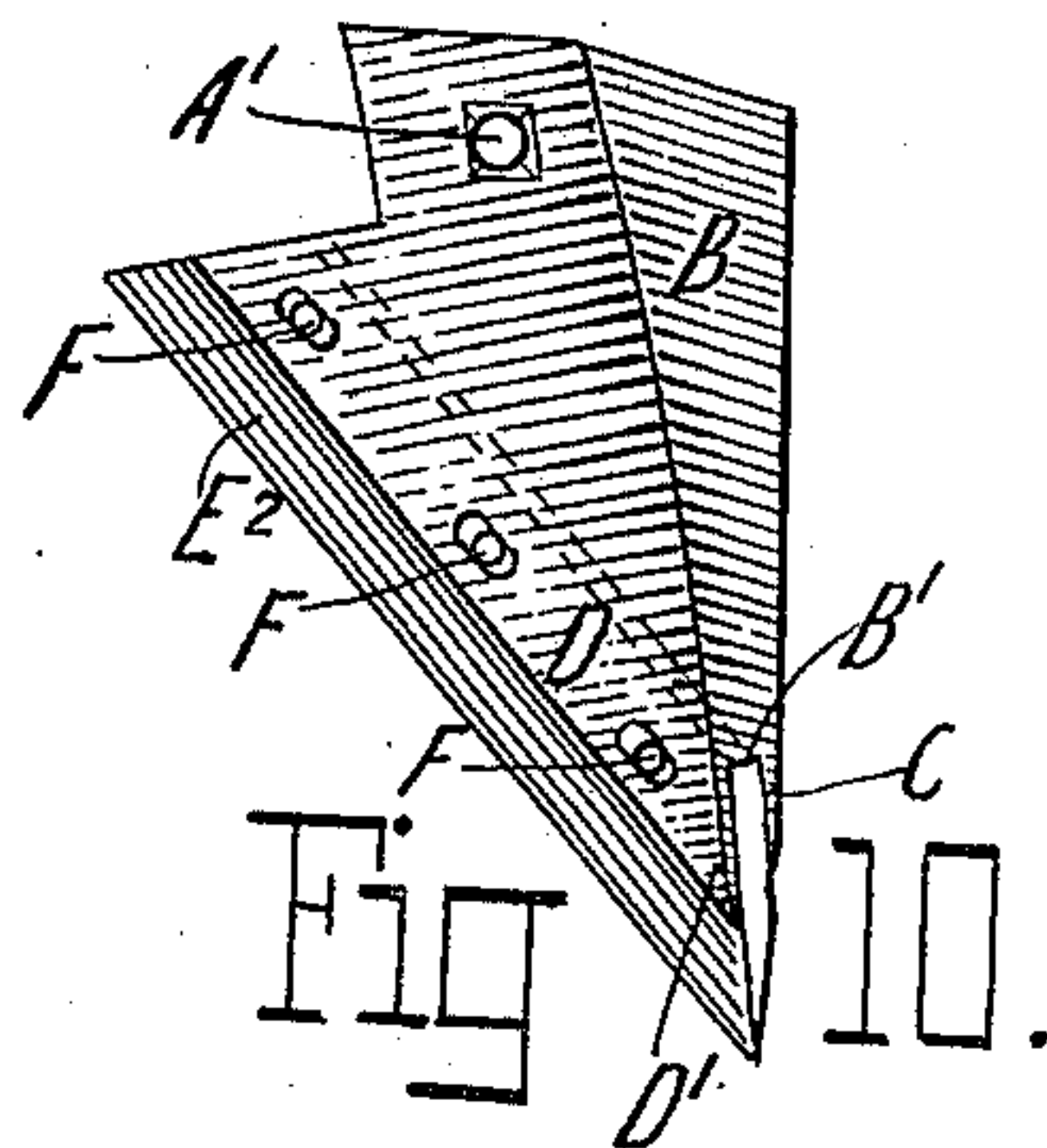
