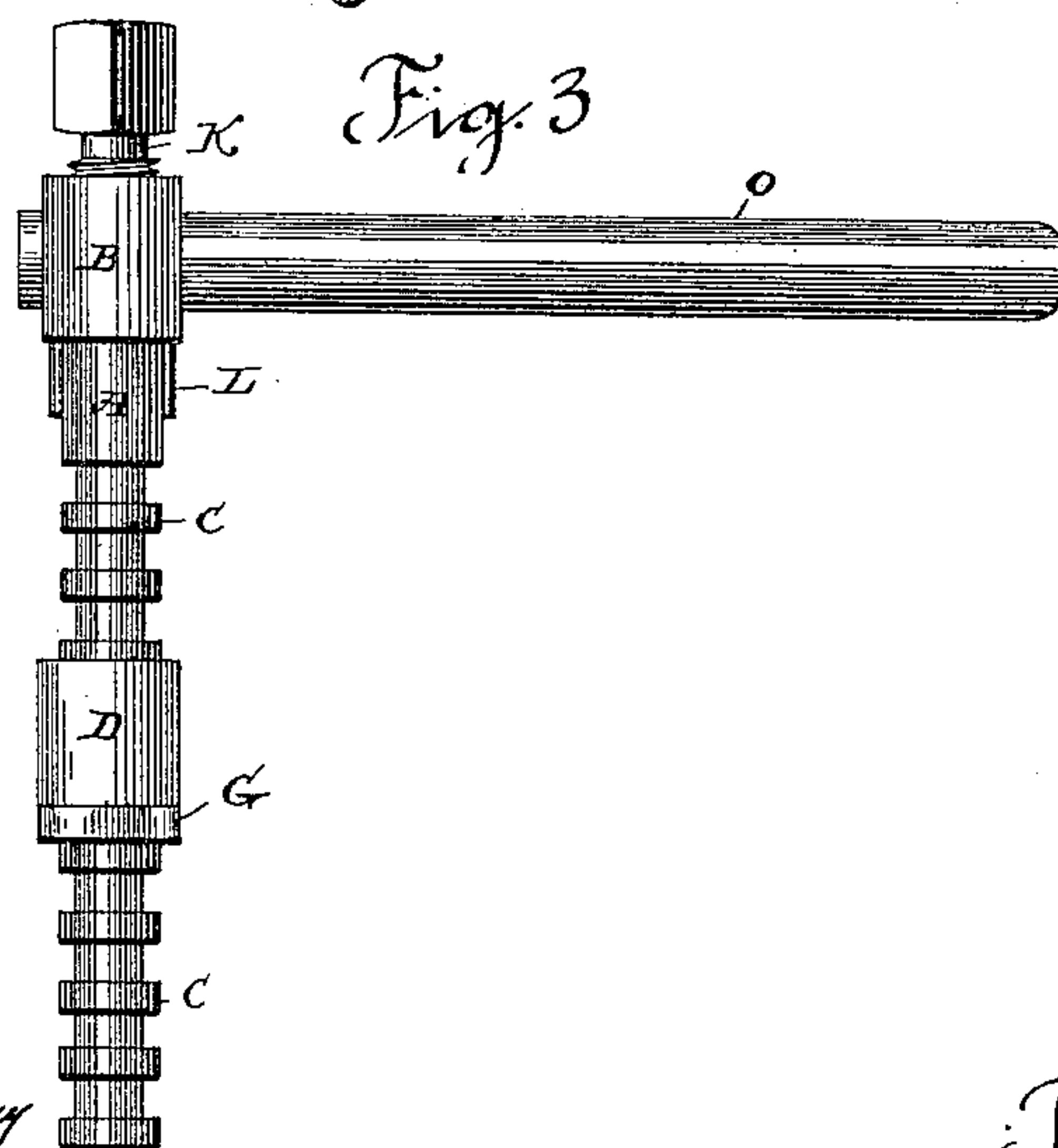
