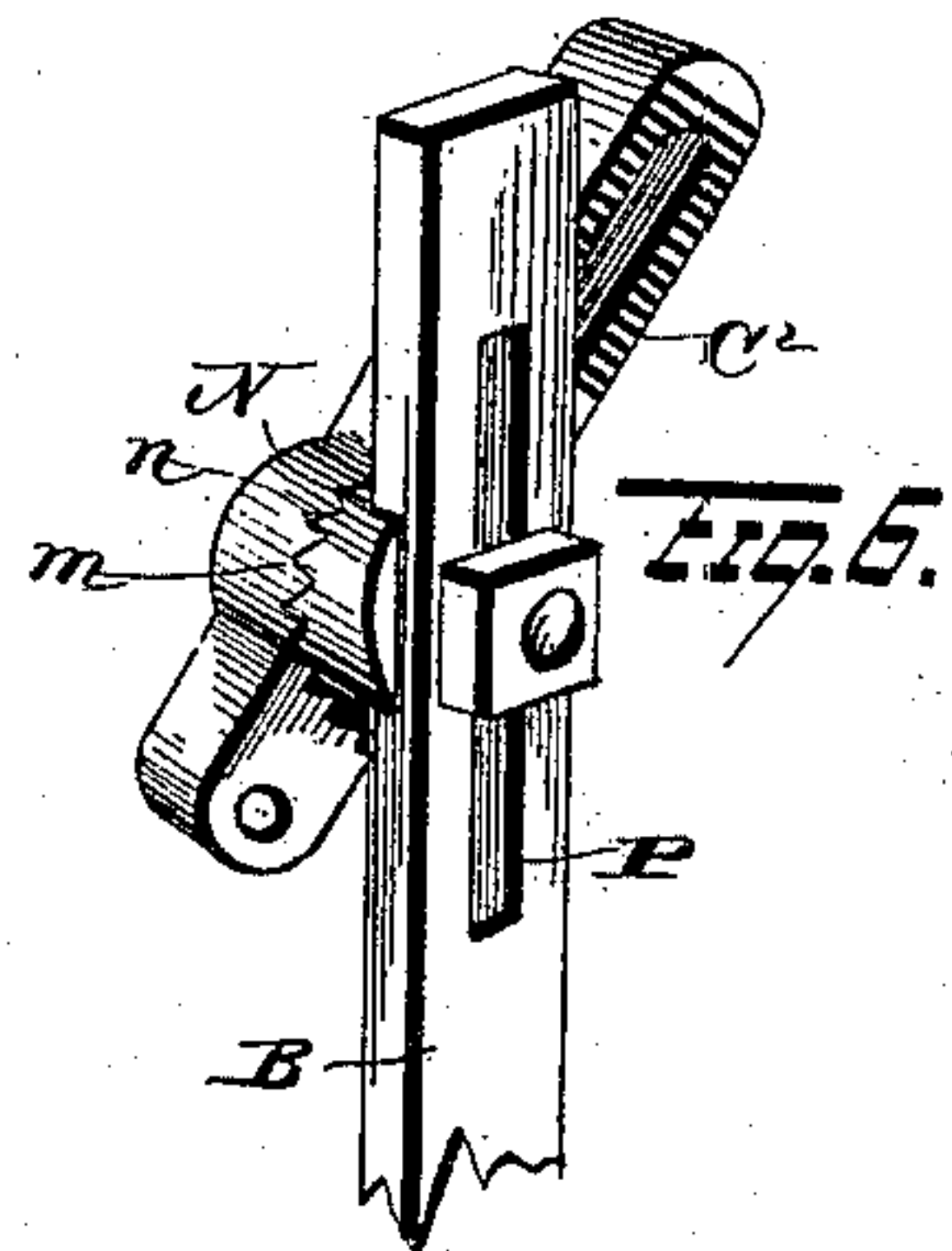
