

No. 608,110.

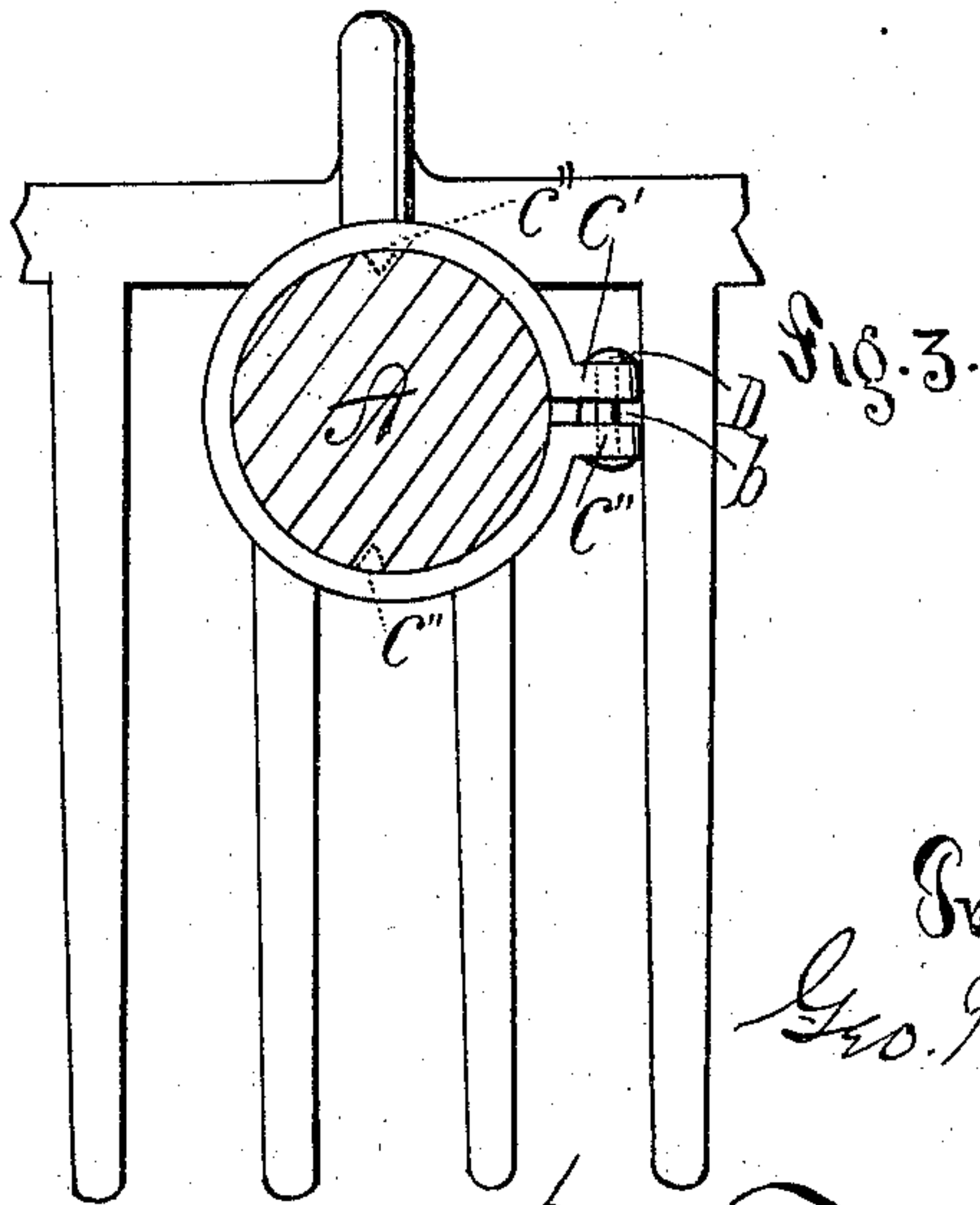
