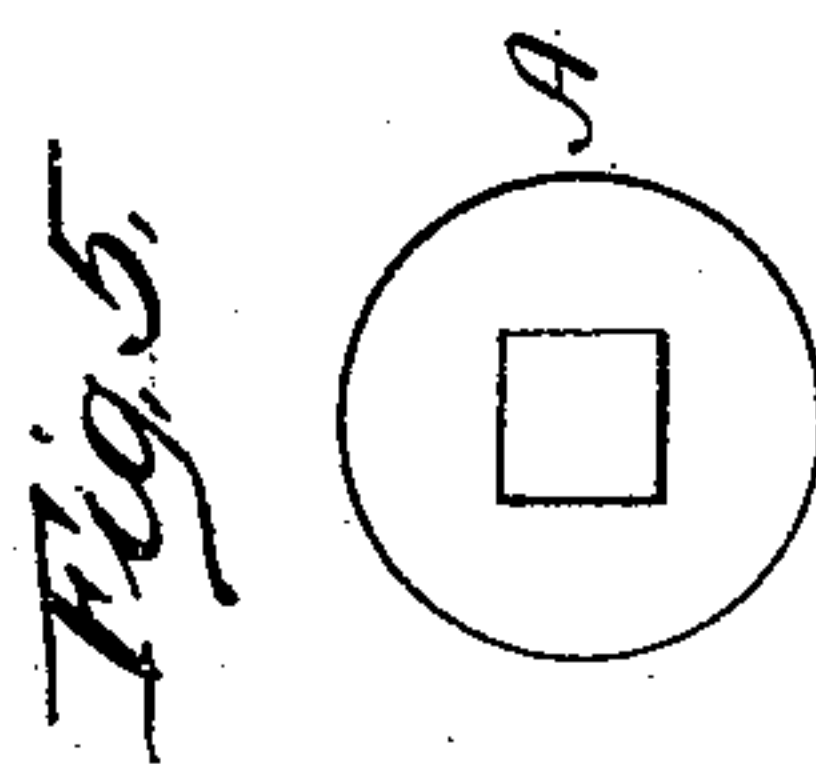
