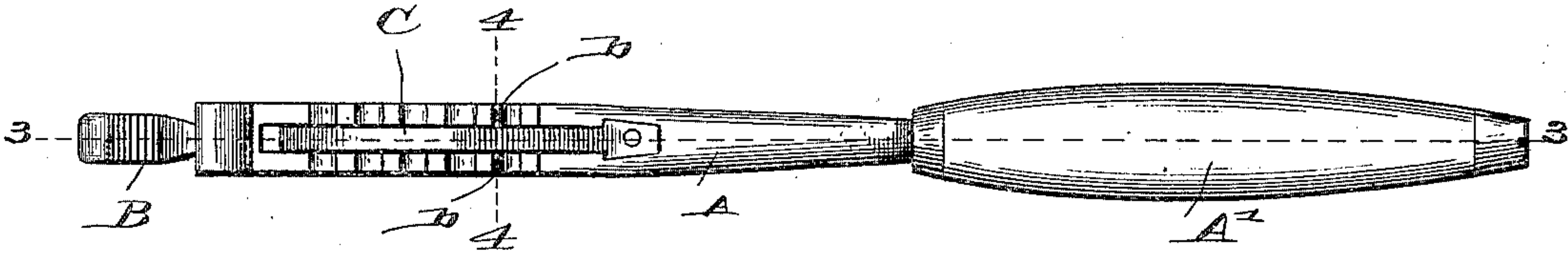


FIG. 3.

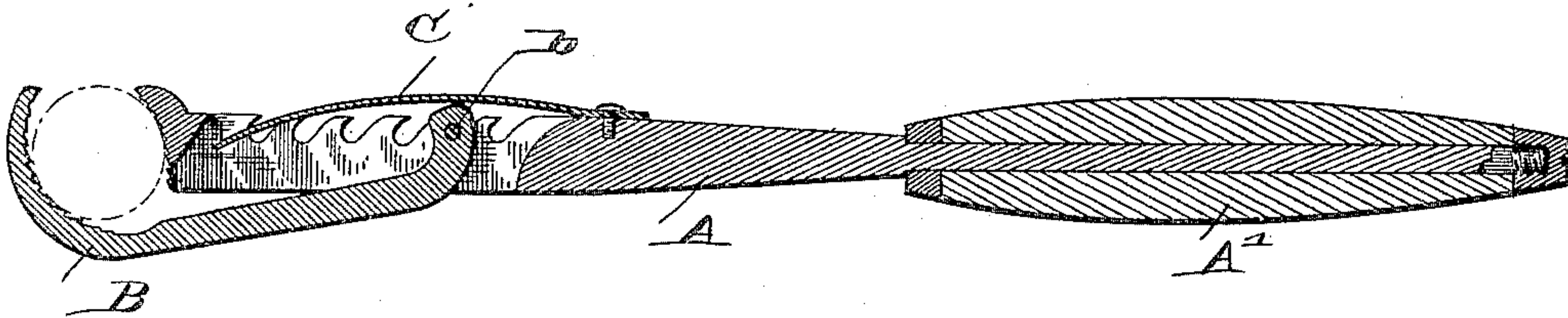
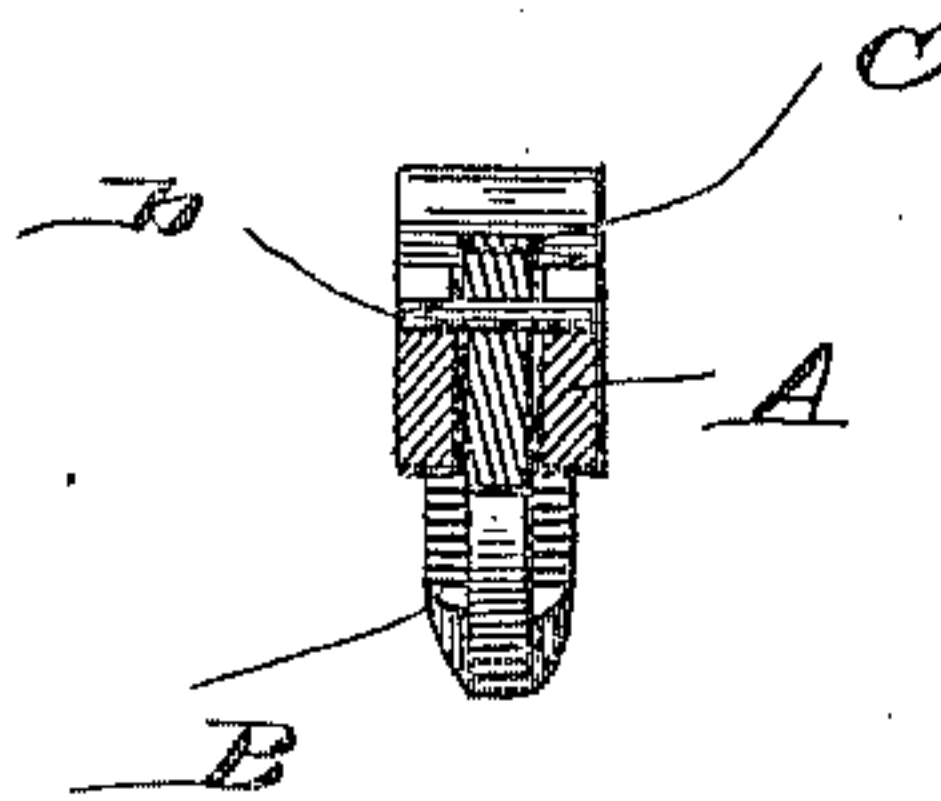