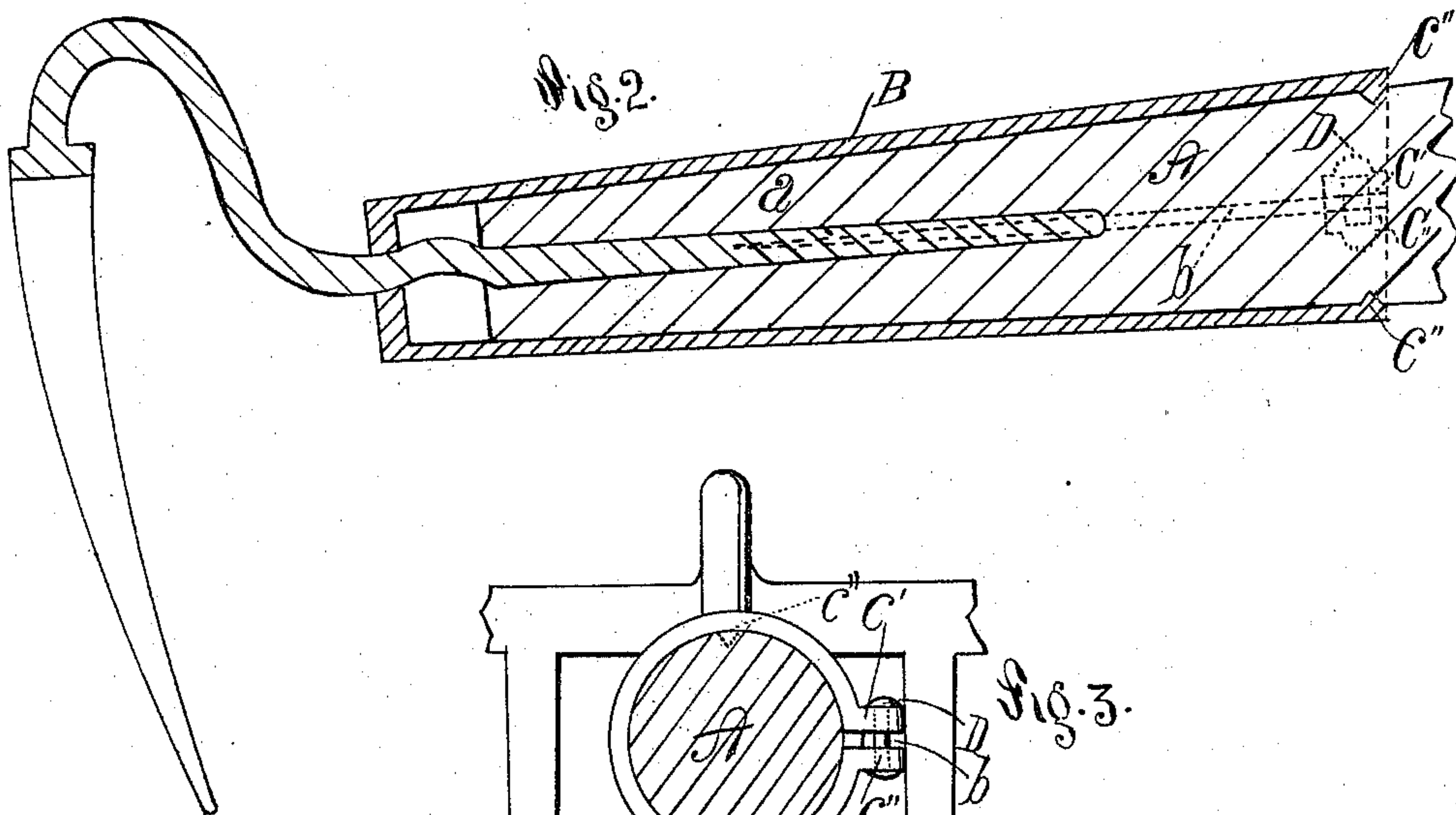