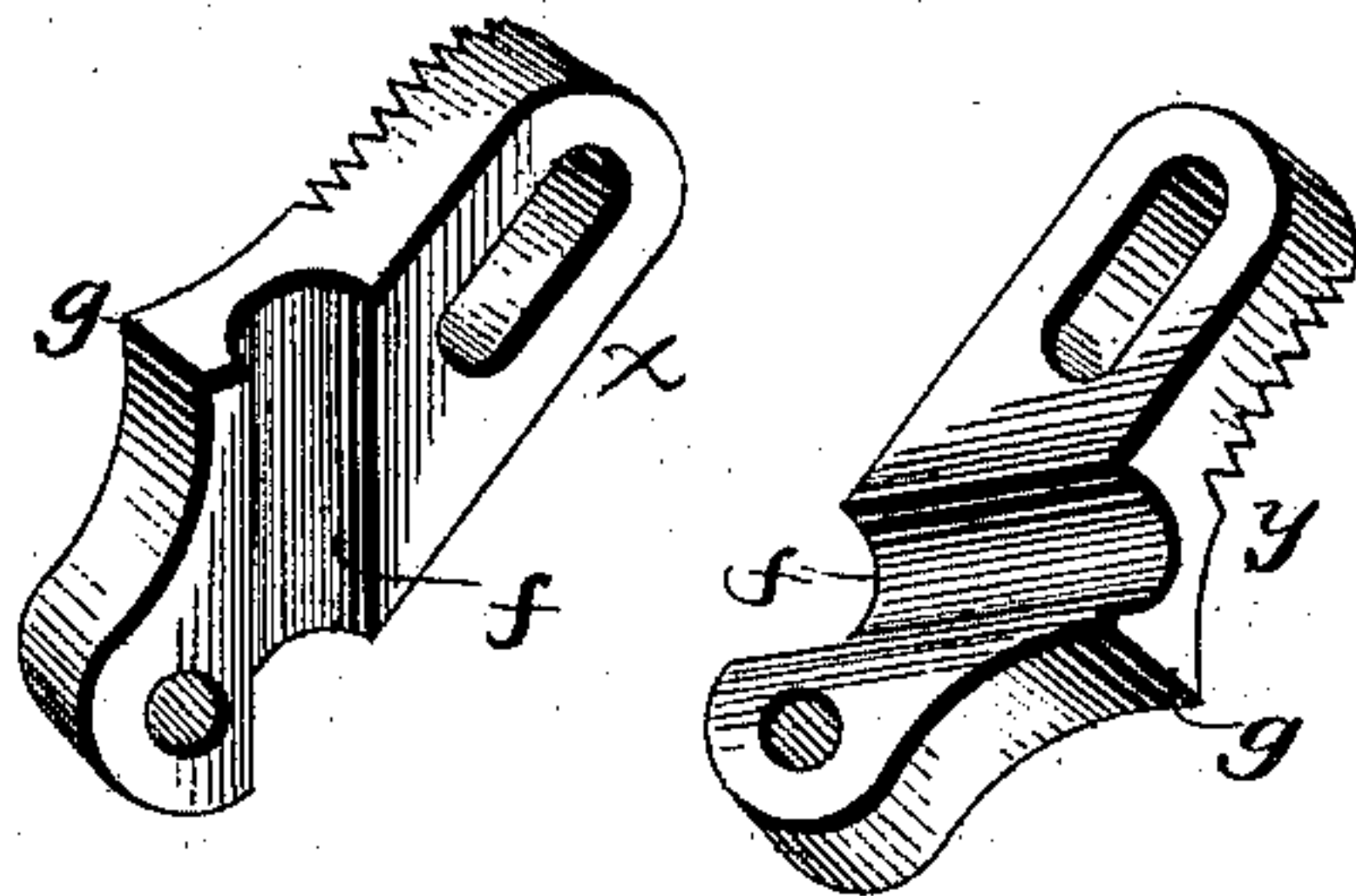