FIG. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM E. GOODNOW AND HOMER R. MARGASON, OF COLUMBUS, INDIANA.

PIPE-WRENCH.

SPECIFICATION forming part of Letters Patent No. 446,547, dated February 17, 1891.

Application filed July 31, 1890. Serial No. 360,445. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM E. GOODNOW and HOMER R. MARGASON, citizens of the United States, residing at Columbus, in the county of Bartholomew and State of Indiana, have invented certain new and useful Improvements in Pipe-Wrenches, of which the following is a specification.

The object of our said invention is to produce a pipe-wrench which may be easily and quickly adjusted and rapidly operated, and which shall have a large bearing upon the surface of the pipe being handled.

Said invention will be first fully described, and then pointed out in the claim.

Referring to the accompanying drawings, which are made a part hereof, and on which similar letters of reference indicate similar parts, Figure 1 is a side elevation of a wrench embodying our said invention; Fig. 2, a plan view of the same; Fig. 3, a central sectional view on the dotted line 3 3 in Fig. 2, and Fig. 4 a transverse sectional view on the dotted line 4 4.

In said drawings, the portions marked A represent the main portion of the wrench, B the swinging portion, and C a spring whereby the swinging portion is held up to position to engage with the pipe to which the wrench is applied in operation. The main portion A includes the shank or tang of the wrench, and usually has a wooden or other suitable handle A' mounted on said shank or tang. Its other end is serrated and curved to fit against the surface of the pipe in operation, thus forming one jaw of the wrench, and it contains a mortise or slot, through which the rear end of the swinging portion B passes. In the upper surfaces of the two sides, alongside this mortise or slot, are a series of notches, which receive the pivot by which the swinging jaw is supported and upon which it moves. These notches are preferably arranged distances apart equal to the differences in the diameters of standard sizes of pipe—that is, the notch farthest from the end or jaw of the main portion A brings the other jaw such a distance from said main jaw that the two jaws will just grip the smallest size of pipe that it is intended the wrench shall be used

with, while the next set of notches is arranged so that the jaws will just fit the next size of pipe, and so on up to the largest size of pipe with which the wrench is adapted to be used. The jaw of the swinging portion B is curved reversely to the operative face or jaw upon the end of the portion A, and is adapted to fit the opposite side of the pipe to which the wrench may be applied. Its shank portion extends up through the mortise or slit in the part A, and has a pivot *b* or gudgeons, which rest in the notches provided therefor, as before explained. The end of this portion which projects through this mortise or slot is flattened, as shown most plainly in Fig. 3, and the spring C rests against said flattened end, thus holding the jaw up into proper position to engage with the pipe while in operation, although the spring force is not sufficient to prevent the jaw from being swung back when desired. The spring C is preferably fixedly secured to the main portion A at one end and extends out over the mortise or slit in said main portion, and is arranged to bear against the flattened end of the shank of the portion B. It thus holds said jaw up into proper operative position, as before explained, and also prevents said shank from dropping too far through said slot or mortise.

In operation the swinging jaw is caught around the pipe and the handle lifted, which brings the other jaw in contact therewith, and a further movement turns the pipe. By lowering the handle the wrench slips easily back around the pipe in the opposite direction, ready to take a new hold, and this operation is continually repeated until the pipe is turned as much as desired. As above stated, the two gripping-faces are opposingly curved, and thus operatively encircle a considerable portion of the pipe being operated upon. This obviously is of considerable advantage.

Having thus fully described our said invention, what we claim as new, and desire to secure by Letters Patent, is—

In a pipe-wrench, the combination of two jaws, the faces of which are opposingly curved to fit the pipe, the main jaw being provided with a mortise or slot and having notches arranged alongside said mortise or slot, the

other being curved and passing through said
mortise or slot and provided with gudgeons
which engage in said notches, and a spring
fixedly secured to the first and extending out
5 over the second, the formation being such
that said second jaw will be held up into po-
sition by the pressure of said spring, said sev-
eral parts being arranged and operating sub-
stantially as set forth.

In witness whereof we have hereunto set ro
our hands and seals, at Columbus, Indiana,
this 26th day of July, A. D. 1890.

WILLIAM E. GOODNOW. [L. S.]
HOMER R. MARGASON. [L. S.]

Witnesses:

JOHN W. MORGAN,
JOHN F. DAVIDSON.