

No. 711,068.

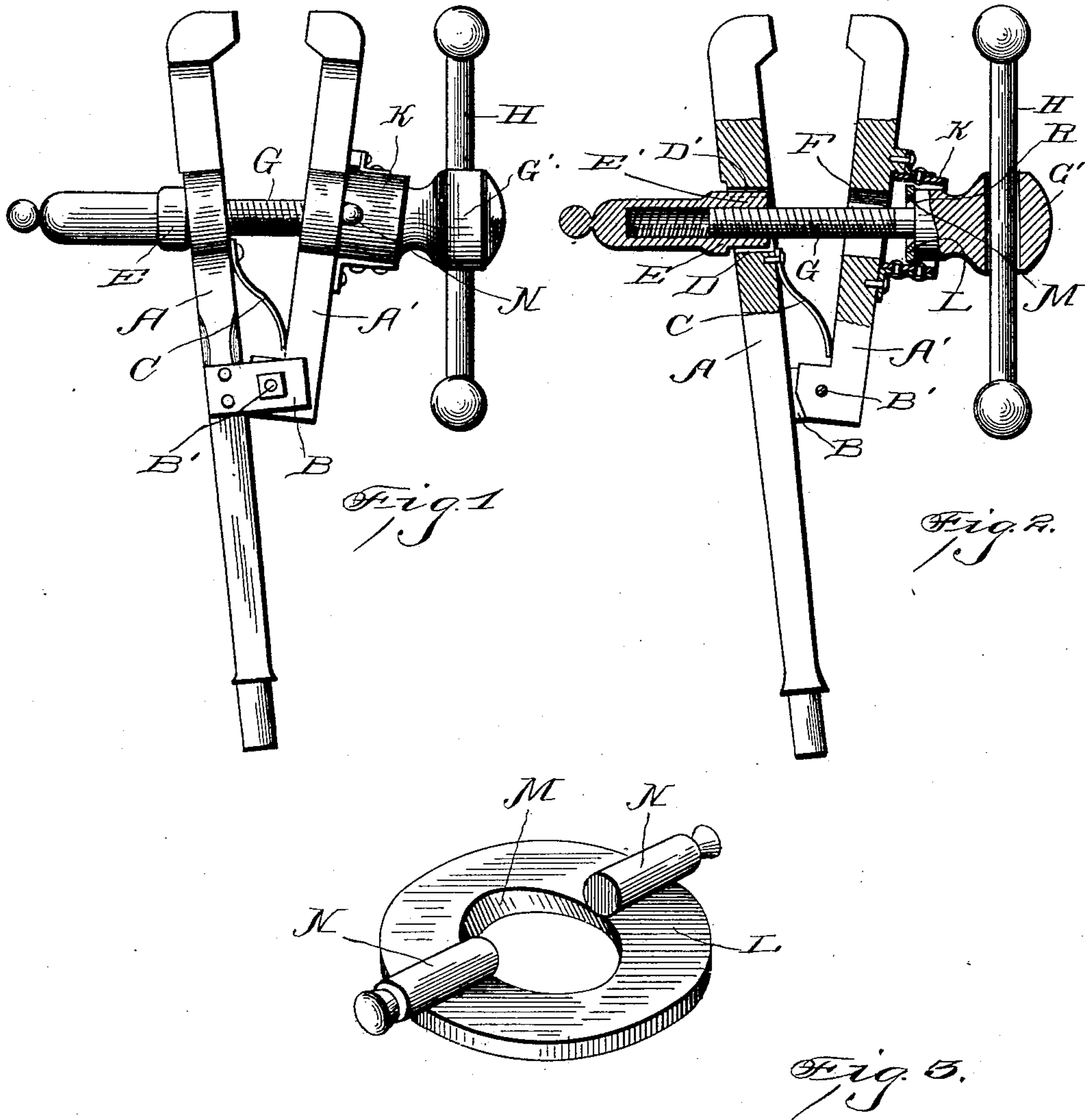
Patented Oct. 14, 1902.

B. McMAHON & P. LINDGREN.

ATTACHMENT FOR VISES.

