

G. D. DEAN.
Pipe-Wrenches.

No. 163,642.

Patented May 25, 1875.

Fig. 1.

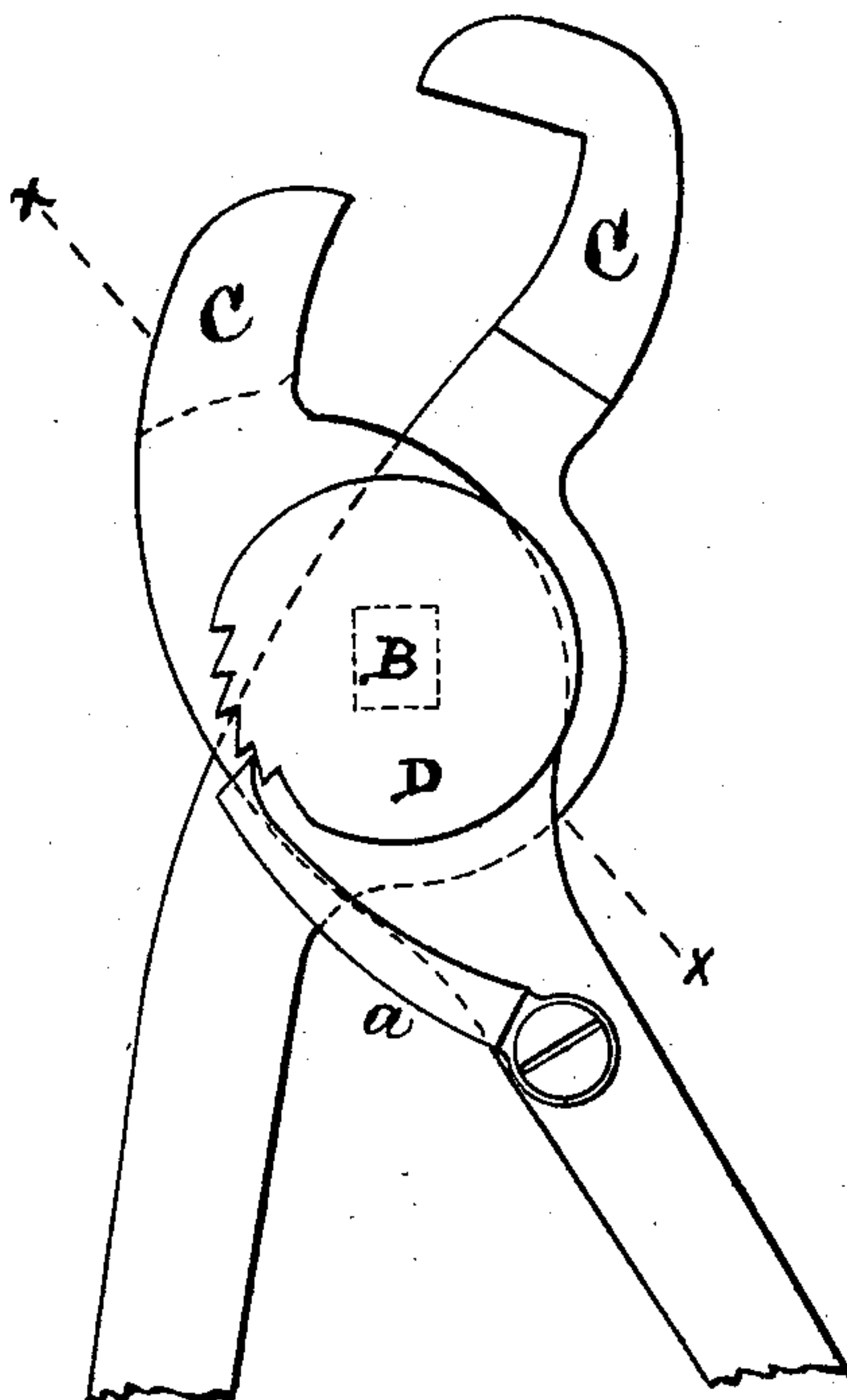


Fig. 2.