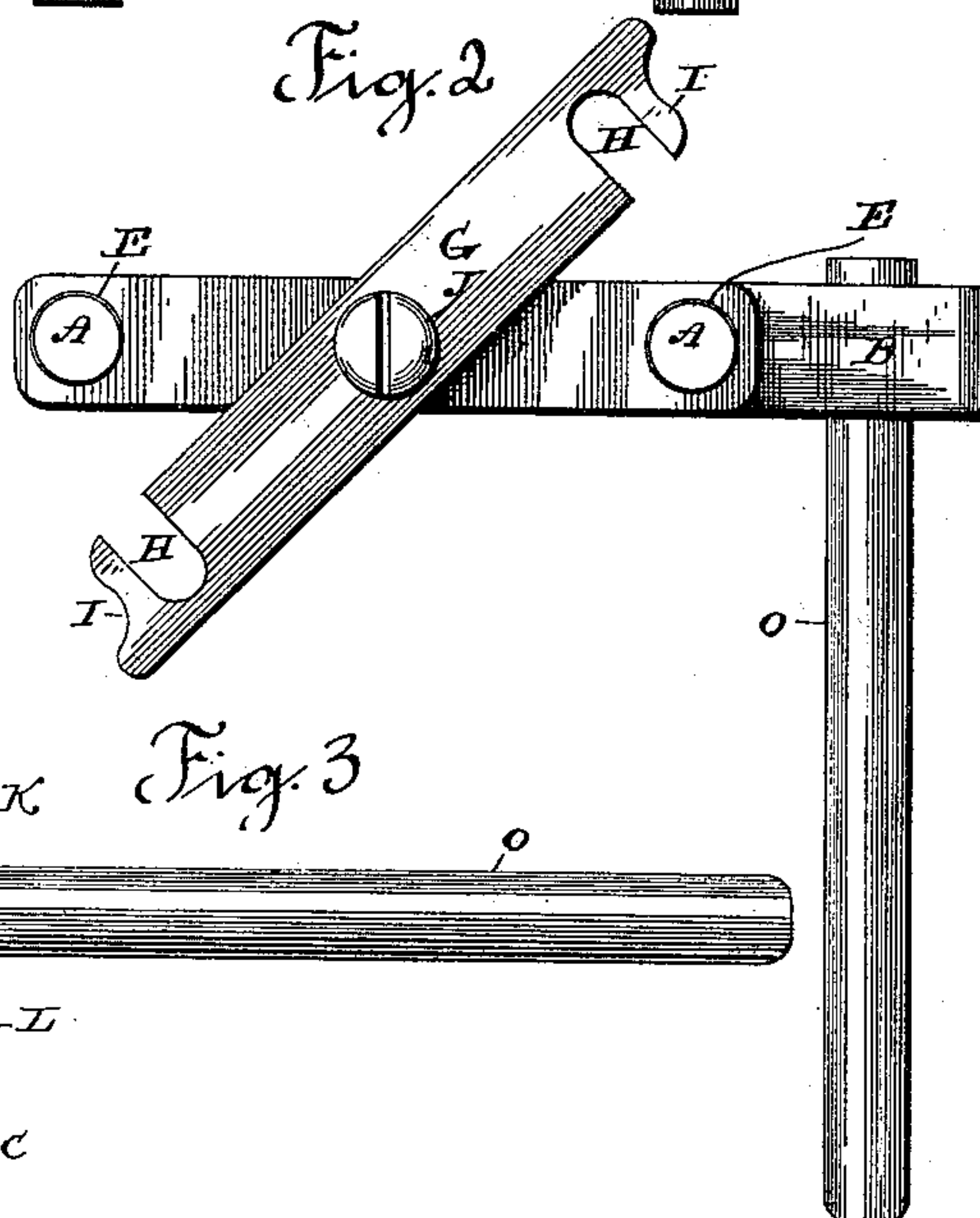
