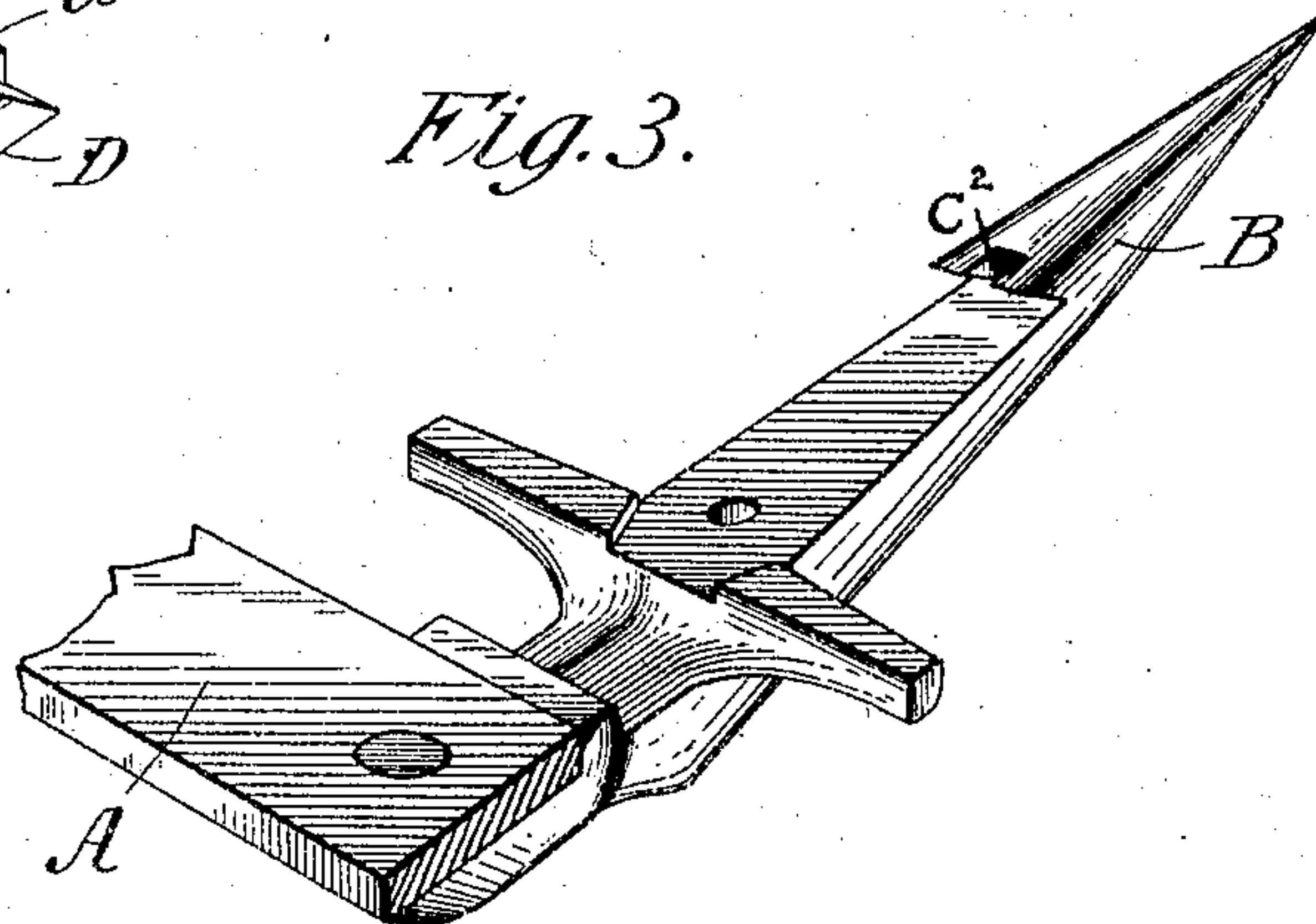