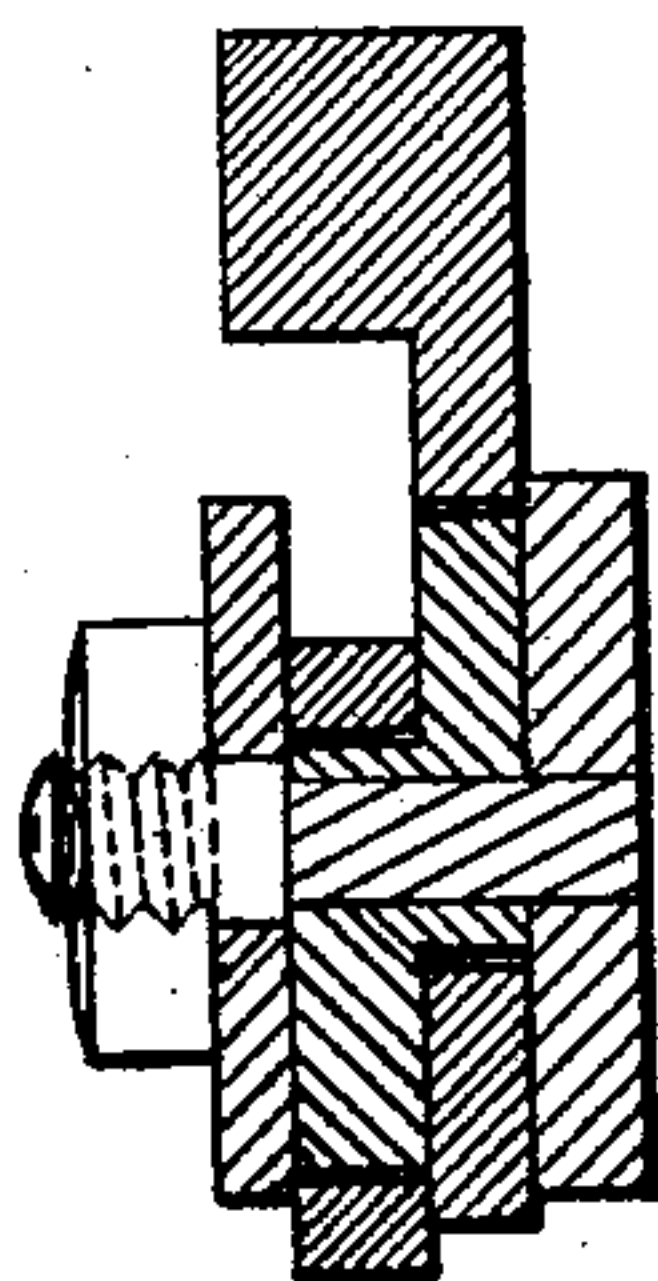


Fig. 3.