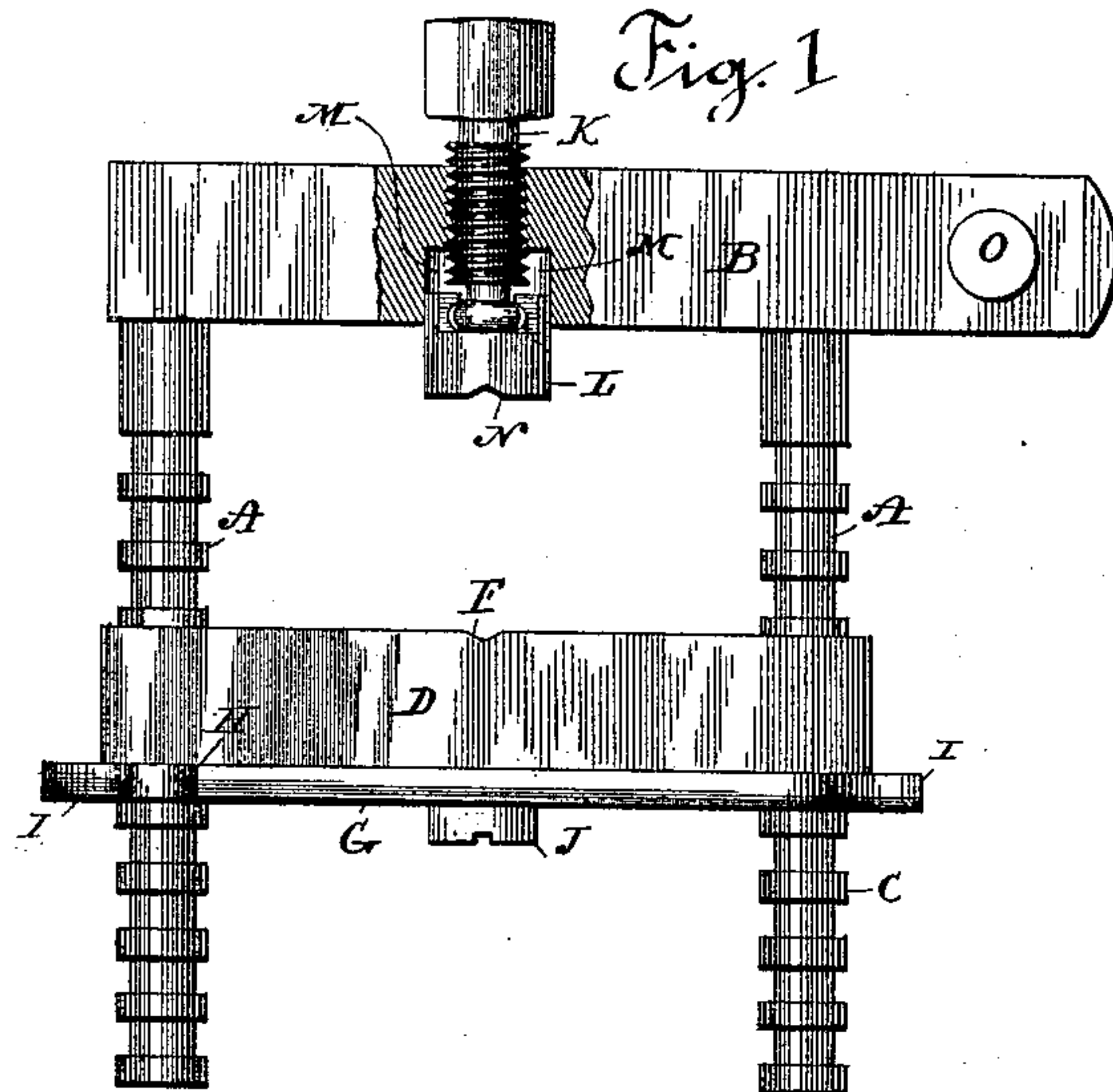