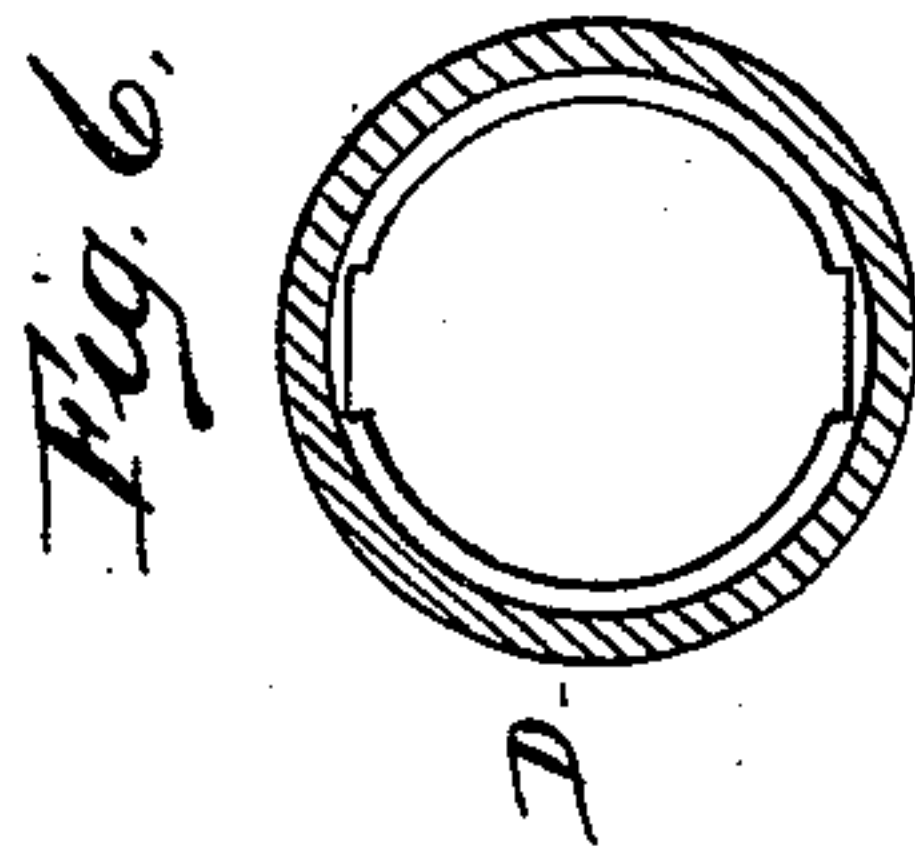
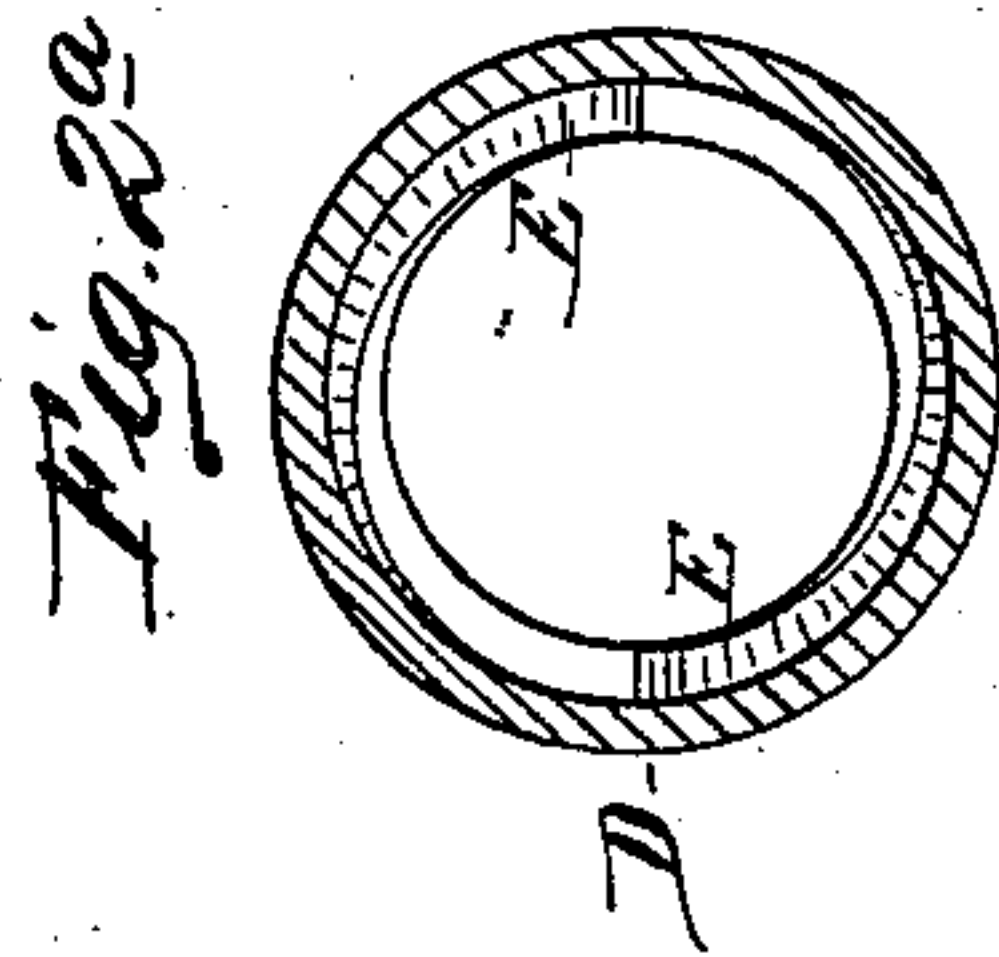