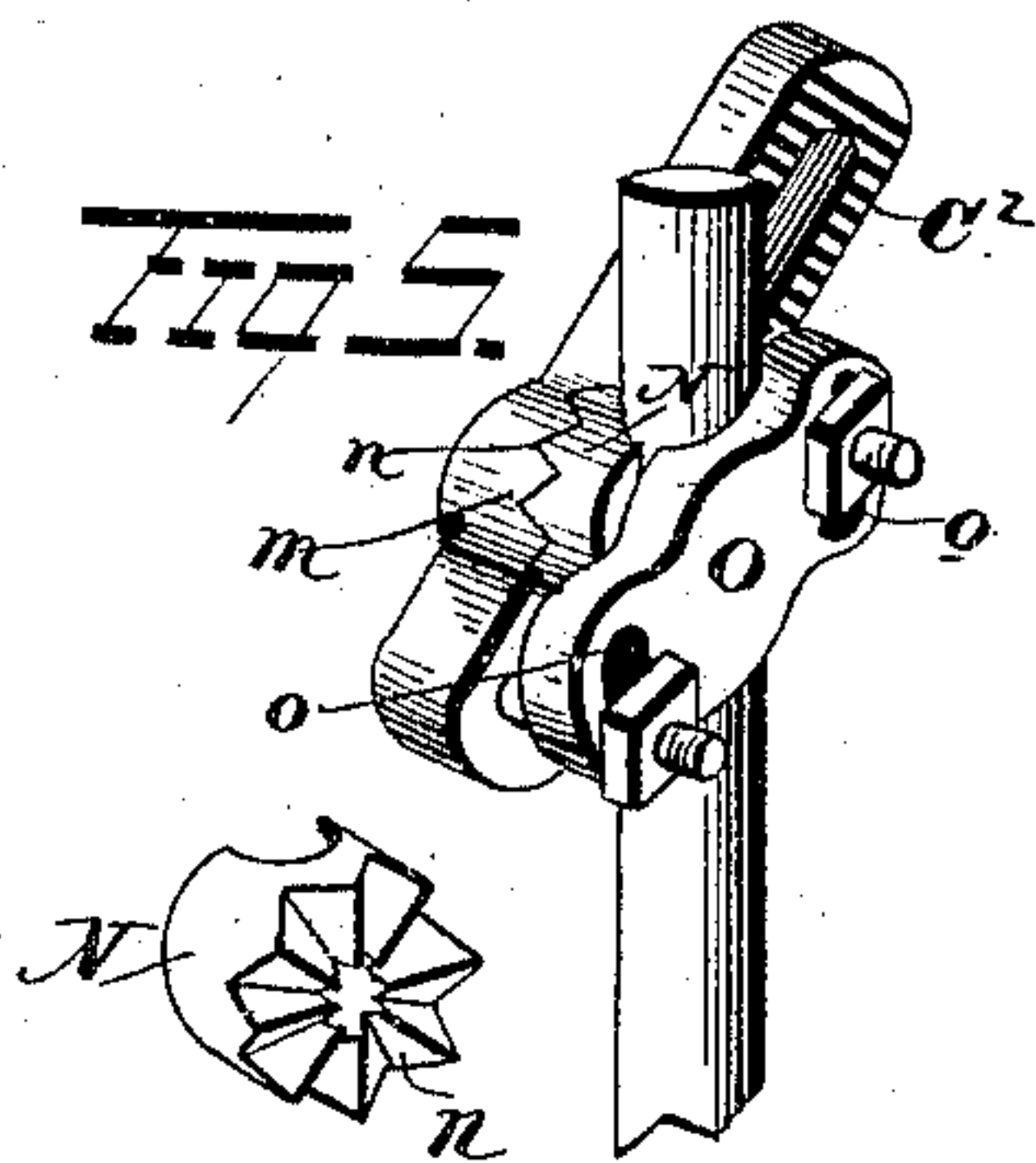
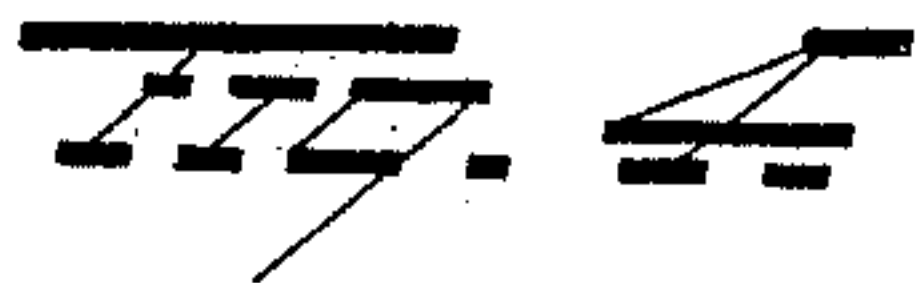