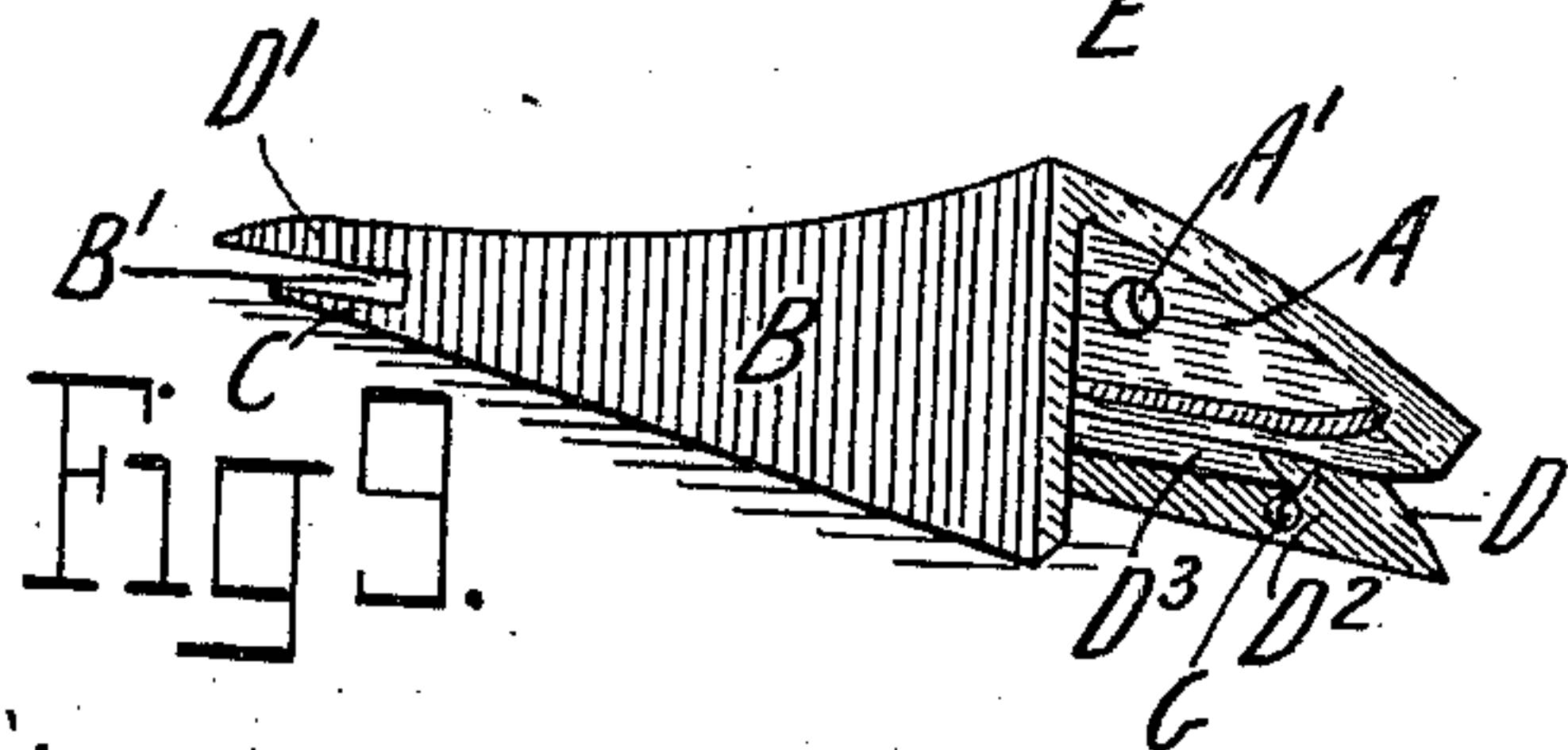