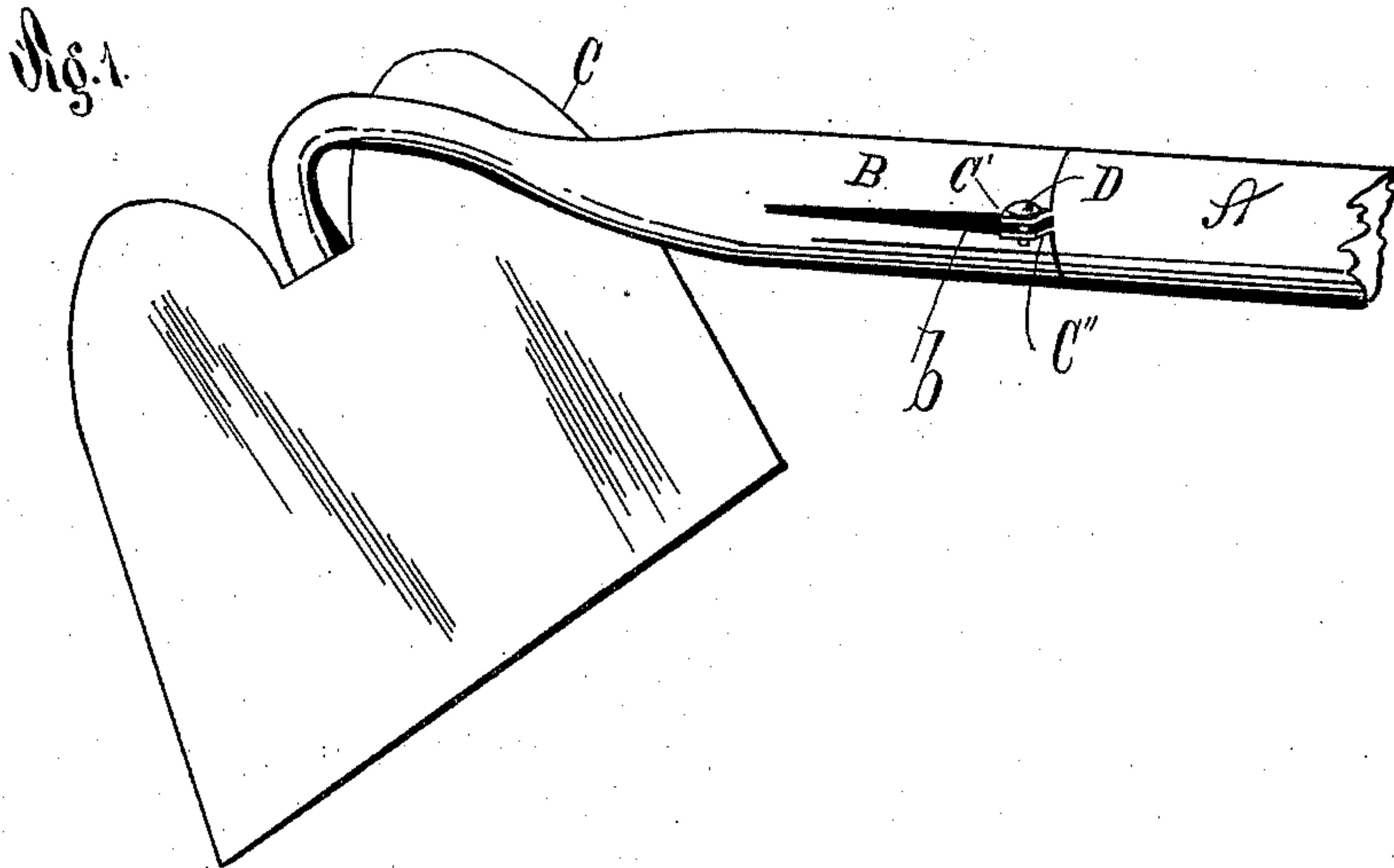
Patented July 26, 1898.