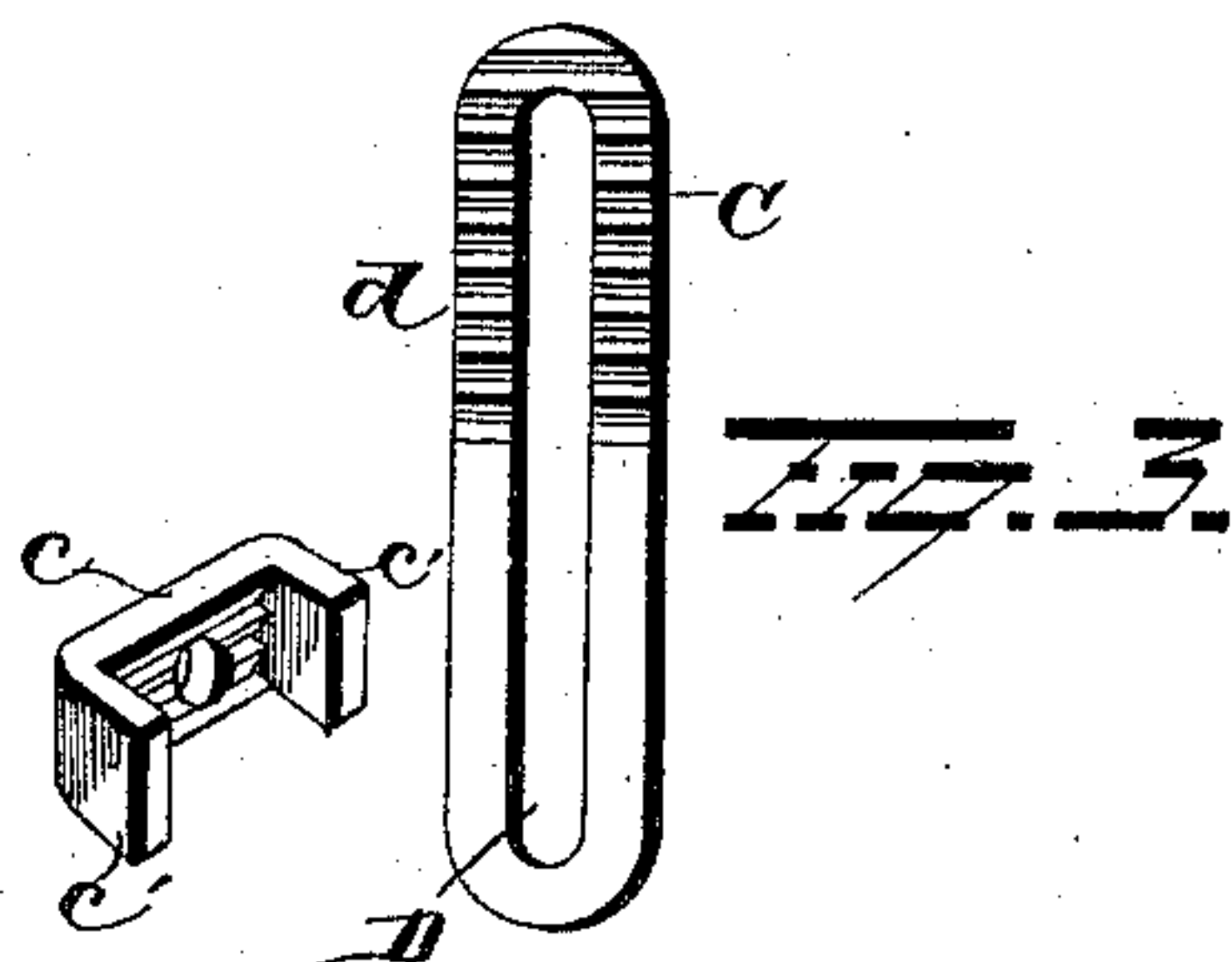