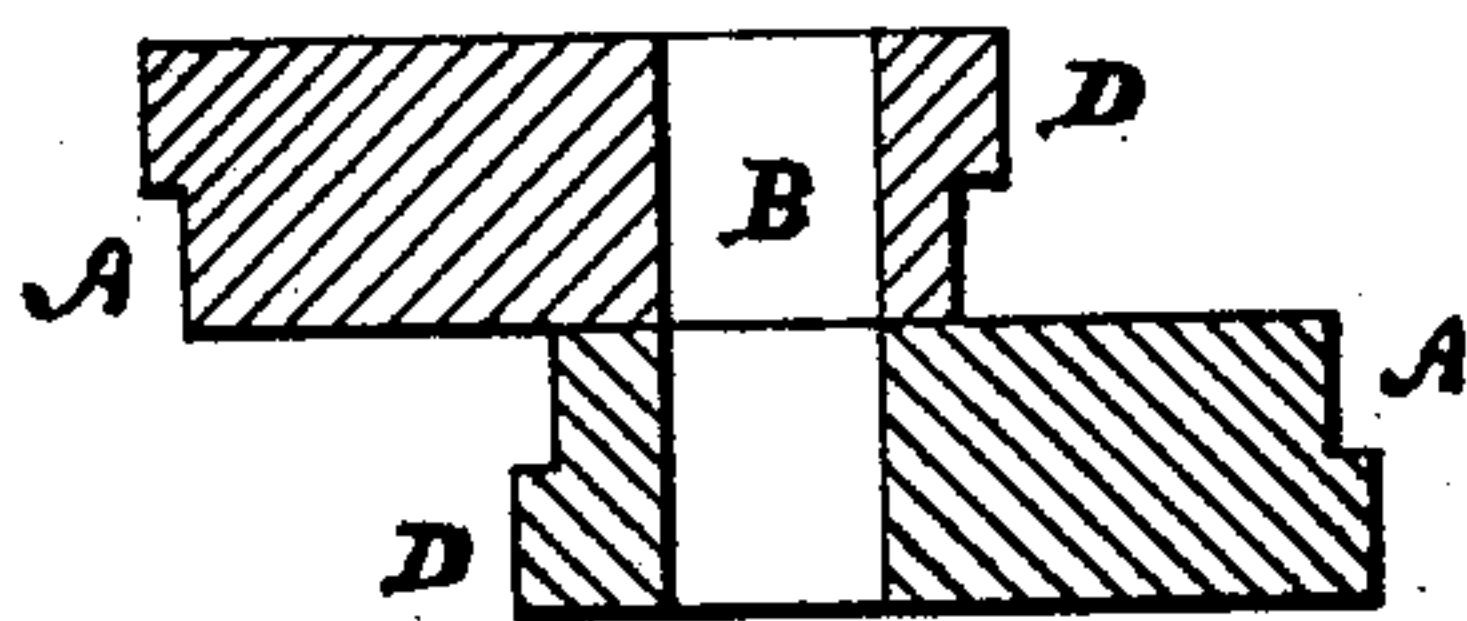
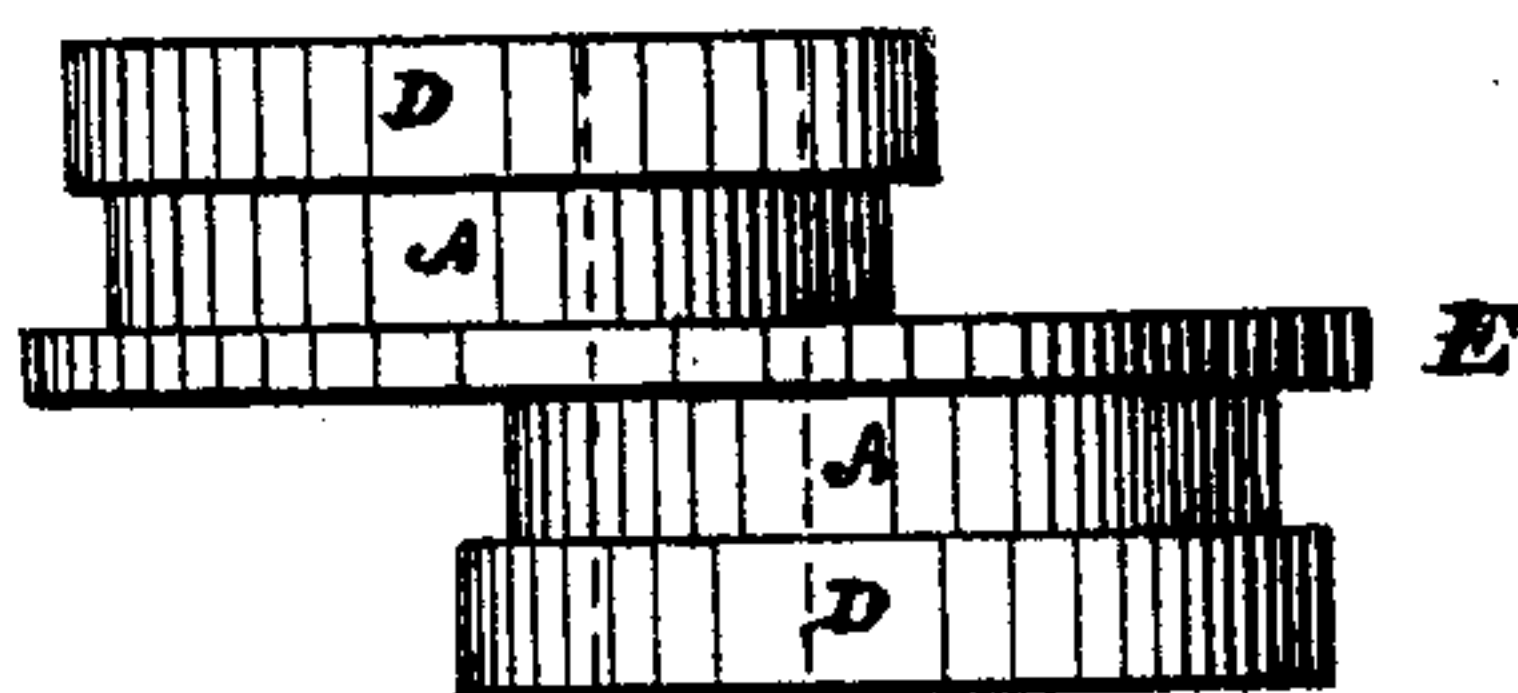