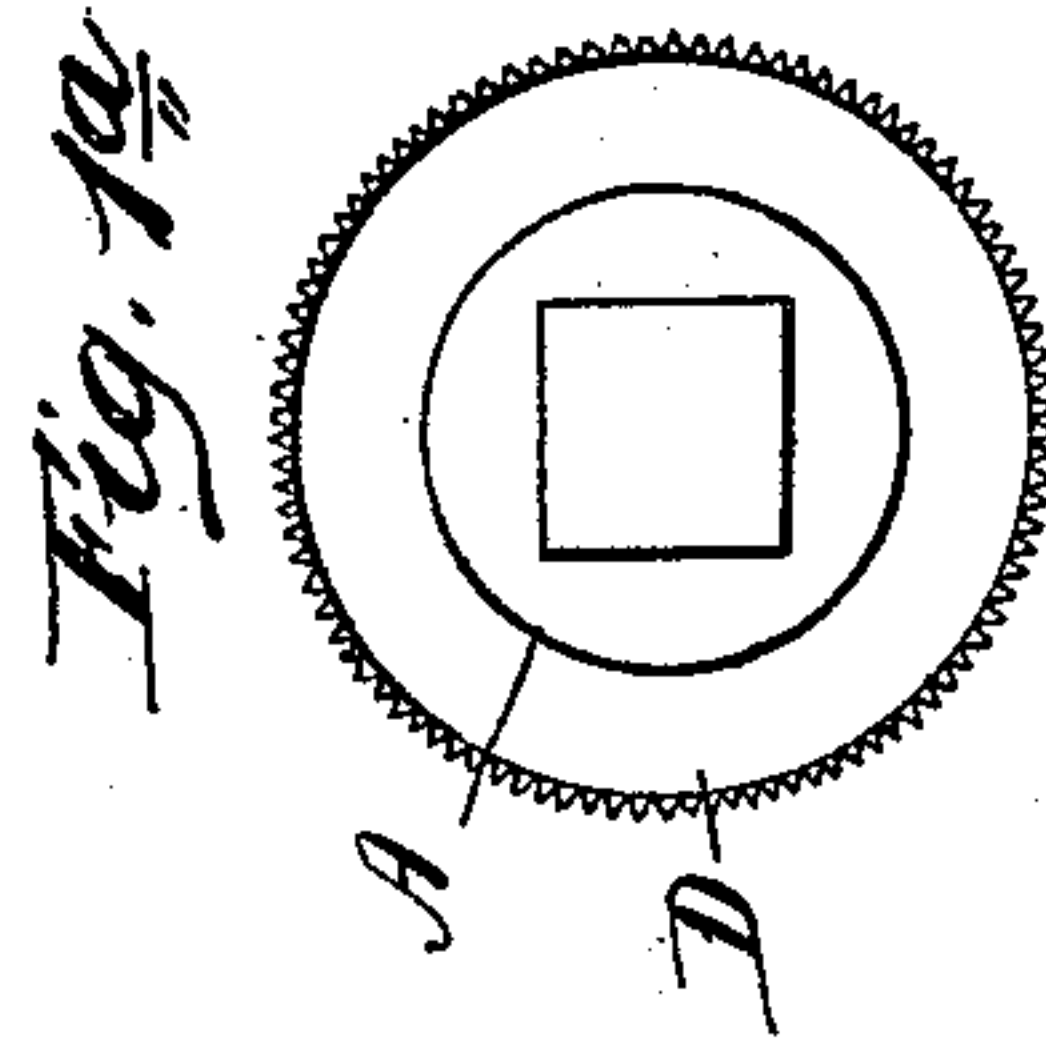