(Application filed May 26, 1902.)

(No Model.)



Witnesses

R. U. Boswell.
A. L. Hough.

Inventors
Bernard McMahon,
and Peter Lindgren
By Franklin H. Hough
Attorney.

UNITED STATES PATENT OFFICE.

BERNARD McMAHON AND PETER LINDGREN, OF SPOKANE, WASHINGTON.

ATTACHMENT FOR VISES.

SPECIFICATION forming part of Letters Patent No. 711,068, dated October 14, 1902.

Application filed May 26, 1902. Serial No. 109,028. (No model.)

To all whom it may concern:

Be it known that we, BERNARD McMAHON and PETER LINDGREN, citizens of the United States, residing at Spokane, in the county of Spokane and State of Washington, have invented certain new and useful Improvements in Attachments for Vises; and we 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 letters of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in vises, and particularly in the provision of means whereby the pressure upon the shoulder of the turning-screw may be uniform when the jaws are being tightened with one of the latter at an inclination; and it consists in the provision, in connection with one jaw of the vise, of a pivoted plate, which is mounted in suitable bearings and is adapted to present the upper face thereof against the shoulder of the tightening-screw and to move with the shoulder from an inclined to a vertical position as the jaws are screwed together.

The invention consists, further, in various details of construction, combinations, and arrangements of parts, as will be hereinafter more fully described and then specifically defined in the appended claim.

Our invention is illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of our improved vise, showing the jaws open. Fig. 2 is a vertical sectional view through the turning-screw. Fig. 3 is an enlarged detail view of the pivoted plate which coöperates with the screw, which forms the essential feature of the present invention.

Reference now being had to the details of the drawings by letter, A and A' designate the two jaws of our wrench, the former of which has bracket-arms B, carrying a bolt B', on which the lower end of jaw A' is pivotally mounted. A spring C is mounted on the jaw A, and its free end is disposed in the path of the movable jaw and is adapted to contact yieldingly with the inner face of jaw A' when

the latter is thrown toward the jaw A. The jaw A has an aperture D, with a recess D' in the marginal wall thereof and adapted to receive the interiorly-threaded screw-retaining socket member E, the latter being provided with a key E', adapted to enter said recess D' for the purpose of preventing said member from rotating when held in the aperture in the jaw A. The second jaw A' is provided with an aperture F for the reception of the screw G, which screw has a headed portion G', to which a rod H is attached.

Secured to the outer face of the jaw A' is a casing K, which in the present instance is shown of cylindrical outline and is fastened by means of brackets secured to the jaw. Pivotaly mounted in said casing, preferably near the inner marginal edge thereof, is a circular plate L, having diametrically opposite lugs N, which have bearings in niches or apertures in said casing, and said lugs when positioned in the casing are adapted to bear against the outer face of the jaw A', so as to throw the strain upon said jaw when the latter is being screwed toward the stationary jaw A. Said plate is centrally apertured, as at M, to receive the screw G, and the outer flat face of the plate is adapted to afford a bearing surface for the shoulder R on the head G' and into which the inner end of the screw merges.

The operation of our vise will be readily understood, as when the screw is turned the outer surface of the pivoted plate in said casing will bear flat against said shoulder on the head of the screw, and as the latter is turned for the purpose of throwing the jaws together the plate will turn upon its pivotal point to assume a substantially vertical position when the jaws are together, thus throwing equal strain upon all parts of the face of shoulder, which is considered a great advantage.

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

A vise comprising a stationary jaw, a pivoted jaw mounted thereon, a cylindrical shell, bracket-arms secured to said pivoted jaw and to which arms said shell is fastened, the inner edge of the shell having recesses diametrically opposite each other, a plate

provided with integral pivotal lugs, which
latter have bearings in said recesses, and
bearing against the outer face of the pivotal
jaw, a screw passing through the jaws and
5 having a portion of its head within said shell
and bearing against the pivotal plate, as set
forth.

In testimony whereof we hereunto affix our
signatures in presence of two witnesses.

BERNARD McMAHON.
PETER LINDGREN.

Witnesses:

MARIAN L. MANN,
FRED FLINT.