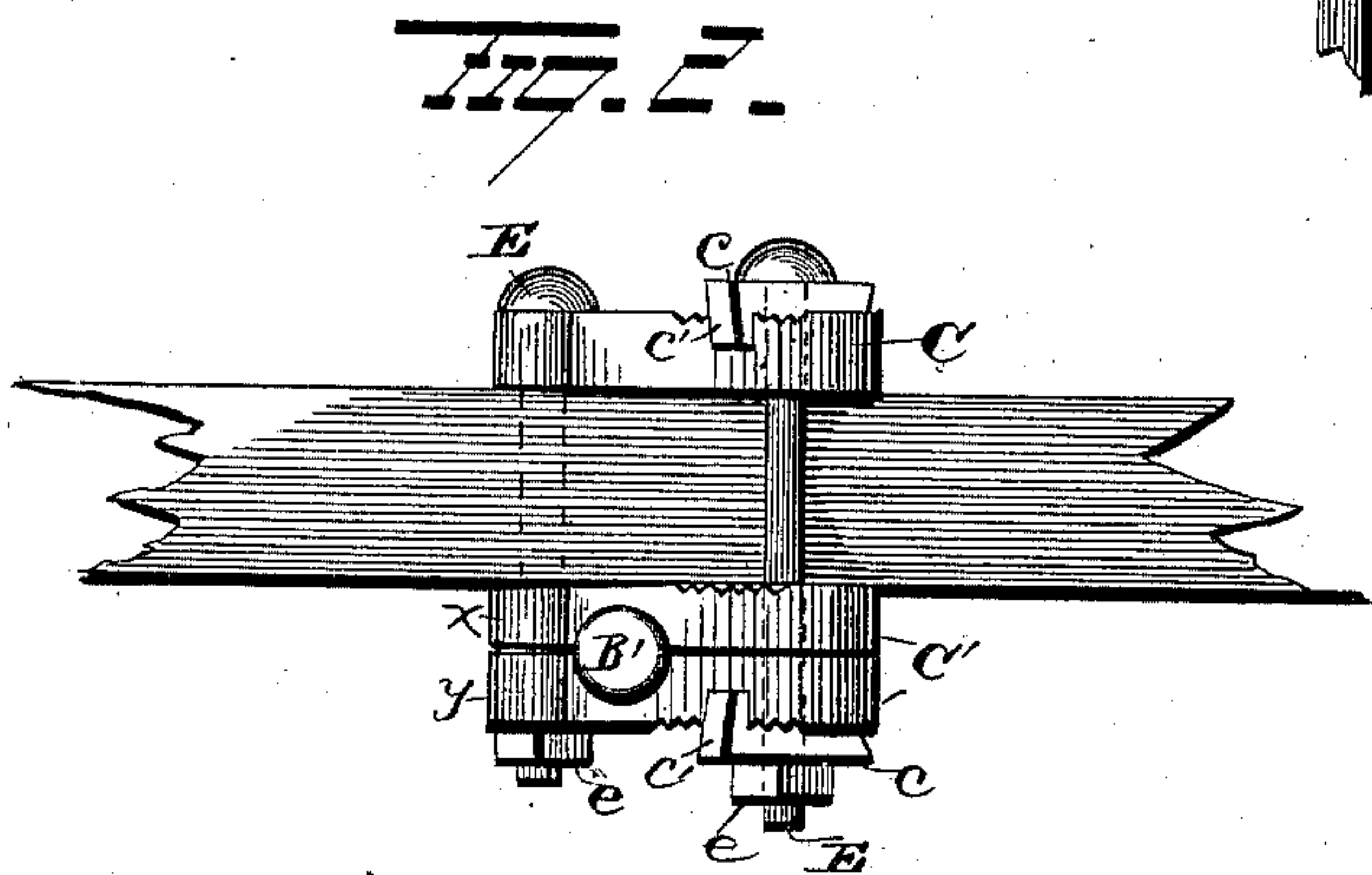