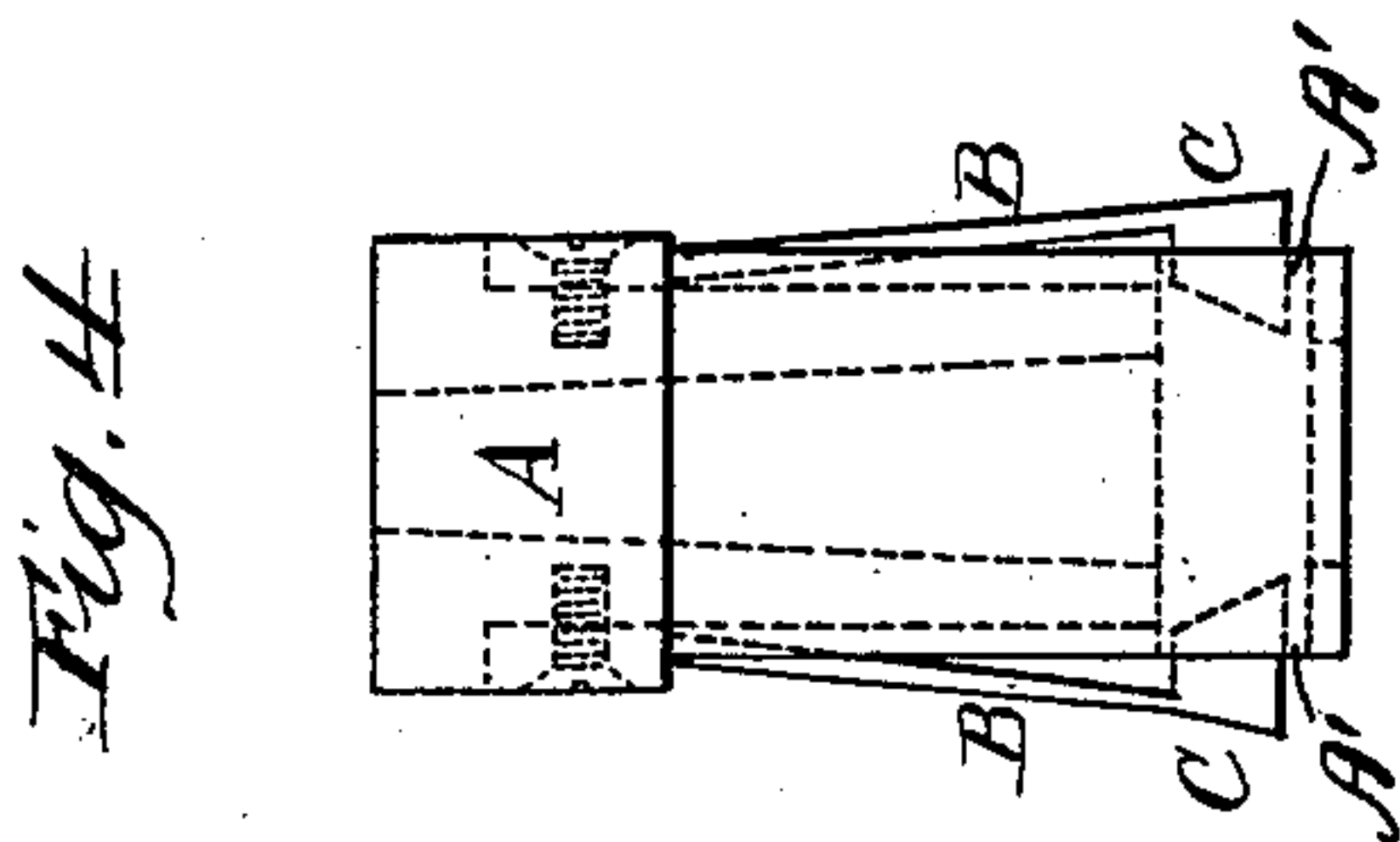