Fig. 4.



Witness,
C. Drake
Geo. W. Francis

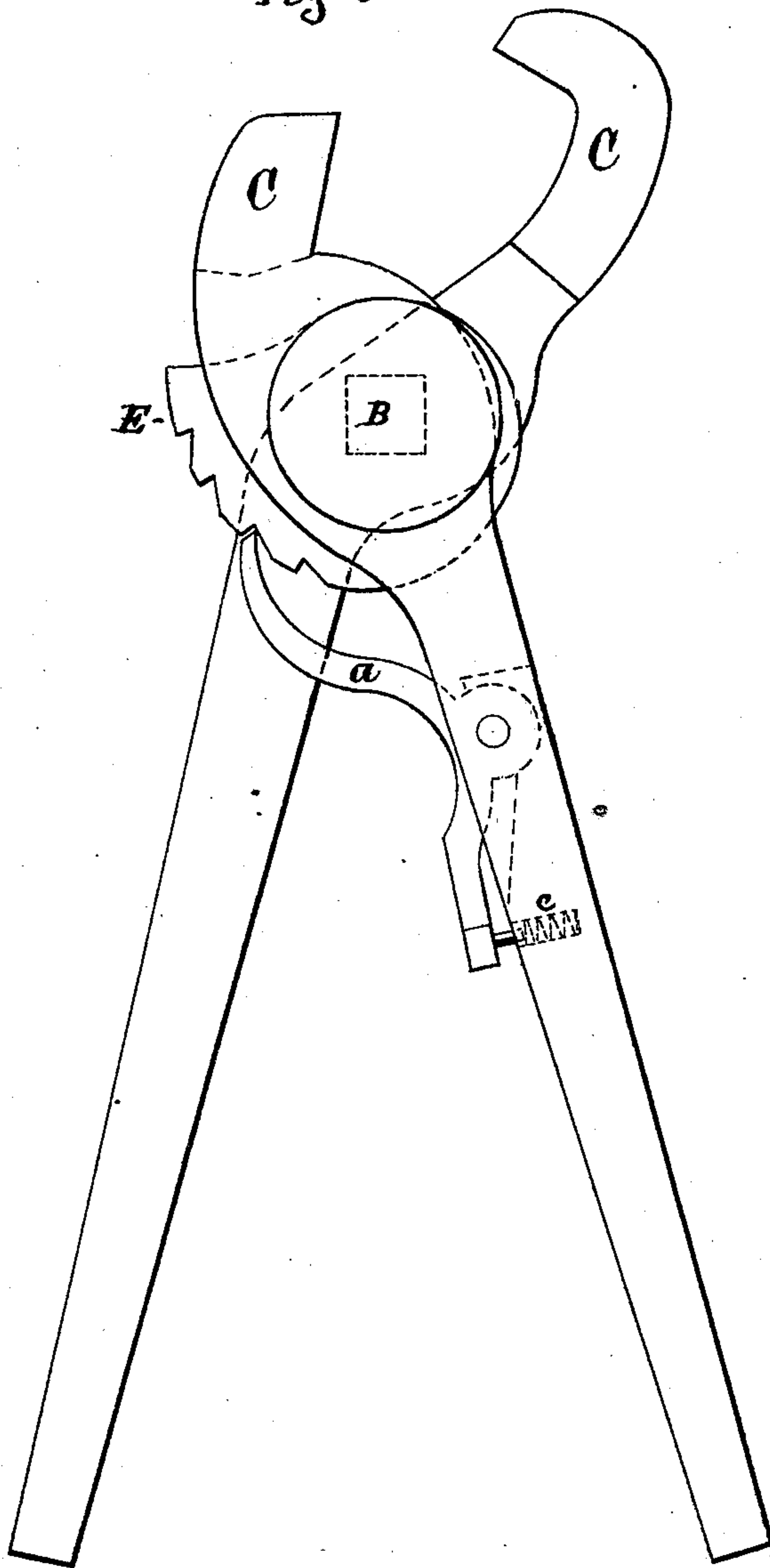
Inventor,
Geo. D. Dean
By C. Drake, Atty.