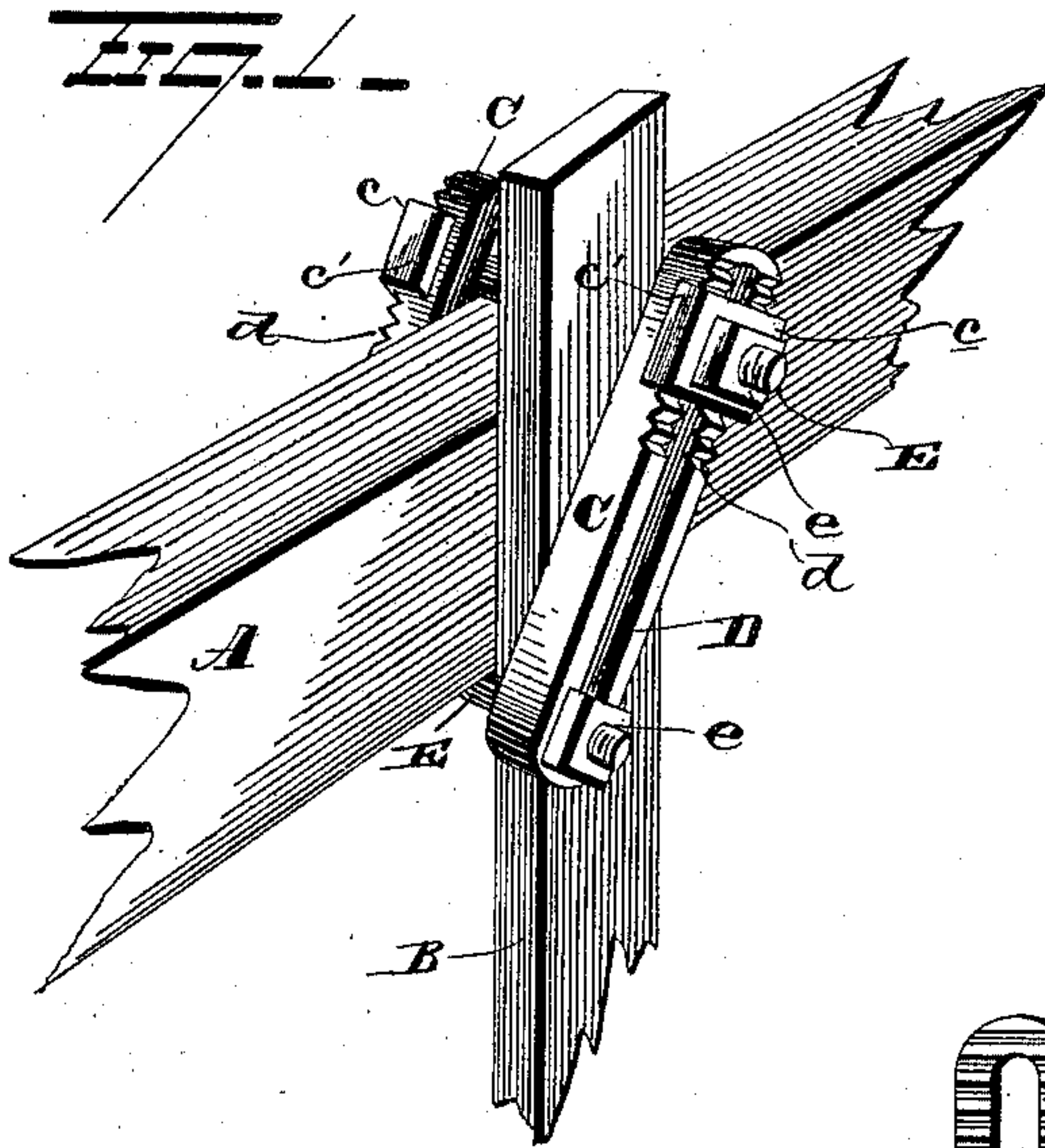