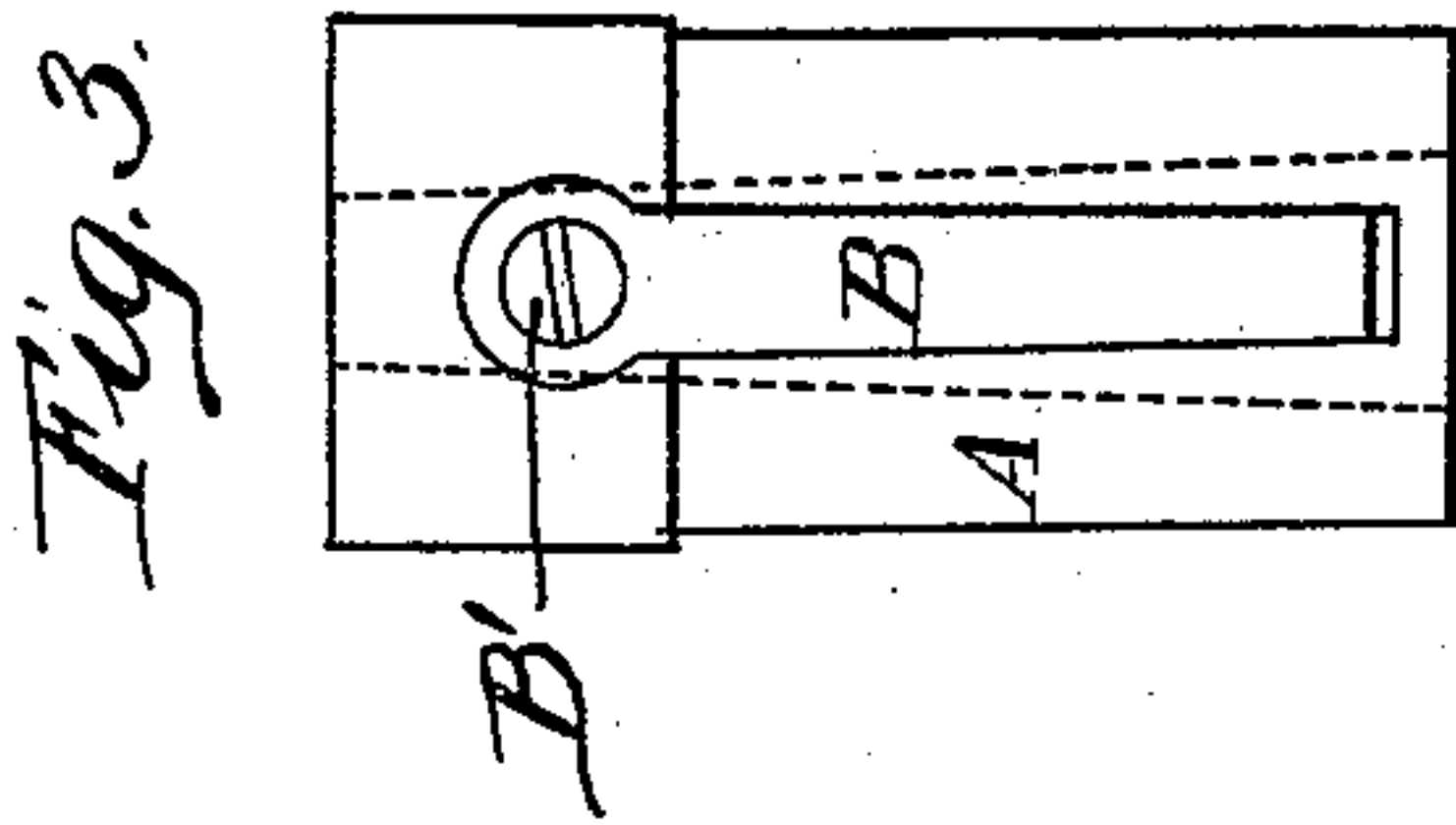
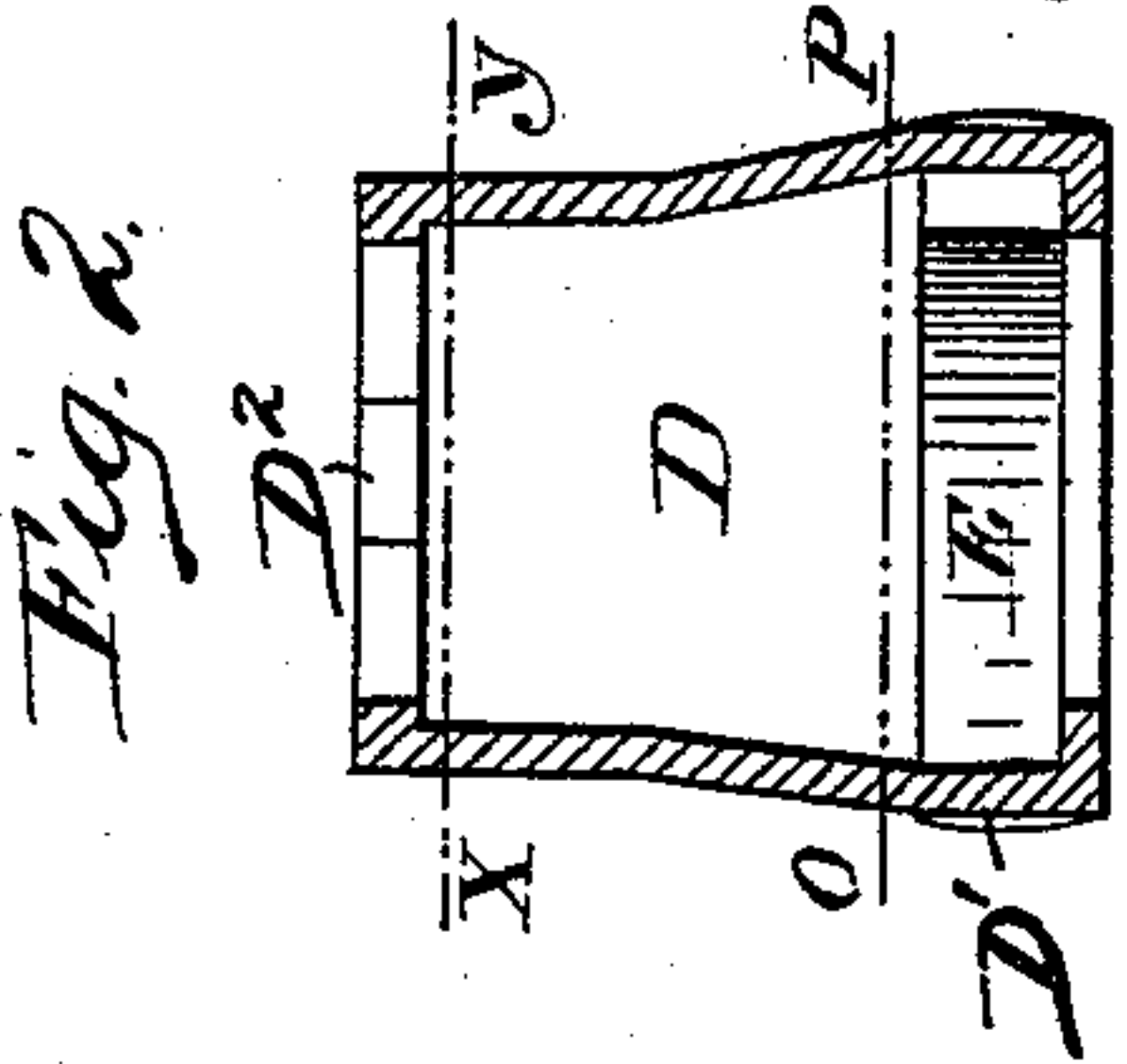