(No Model.)

T. C. SMITH.
LATHE DOG.

No. 405,853.

Patented June 25, 1889.



Witnesses:
Chas B. Shumway
Harry Hall,

Inventor
Thomas C. Smith.
By George W. Seymour
Att'y

UNITED STATES PATENT OFFICE

THOMAS CLARK SMITH, OF BRIDGEPORT, ASSIGNOR TO REUBEN H. BROWN
& CO., OF NEW HAVEN, CONNECTICUT.

LATHE-DOG.

SPECIFICATION forming part of Letters Patent No. 405,853, dated June 25, 1889.

Application filed April 7, 1888. Serial No. 269,914. (No model.)

To all whom it may concern:

Be it known that I, THOMAS CLARK SMITH, residing at Bridgeport, in the county of Fairfield and State of Connecticut, have invented
5 certain new and useful Improvements in Lathe-Dogs; and I do declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, which form a part of this speci-
10 fication.

My invention relates to an improvement in lathe-dogs, the object being to produce a cheap, durable, and efficient tool, adapted to be quickly adjusted to the work in hand.

15 With these ends in view my invention consists in a lathe-dog having two parallel arms provided with corresponding retaining-points, a cross-bar sliding over such arms, and a button carried by such cross-bar and adapted to
20 lock it to the arms.

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

25 In the accompanying drawings, Figure 1 is a view in front elevation of one form which a lathe-dog embodying my invention may assume. Fig. 2 is a view thereof in end elevation looking toward the locking-button, and
30 Fig. 3 is a view of the tool in side elevation.

My improved tool is provided with two parallel arms A A, rigidly secured to the frame-piece B of the tool and each provided with corresponding retaining-points C, formed as
35 herein shown, by dividing their surfaces into alternate spaces and collars. A cross-bar D is mounted upon such arms so as to slide freely upon them, and is thereto provided with an opening E at each end. This bar is
40 also provided with a transverse retaining-notch F, which is formed in its inner edge and midway of its length. A locking-button G, provided with slots H H, respectively entering the opposite edges of its ends, and with
45 operating-fingers I I, respectively located at its extreme ends, is centrally pivoted to the outer edge of the bar D by a screw J, as shown. A clamping-screw K is mounted in the frame-piece B at a point midway between
50 the arms A A, with which it is parallel. A

swivel L, mounted on the end of the said screw and located in part in a recess M formed in the inner edge of the frame-piece B, has a retaining-notch N formed in its outer face for co-operation with the notch F, with
55 which the swivel is in alignment. A driving-pin or arm O, projecting from the rear face of the frame-piece B and located at one end thereof, is provided for driving the tool in the usual manner. 60

In using my improved tool, the sliding cross-bar is adjusted toward and away from the frame-piece and as close to the requirements of the work in hand as the retaining-points will permit. It is then locked onto the arms
65 by turning the button into corresponding retaining-points thereof. The work is then firmly clamped into place between the frame-piece and cross-bar by means of the clamping-screw. As the cross-bar slides freely on
70 the arms, it is very readily shifted to the requirements of a wide range of work and without any strain upon the arms, whereas when the arms are threaded, as has been done heretofore, and turned to adjust the bar, the
75 operation of adjusting the tool to the work in hand is not only very slow and tedious, but also liable to wrench and bend the arms and wear their threads, as must result if they are not turned in uniformity. Under my in-
80 vention, also, the clamping-screw imposes the strain directly upon the frame-piece and cross-bar, so that what of strain falls on the arms is equally distributed between them and obviously to the best advantage, whereas
85 in prior constructions the strain has been imposed directly upon the threaded arms and unequally, unless the adjustable bar is exactly square with them, and this rarely occurs. Furthermore, under my construction
90 the tool is not easily bruised and is very durable, convenient, and efficient in use.

It is apparent that in carrying out my invention some changes in the form herein shown and described may be made. I would
95 therefore have it understood that I do not limit myself to such form, but hold myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of my invention. 100

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

1. A lathe dog having two parallel arms, each provided with corresponding retaining-points, a cross-bar adapted to slide freely over such arms, and a locking-button carried by the said cross-bar and adapted to engage with the arms to lock the said bar thereto, substantially as set forth.

2. A lathe-dog having two parallel arms, each provided with corresponding retaining-points, a bar adapted to slide freely over such arms, a locking-button carried by such bar and adapted to engage with the arms to lock the said cross-bar thereto, and a clamping-screw mounted in the main frame-piece of the tool and midway between the two arms, substantially as set forth.

3. A lathe-dog having two parallel arms, each having its surface divided into corre-

sponding retaining-points formed by alternate spaces and collars, a bar adapted to slide freely upon such arms, and a locking-button carried by the said bar and adapted to be engaged with the arms to lock the bar thereto, substantially as set forth.

4. A lathe-dog having two parallel arms, each provided with corresponding retaining-points, a cross-bar adapted to slide freely over such arms, and a locking-button pivoted to the said bar and having its opposite ends slotted from their opposite edges to adapt it to engage with the arms for locking the bar thereto, substantially as set forth.

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

THOMAS CLARK SMITH.

Witnesses:

CHAS. B. SHUMWAY,
M. S. SEELEY.