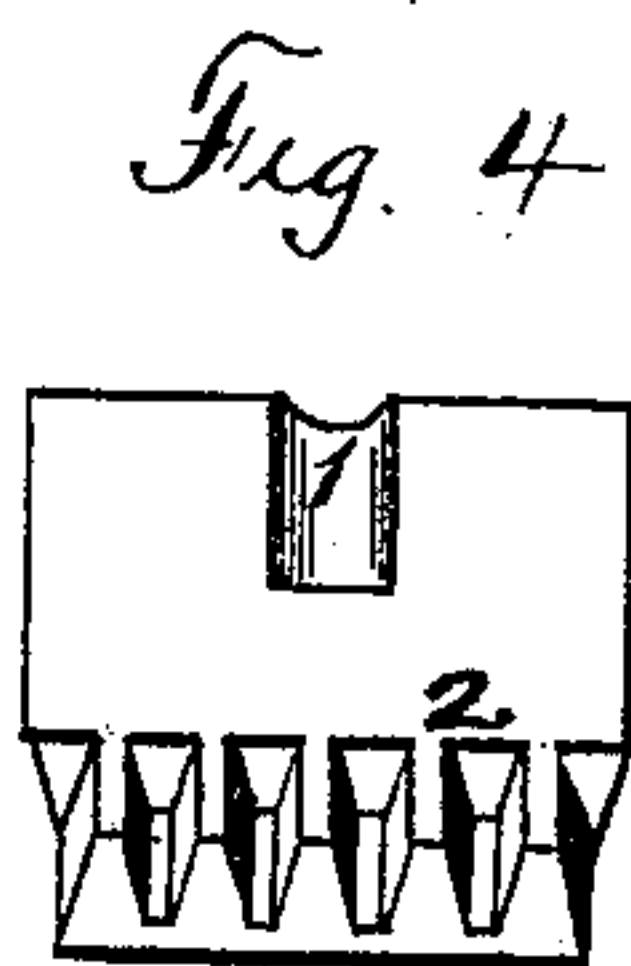
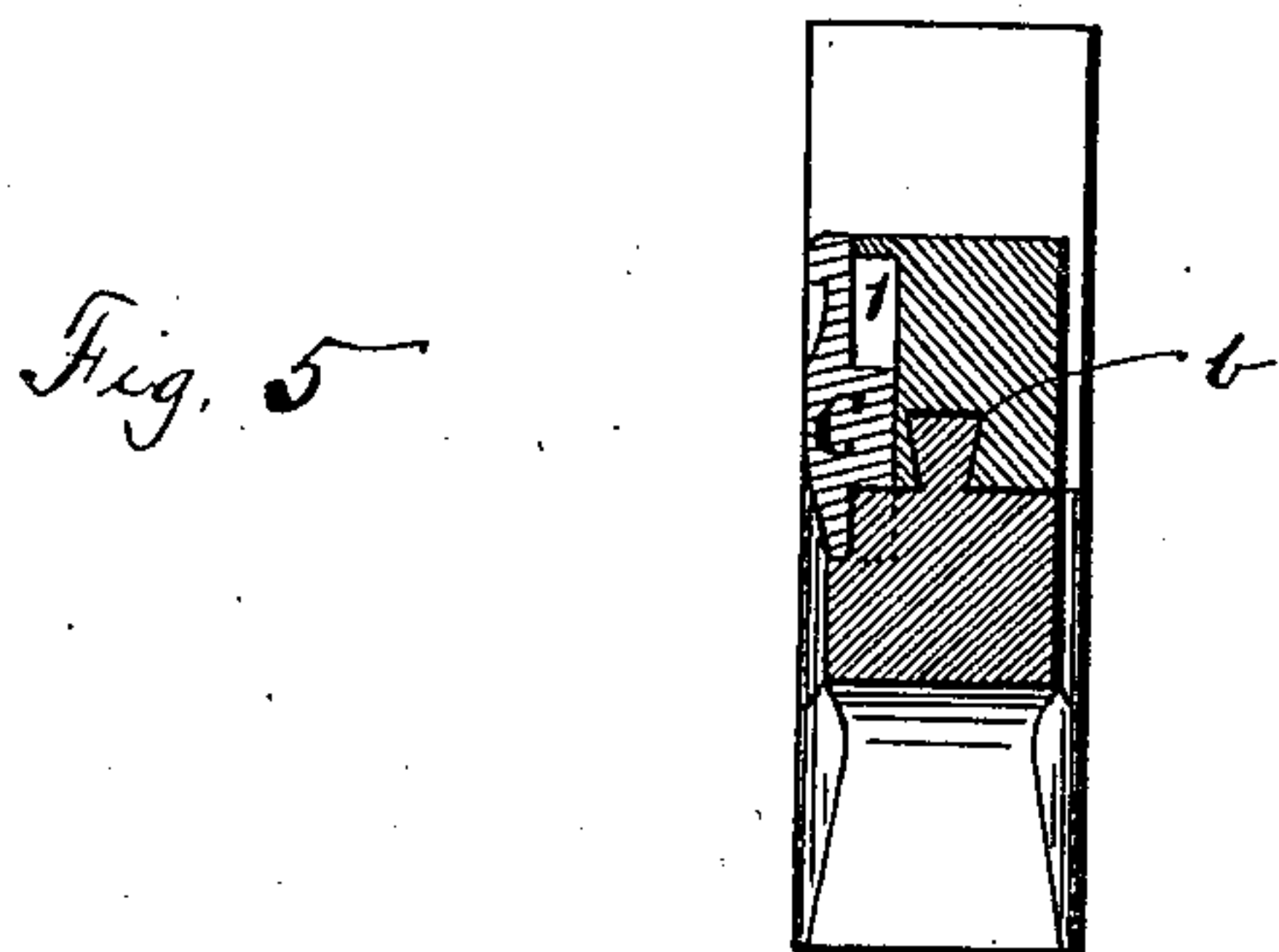