(No Model.)

C. R. HARTMAN.
ROLLING COLTER.

No. 313,073.

Patented Mar. 3, 1885.



WITNESSES

E. J. Nottingham
Geo. F. Downing.

INVENTOR

Chas. R. Hartman
B. H. Symmon
ATTORNEY

UNITED STATES PATENT OFFICE.

CHARLES R. HARTMAN, OF VINCENNES, INDIANA.

ROLLING-COLTER.

SPECIFICATION forming part of Letters Patent No. 313,073, dated March 3, 1885.

Application filed June 23, 1884. (No model.)

To all whom it may concern:

Be it known that I, CHARLES R. HARTMAN, of Vincennes, in the county of Knox and State of Indiana, have invented certain new and useful Improvements in Rolling-Colters; and I do hereby 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.

My invention relates to an improvement in devices for attaching colters.

Hitherto it has been customary to use a clip or yoke which embraced the colter-standard and the beam, occupying an oblique position thereon, and provided with draw-nuts for causing the standard to hug the beam; or the standard of the colter has been constructed to form a cheek resting against the side of the beam and bolted to a cheek lying against the opposite side of the beam. Serrations have also been used on one of the cheeks for holding the nut against displacement. Devices embracing the four sides of the beam in the form of a yoke have also been constructed admitting of a slight adjustment. The devices hitherto constructed, however, have failed to provide for clamping standards of different shapes in cross-section to beams of materially different depths and widths, and on both right and left hand plows, and at the same time allow the standard to be locked in different angular adjustments with respect to the beam.

The object of my present invention is to provide a device which shall overcome the defects of those heretofore constructed, and which shall be simple, durable, and inexpensive.

With these ends in view my invention consists in cheeks provided with oblong closed slots centrally located therein, and having transverse serrations on one or both sides, caps provided with serrated faces adapted to engage the serrations on the faces of the cheeks, and with lips which embrace the edges of the cheeks, and draw-bolts passing through the said slots and caps.

My invention further consists in forming one of the said clamping-cheeks double, and providing the contiguous faces of the two parts

with corresponding recesses adapted to embrace the opposite surfaces of standards.

My invention further consists in certain features of construction and combinations of parts, as will be hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view of my device holding a rectangular standard in position. Fig. 2 is a view of a modified form holding a round standard in position. Fig. 3 is a detached view of one of the cheeks and caps. Fig. 4 is a detached view of the double cheek, the parts being separated; and Figs. 5 and 6 represent modifications.

A represents a plow-beam, B a rectangular colter-standard, C the clamping-cheeks, and *c* the caps. The cheeks C are made somewhat longer than the depth of the deepest beam there will be any probability of using, and as light as is consistent with the strain to which they are to be subjected. The cheeks C are similar in construction, and are provided with oblong closed slots D, sufficiently wide to admit the draw-bolts E. The outer faces of the cheeks C are provided with transverse serrations *d*. These serrations may extend from the top down about half-way on the faces; or they may extend the entire length of the face. The caps *c* have serrated faces corresponding to the serrations on the faces of the cheeks, and have lips *c'*, which embrace the edges of the cheeks and serve to prevent the cheeks from spreading. The bolts E pass through slots D and caps *c*, and are provided with nuts *e*, by means of which the cheeks are drawn in snug contact with the standard and beam.

By means of the elongated slots D the bolts are allowed to approach each other as the depth of the beam varies without changing the relative position of the cheek to the beam, and the bolts are locked against any liability of displacement by means of the serrated caps *c* in contact with the serrated faces of the cheeks. This construction of the cheeks also admits of changing the angle of the standard with respect to the beam and securely locking the same to the beam, as before explained.