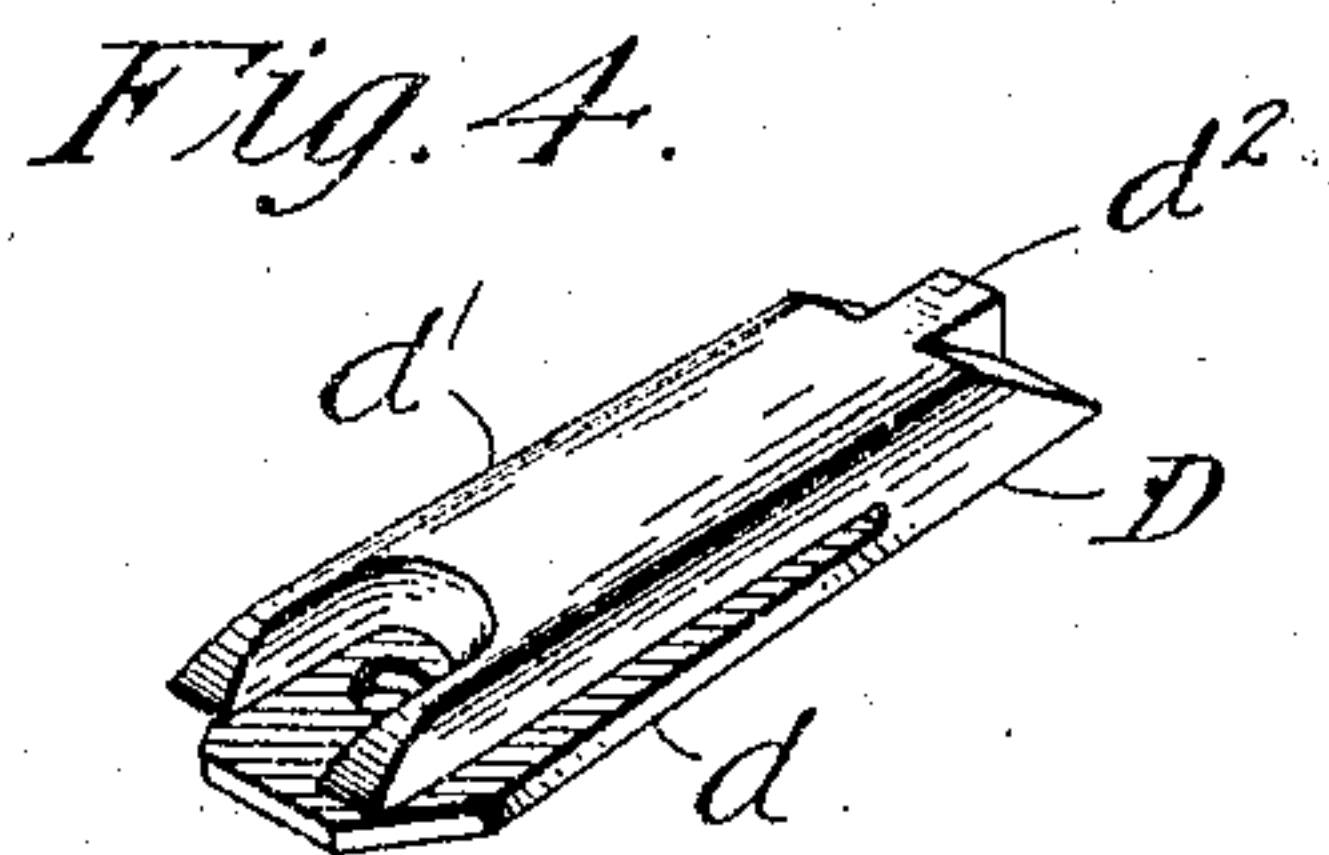
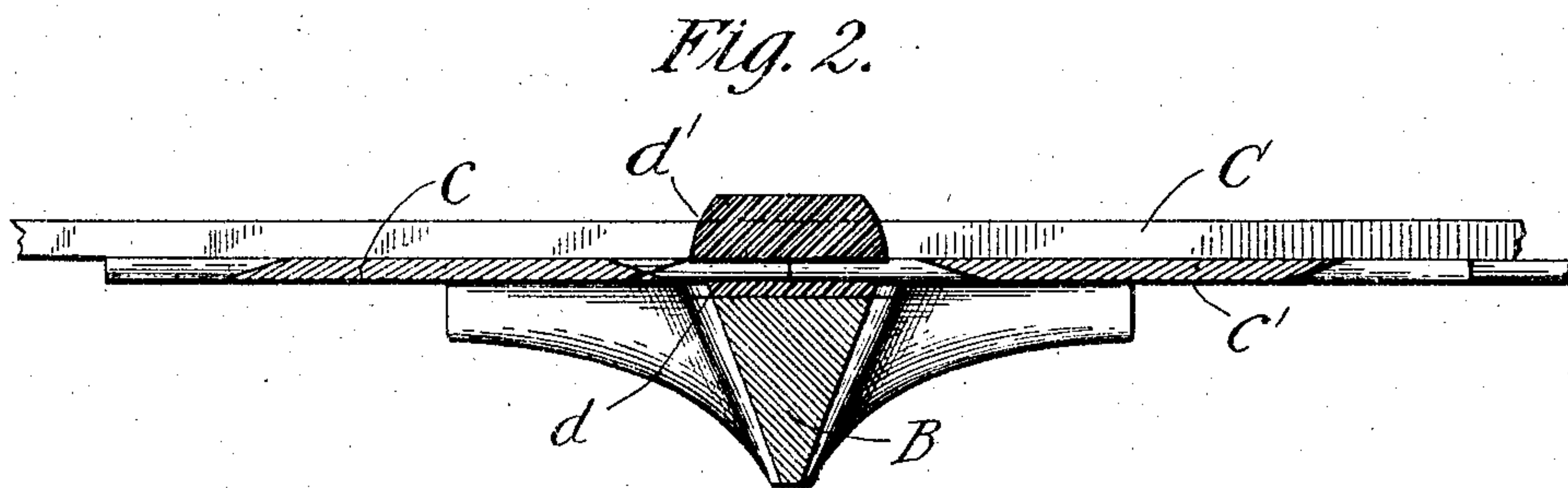