G. H. DUNLOP.

DEVICE FOR ATTACHING IMPLEMENTS TO HANDLES.

(Application filed Feb. 17, 1898.)

(No Model.)



Witnesses.
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UNITED STATES PATENT OFFICE.

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DEVICE FOR ATTACHING IMPLEMENTS TO HANDLES.

SPECIFICATION forming part of Letters Patent No. 608,110, dated July 26, 1898.

Application filed February 17, 1898. Serial No. 670,691. (No model.)

To all whom it may concern:

Be it known that I, GEORGE H. DUNLOP, a citizen of the United States, residing at Hollywood, in the county of Los Angeles and State of California, have invented new and useful Improvements in Devices for Attaching Implements to Handles, of which the following is a specification.

The particular object of my invention is to provide a device whereby tools—such as hoes, shovels, rakes, forks, &c.—may be quickly, conveniently, and firmly attached to the handles and whereby in case the handle should work loose it may be readily tightened.

My invention comprises the features of construction and combinations of parts hereinafter set forth whereby I accomplish the objects above specified.

The accompanying drawings illustrate my invention.

Figure 1 is a view of a hoe with socket-shank attached to its handle by means which embody my invention. Fig. 2 is a sectional view showing a rake and another form of device whereby tools provided with solid shank and ferrule are attached to handle. Fig. 3 is a view showing a handle in cross-section and illustrating the means of tightening the device upon the handle.

In the drawings, A represents a handle which has one end α shaped or tapered in the usual manner.

B is a ferrule or cap which is also shaped to fit upon the end of the handle and is provided at its larger end with a slit or slot b , which extends only a portion of the length of the ferrule. This slot is sufficiently wide to allow of considerable contraction of the ferrule after the handle is placed in position in the ferrule. As shown in Fig. 1, this ferrule is made integral with the shank of a hoe C, so that in effect the hoe is provided with a shank having a socket (which is the inside of the ferrule) within which seats the end of the handle.

Suitable means for tightening the ferrule are provided. These means, as shown in the drawings, comprise a rivet D, which is arranged passing through lugs or ears C' C'' , which project from the ferrule upon opposite

sides of the slot and near the larger and slotted end of the ferrule. In case the handle should work loose within the ferrule, by battering the rivet the ears will be drawn closer together and the ferrule and handle thus firmly connected with each other.

If it is deemed desirable, the ears may be made to extend a greater distance along the ferrule and two sets of rivet-holes provided therethrough, or two independent sets of ears may be provided in case the ferrule should be made so long as to require their use to clamp the ferrule tightly upon the handle. It is obvious that screws or bolts may be used in the place of rivets; but ordinarily rivets are preferable in that rust and dirt will not impair their usefulness.

In Fig. 2 of the drawings I have shown my invention applied to the ordinary solid shank and ferrule construction. In this instance the ferrule is clamped upon the handle in the same manner as that described regarding Fig. 1, and in case the ferrule works loose it may be tightened upon the handle in the manner just described.

By slotting the ferrule along only a portion of its length its rigidity and strength are in no wise impaired.

The inside of the ferrule or socket-shank near its larger end may be provided with teeth or sharp projections c'' , which by reason of the ferrule being expanded when the handle is slipped into position will not engage with the handle, but when the ferrule is clamped upon the handle will bite into the wood, thus firmly securing the ferrule in position and preventing the handle from withdrawing therefrom.

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

1. The combination set forth of a handle; a tool having a shank provided with a socket to receive the handle, such socket being tapered and the shank-socket being slotted only at its open end; and means for clamping the slotted end of the shank upon the handle.

2. The combination set forth of a handle; a ferrule slotted along a portion of its length and adapted to fit upon the handle, and pro-

vided with outwardly-projecting lugs or ears; and means for drawing the lugs or ears together to clamp the ferrule upon the handle.

3. The combination set forth of a handle
5 tapered at its end; a tapering ferrule adapted to seat upon the handle, and having a portion of its length, at its larger end, slotted, the inside of the slotted end being provided

with projections to take into the wood of the handle; and means for clamping the slotted end of the ferrule upon the handle to cause the projections to bite into the wood.

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