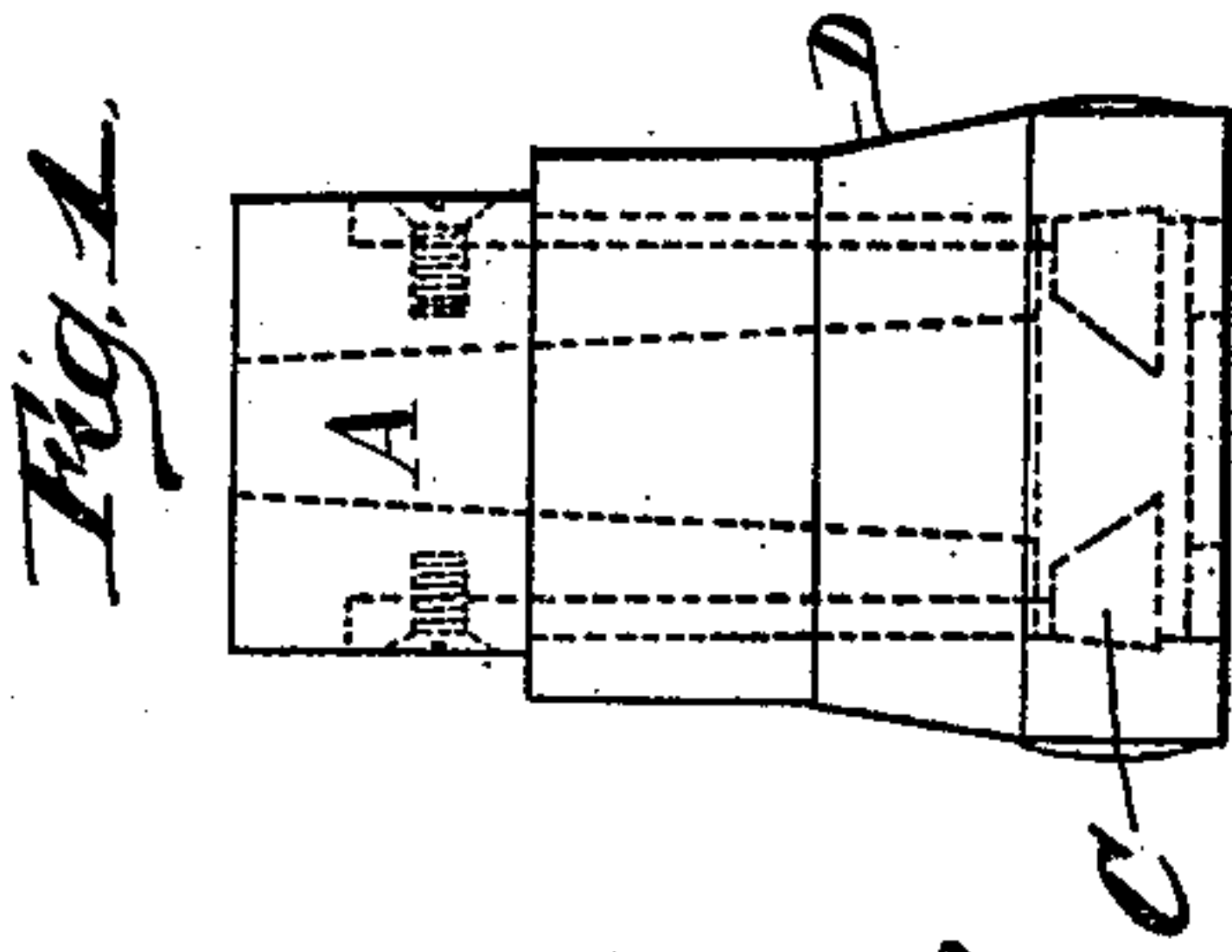