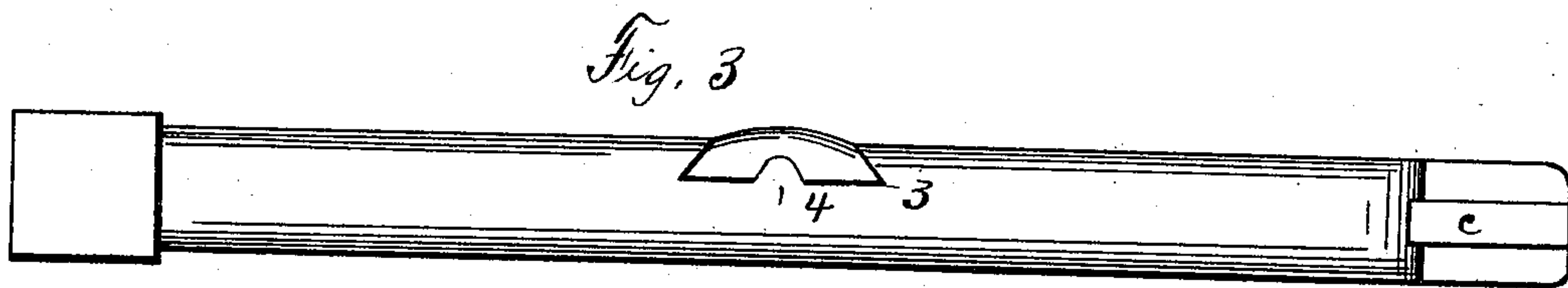