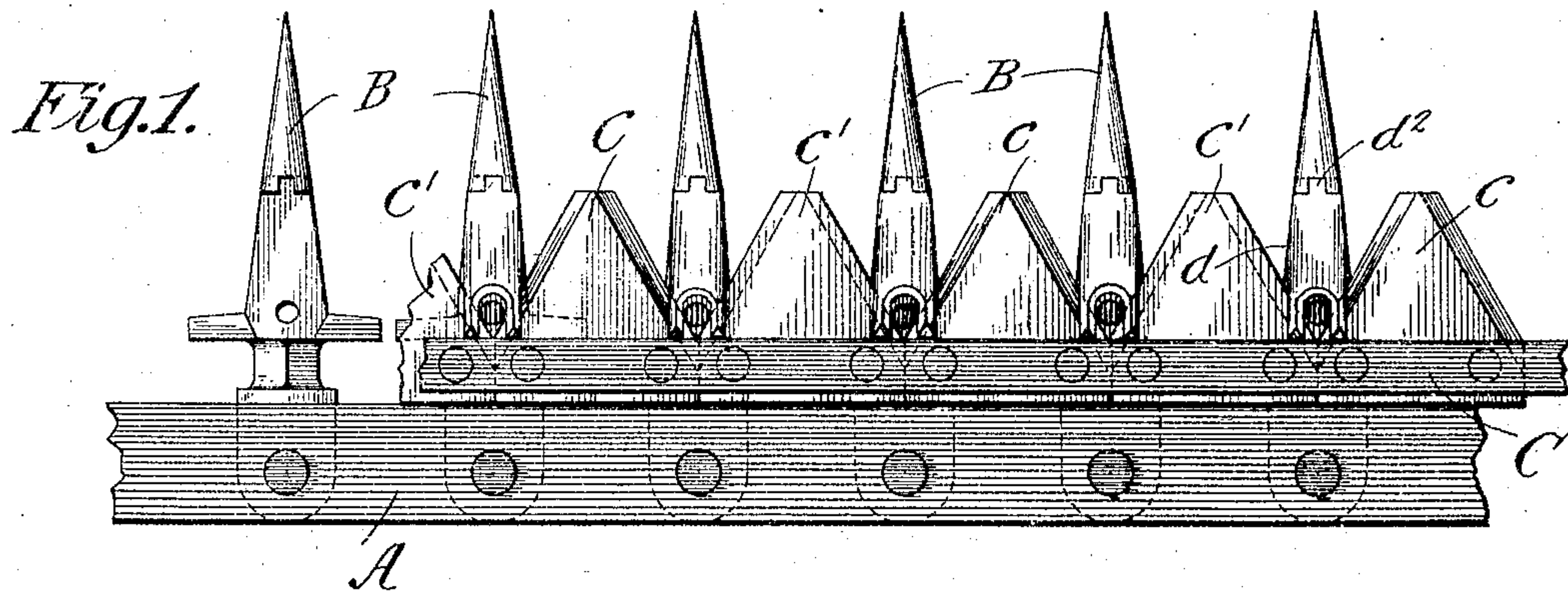