(No Model.)

A. FLEURANT.
CHUCK OR HOLDER FOR TOOLS, &c.

No. 494,631.

Patented Apr. 4, 1893.



Witnesses:

H. B. Kingsberg

C. M. Mott

Inventor:

Antoine Fleurant

By his attorney J. M. O. Boulton

UNITED STATES PATENT OFFICE.

ANTOINE FLEURANT, OF MACON, FRANCE.

CHUCK OR HOLDER FOR TOOLS, &c.

SPECIFICATION forming part of Letters Patent No. 494,631, dated April 4, 1893.

Application filed September 2, 1891. Serial No. 404,574. (No model.) Patented in France February 18, 1891, No. 211,409.

To all whom it may concern:

Be it known that I, ANTOINE FLEURANT, a citizen of the Republic of France, residing at Macon, in France, have invented certain new and useful Improvements in Chucks or Holders for Tools and the Like, (for which I have obtained Letters Patent in France, No. 211,409, dated February 18, 1891,) of which the following is a specification.

10 This invention relates to that class of tool holders or chucks for use with hand braces, drilling machines and so forth, the object of which is to securely and centrally hold the tool or other object in the holder.

15 The invention will be best understood by reference to the accompanying drawings in which:—

Figure 1 is an elevation of the complete holder or chuck of which Fig. 1^a is an end view. Fig. 2 is a longitudinal section of the sleeve of which Fig. 2^a is a cross section on the lines *o—p* of Fig. 2. Fig. 3 is an elevation of the internal tube with the sleeve removed, Fig. 4 being a similar view of the same part but taken on a plan in end view at right angles thereto. Fig. 5 is a back end view of the inner tube and Fig. 6 is a cross section of the sleeve D upon the line *x—y* of Fig. 2, looking toward the back of the sleeve.

30 Like letters represent like parts throughout the drawings.

A represents an external cylindrical tube the interior of which may be cylindrical or tapered and round or square as preferred; this tube may be either the end of the spindle of the drill or other machine or a portion of the stock of a brace or it may be a separate article adapted to be secured to the said stock or spindle in any convenient manner.

40 D is the sleeve having a preferably milled edge D' by which it may be rotated upon the tube A, and with which it is either permanently connected while free to rotate, or it may be merely slipped on as preferred. The

sleeve D is provided with internal eccentric or spiral ribs or projections E as shown in Figs. 2 and 2^a, and recesses D² at its back end to allow of the passage of the spring catches B next described. The tube A carries two or more spring catches B having heads C adapted to project into the interior of the tube A which is for that purpose provided with slots or openings A'; the catches B may be secured to the tube A at their fixed ends by screws B'.

In operation the tool or equivalent to be held in the chuck is placed into the central opening in A and the sleeve D revolved so that the wider parts of the spirals E press upon the back of the catch heads C causing them to project into the interior of the tube A and thus grip the article to be held therein. In Fig. 1 the heads C are shown projected into the interior of the tube A while in Fig. 4 they are shown retracted by the power of their own springs B.

I claim—

In a chuck or holder for tools, the combination of the tube having a central bore or opening to adapt said tube to receive interiorly a tool, and provided with slots A' near one end thereof, spring arms B detachably secured at one end to the tube on opposite sides thereof, by screws B' and provided at the opposite end with heads C adapted to be projected through the openings A', a tube D rotatably mounted over the tube and arms B, a series of inclines E within the tube D opposite the heads C, and adapted to bear upon the latter to force them inwardly through the openings A' when the tube D is turned, as described.

In testimony whereof I have hereto set my hand in the presence of the two subscribing witnesses.

ANTOINE FLEURANT.

Witnesses:

LAFORST ANTOINE,
JULES NUGUET.