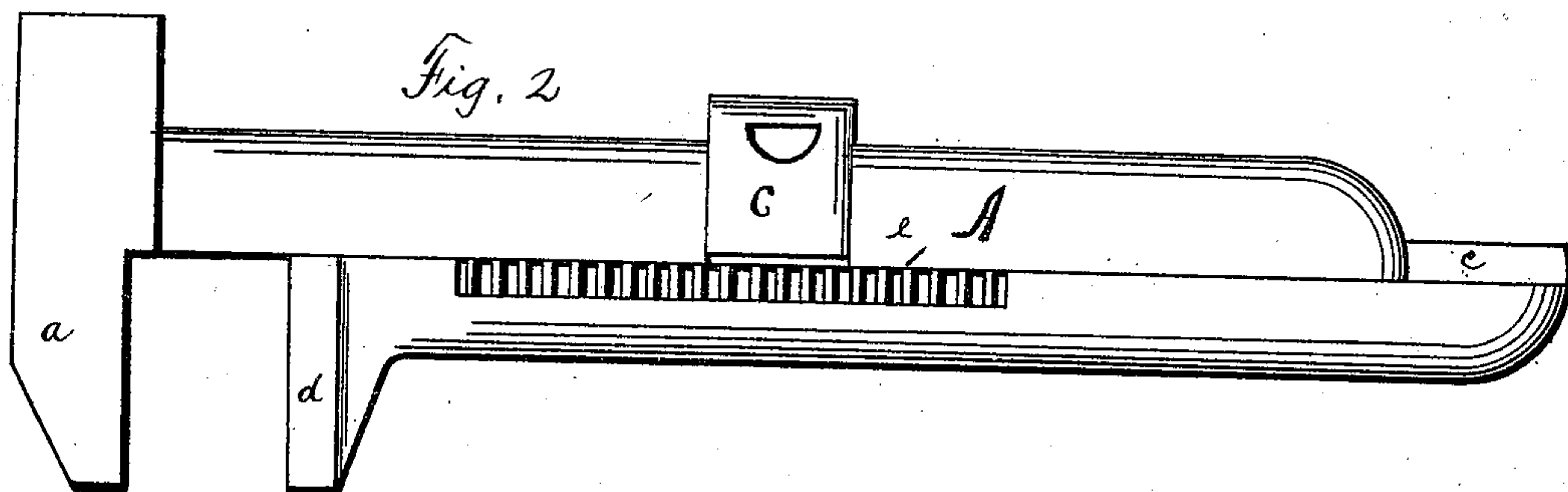
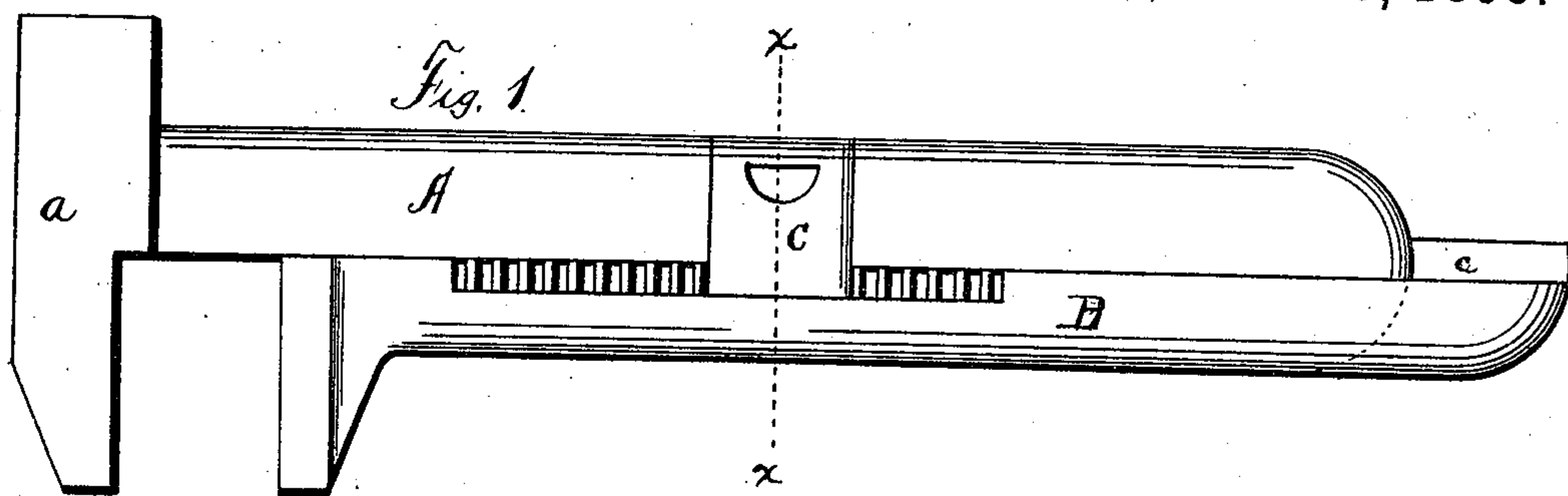