The adjustability of this device to beams of different widths depends solely upon the length

of the bolts, which may be renewed at a trifling cost.

The device is applicable to either a right or left hand plow, and is capable of the most precise adjustment.

In Fig. 2 the cheek designated C' consists of two sections, *x* and *y*, the contiguous faces of which are provided with recesses *f*, made semicircular, semi-oval, or semi-polygonal in cross-section, and adapted to receive a round or other shaped standard, B'. The sections *x* and *y* are symmetrical in construction and provided with the oblong slots D, serrated faces and caps similar to the cheek C, heretofore described. For the purpose, however, of giving the standard B' a strong bearing, and at the same time make the double cheek C' as light as possible, the sections *x* and *y* are provided with projections *g*, and the slots D extend only about one-half the length of the sections. The opposite faces of the cheek C' are serrated, thus adapting it for use with a right or left hand plow, and at the same time allowing the projections *g* to extend rearwardly. By means of this latter construction I am also able to adapt my device to beams other than rectangular in cross-section, the faces of the cheeks lying adjacent to such beam being cut away to fit the same.

In Figs. 5 and 6 one of the cheeks, C², is provided with radial serrations *m*, adapted to register with radial serrations *n* on a rosette, N. The back of the rosette is grooved or recessed in a manner similar to the sections *x* and *y*, above described, and an auxiliary cheek, O, Fig. 5, is grooved or recessed to conform to the recess in the back of N, the two grooves being adapted to embrace the standard and lock the same to the cheek C² in different vertical angular adjustments in addition to the vertical angular adjustments allowed by the cheeks C, before mentioned. The ends of the auxiliary cheek O are provided with transverse closed slots *o*, slight curved, through which the draw-bolt passes, the auxiliary cheek being thereby allowed to adjust itself to the different positions of the rosette.

In Fig. 6 the auxiliary cheek O is omitted, the standard being in this instance slotted, as at P, to receive the draw-bolt, and received in the groove, as in section *x*. The standard, when thus constructed, is preferably rectangular in cross-section.

It is evident that many slight changes may be made in the form and construction of the several parts without departing from the spirit and scope of my invention; hence I do not wish to limit myself strictly to the construction herein set forth; but,

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a plow-beam, two clamping-cheeks, each provided with an oblong closed slot and a transversely-serrated face, and draw-bolts passing through the slots above and below the beam, of a colter or other standard formed independently of and rigidly held in any desired vertical adjustment by said clamping-cheeks, substantially as set forth.

2. The combination, with a plow-beam, two clamping-cheeks, each provided with an oblong closed slot and a transversely-serrated face, caps having serrated faces and lips which engage the edges of the cheeks, and draw-bolts—one above and one below the beam—passing through the slots and caps, of a colter or other standard formed independently of and rigidly held in any desired vertical adjustment by said clamping-cheeks, substantially as set forth.

3. The combination, with a plow-beam and a standard, of a single and a double clamping-cheek, each provided with an oblong closed slot, the double clamping-cheek embracing the standard, and draw-bolts passing through the slots, whereby the standard is locked to the beam in different angular adjustments, substantially as set forth.

4. The combination, with a plow-beam and a standard, said standard being semicircular, semi-oval, or semi-polygonal in cross-section, of a single and a double clamping-cheek, each of said cheeks being provided with an oblong closed slot and with transverse serrations on their outer faces, the double cheek embracing the standard, caps having serrated faces and lips which engage the edges of the cheeks, and draw-bolts passing through the slots and caps, whereby the standard is securely locked to the beam, substantially as set forth.

5. The combination, with a plow-beam and a standard, of a single and a double cheek, the double cheek being provided with recesses on the contiguous faces of its parts for receiving the standard, and with transverse serrations on its opposite faces, and the single cheek being provided with transverse serrations on its outer face, serrated caps adapted to engage the outer faces of the cheeks, and draw-bolts passing through the cheeks and caps, thereby locking the standard to the beam, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

CHARLES R. HARTMAN.

Witnesses:

J. KEITH,

LOUIS A. MEYER.