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Fig 5



Witnesses,
O. Drake.
Geo. W. Francis

Inventor:
Geo. Dean
O. Drake, atty

UNITED STATES PATENT OFFICE.

GEORGE D. DEAN, OF NEWARK, NEW JERSEY.

IMPROVEMENT IN PIPE-WRENCHES.

Specification forming part of Letters Patent No. **163,642**, dated May 25, 1875; application filed April 5, 1875.

To all whom it may concern:

Be it known that I, GEORGE D. DEAN, of the city of Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Pipe-Tongs; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains 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.

Figures 1 and 5 are illustrations of pipe-tongs embodying my invention. Fig. 2 is a section taken through line *x*. Figs. 3 and 4 are detail views.

This invention has for its object the construction of a convenient and substantial pipe-tongs, having their jaws adjustable with relation to each other, and thereby adapted to grasp different-sized pipes, thus avoiding the necessity of having so many different sizes of tongs.

My invention consists in the employment and use of the eccentrics A in connection with the shanks of the tongs, as will be more fully hereinafter set forth.

By using two eccentrics, A, adjusted upon a given center, B, as shown, and throwing in opposite directions from said center, I am enabled to use smaller eccentrics, in order to throw the jaws C a given distance to or from each other, than if I used a single one, the advantage of which will be readily understood.

The thickness and diameters of the eccentrics are proportioned to the size and thick-

ness of the shanks of the tongs. Of course the thickness of the shanks and the eccentrics should be the same. Suitable nuts or collars D are secured to the center shaft B, outside of the shanks, to prevent them from coming apart. A pawl or dog, *a*, or other suitable device, is attached to one of the shanks, and engages with one of the collars D, to hold the jaws at any desired point of adjustment. A suitable spring, *c*, should be provided in connection with said pawl and shanks to hold it in position. In lieu of the collars D outside of the shanks, a single washer, E, located in the center between the eccentrics, may be used, as shown in Figs. 4 and 5, and the pawl arranged inside of the shanks to engage therewith; also, the eccentrics and collars may be made separately, or in one solid piece, as shown in Figs. 3 and 4, and the collars, if desired, may be let into the shanks, thus making a smooth finish on the outside thereof.

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

In a pipe-tongs, constructed as hereinbefore described, the combination of the eccentrics A, bolt B, provided with the nut D, washer E, pawl *a*, and spring *c*, with the shanks C, the several parts being arranged to operate substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own invention I affix hereto my signature in presence of two witnesses.

GEORGE D. DEAN.

Witnesses:

AMZI J. DEAN,
OLIVER DRAKE.