No. 778,404.

PATENTED DEC. 27, 1904.

O. COOK.
SICKLE AND SICKLE BAR.
APPLICATION FILED SEPT. 4, 1902.



WITNESSES:

Charles H. Schaefer
M. J. Lagan

INVENTOR

O. Cook.
BY *Charles H. Schaefer*
ATTORNEY.

UNITED STATES PATENT OFFICE.

ORT COOK, OF CHICAGO, ILLINOIS, ASSIGNOR TO JOSEPH R. McGLASHAN
AND JOHN S. McGLASHAN, OF CHICAGO, ILLINOIS.

SICKLE AND SICKLE-BAR.

SPECIFICATION forming part of Letters Patent No. 778,404, dated December 27, 1904.

Application filed September 4, 1902. Serial No. 122,142.

To all whom it may concern:

Be it known that I, ORT COOK, a citizen of the United States, and a resident of the city of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Sickles and Sickle-Bars; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates more particularly to a construction of sickle-bars and sickles for mowers, reapers, harvesters, or the like. As sickle-bars and sickles for machines of this class have heretofore been constructed sections are sharpened from above and the cutting has been done altogether by the lower edges of the sections coacting with ledger-plates, over which the sections slide. As a result considerable down pressure is always produced, tending to quickly wear away the edges of the ledger-plates and sections and greatly increasing the friction due to the operation of the device and permitting choking. The object of this invention is to produce a simple, strong, and economical construction wherein the sickle and the guard are so constructed as to equalize the cut at the upper and lower faces of the sections, thus affording a balanced sickle and reducing or entirely obviating the downward pressure of the sickle on the ledger-plates and very greatly reducing the expense of operation and repair.

The invention consists in the matters hereinafter described, and more fully pointed out and defined in the appended claims.

In the drawings, Figure 1 is a fragmentary top plan view of a sickle-bar and sickle embodying my invention. Fig. 2 is an enlarged vertical longitudinal section of the same. Fig. 3 is a perspective view of one of the guards. Fig. 4 is a perspective view of the ledger-block.

As shown in said drawings, A indicates a finger-bar.

B indicates the guards, secured thereon in the usual manner and arranged as heretofore.

C indicates the sickle-bar, the sections c c' of which are arranged alternately with the cutting edges thereof at the upper or the lower surface of the sections, as shown, or, in other words, providing alternate upper and lower cutting edges on the sickle.

A recess c^2 is provided, as indicated in Fig. 3, in the top of each guard to receive the ledger-block D, which, as shown, comprises a slotted bar or block of steel or other hard material capable of taking a sharp edge and slotted horizontally at the rear end to provide the lower ledger-plate d and the upper ledger-plate d' , as shown in Fig. 4. The front end of said ledger-block is shaped to interlock in the guard, as shown. Said end of the block is beveled downwardly on each side of the center, providing the forwardly-projecting tenon d^2 , and the recess in the top of the guard B is shaped at its front end, as shown in Fig. 3, to receive said end of the ledger-block, which fits closely therein. At the rear end of the ledger-block an aperture is provided in the end of the plate d thereof, which registers with a corresponding aperture in the guard and affords means for rigidly securing the ledger-block in position by means of a single rivet.

The operation is as follows: The ledger-blocks being secured in position in the guards and the sickle above described placed to reciprocate therein, it is obvious that such reciprocation of the sickle results in bringing alternately the upper and lower cutting edges of the sections into coacting cutting relation respectively with the upper and lower ledger-plates d and d' , thus avoiding downward stress due to the cut, or, in other words, balancing the sickle and greatly facilitating the cutting operation. Obviously the guards may be made of any suitable material, and the guards and the sickles (except for the change in the sections) therefor may be for any type of machine, it only being necessary in any machine to apply the ledger-blocks suitable for the particular class of machine in position and invert alternate sections of the sickle, and the device is ready for use.

Obviously many details of construction may be varied without departing from the principles of my invention.

I claim as my invention—

5 1. In a device of the class described the combination with a sickle having upper and lower cutting edges, of guards therefor provided with upper and lower ledger-plates adjacent to the cutting edges of the sections of the
10 sickle.

2. In a device of the class described a sickle comprising a bar, plates or sections secured thereon, alternate sections having the cutting edges thereof respectively in the plane of the
15 top and the bottom of the sections.

3. In a device of the class described, the combination with a sickle-bar, of a finger-bar, guards secured thereon, each provided with a recess in the top thereof, a slotted ledger-block
20 secured in said recess and through which the sickle reciprocates, said ledger-block being shaped at one end to interlock with the guard.

4. In a device of the class described, a sickle-guard recessed in the top, a ledger-block of
25 steel or the like secured therein and slotted in the plane of the movement of the sickle-sections and providing an upper and a lower ledger-plate and means for securing said

ledger-block rigidly but removably in position in the guard. 30

5. The combination with a reciprocating sickle, of the class described, of sections thereon providing alternate upper and lower cutting edges, guards for said sections and ledger-blocks interlocking with and removably secured on said guards and providing upper and lower ledger-plates adapted to coact respectively with the upper and lower cutting edges of the sickle. 35

6. In a device of the class described, a ledger-block slotted at one end to permit a sickle or the like to reciprocate therethrough and providing upper and lower ledger-plates adapted to coact with upper and lower cutting edges of the sickle, means on one end of said ledger-block adapted to interlock in the sickle-guard and an aperture at the other end of said ledger-block adapted to permit said end to be secured on the guard by means of a rivet or the like. 40 45

In testimony whereof I have hereunto subscribed my name in the presence of two subscribing witnesses. 50

ORT COOK.

Witnesses:

C. W. HILLS,

J. R. McGLASHAN.