(No Model.)

H. J. ROSENBERG.  
WRENCH.

No. 506,261.

Patented Oct. 10, 1893.



WITNESSES:

N. A. Carhart,  
D. May Goodrich.

INVENTOR  
Helfred J. Rosenberg  
By Smick & Donison  
ATTORNEYS.

# UNITED STATES PATENT OFFICE.

HELFRED JOHN ROSENBERG, OF ST. LOUIS, MISSOURI.

## WRENCH.

SPECIFICATION forming part of Letters Patent No. 506,261, dated October 10, 1893.

Application filed April 8, 1893. Serial No. 469,619. (No model.)

*To all whom it may concern:*

Be it known that I, HELFRED JOHN ROSENBERG, of St. Louis, in the State of Missouri, have invented new and useful Improvements in Wrenches, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

My invention relates to nut wrenches and particularly to that class which is known as monkey-wrenches.

My object is to produce a nut wrench so arranged and constructed as to allow the movable jaw to be readily adjusted to any sized nut desired, positive in its workings, cheap and durable in its construction and of great utility.

My invention consists in the several novel features of construction and operation hereinafter described and which are specifically set forth in the claims hereunto annexed. It is constructed as follows, reference being had to the accompanying drawings, in which—

Figure 1, is a top plan view of the wrench adjusted to fit a nut about an inch in size. Fig. 2, is a similar view thereof showing the dog out of engagement with the ratchets. Fig. 3, is an edge view of the wrench showing the dog dovetailed therein. Fig. 4, is a bottom plan view of the dog, removed. Fig. 5, is a cross section on line *x x*, Fig. 1.

A, is the base part of a wrench provided with a head *a*—in the ordinary way, rigidly secured thereto, and is provided with a longitudinal dovetailed groove in its inner face, as shown at *b*—.

B, is the bar provided with a tongue *c*—adapted to slide within and be retained in the groove *b*— and is provided with a jaw *d*—on one end. Upon its top face are ratchets *e*— along its inner edge.

C, is the dog provided with the recess *1*—centrally upon its outer edge and its inner edge is provided with ratchet-teeth *2*—which are adapted to engage with the ratchet-teeth *e*— in the piece *B*—. The dog *C*— is dovetailed into the base *A*—, as shown at *3*— and said base is provided with a lug *4*—, or other means of limiting the outward travel of the dog *C*—, it being adapted to travel in the groove *1*—, above referred to.

It will be observed that by constructing the groove *b*— dovetailed and the tongue

*c*— to fit it, when they are inserted into each other they will be held together without further means. It will also be observed that by dovetailing the dog *C*— into the base *A*— it will be retained from displacement thereby, and will be limited in its travel laterally by the lug *4*—. It will also be observed that when the dog *C*— is withdrawn to the position shown in Fig. 2, the piece *B*— may be moved backward and forward upon the base *A*— to any position desired and to fit any nut. The dog is then pushed into the position shown in Fig. 1, where it is rigidly held until it is desired to again change the jaw for a different sized nut.

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

1. A monkey-wrench comprising the base *A*—, having a head thereon, a dovetailed groove in its inner edge, the piece *B*— having a tongue adapted to travel in the aforesaid groove, provided with ratchets upon its upper face, a dog slidingly mounted in the base *A*— and adapted to engage with the ratchets in the piece *B*—, as set forth.

2. A wrench comprising a base *A*—, having a head thereon provided with a dovetailed groove in its inner edge, a piece *B*— provided with a tongue adapted to travel in the aforesaid groove and provided with ratchets upon its upper face, a dog dovetailed in the base *A*— and having means for limiting its lateral movement, as set forth.

3. The herein described wrench comprising a base *A*—, having a head at one end and a dog dovetailed therein, said dog being provided with a groove in its lower outer face and a ratchet upon its inner lower face, a lug mounted in said base, adapted to engage with said groove, the piece *B*— provided with a tongue adapted to engage with the aforesaid groove, and having ratchets upon its upper face with which the teeth in the dog are adapted to engage, substantially as described, for the purposes set forth.

In witness whereof I have hereunto set my hand this 25th day of March, 1893.

HELFRED JOHN ROSENBERG.

In presence of—

JOHN H. BOOGHER,

P. B. TAYLOR.