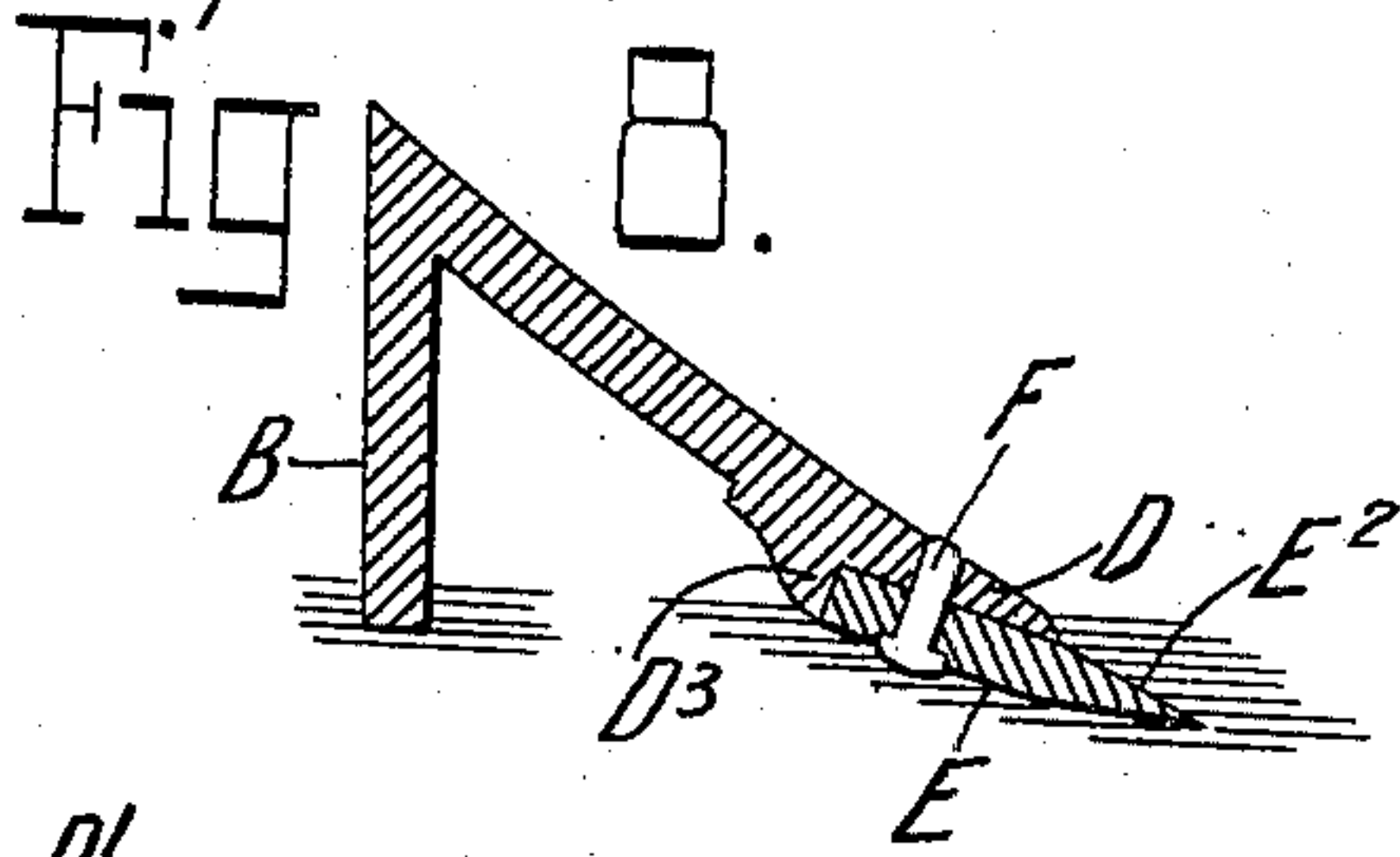
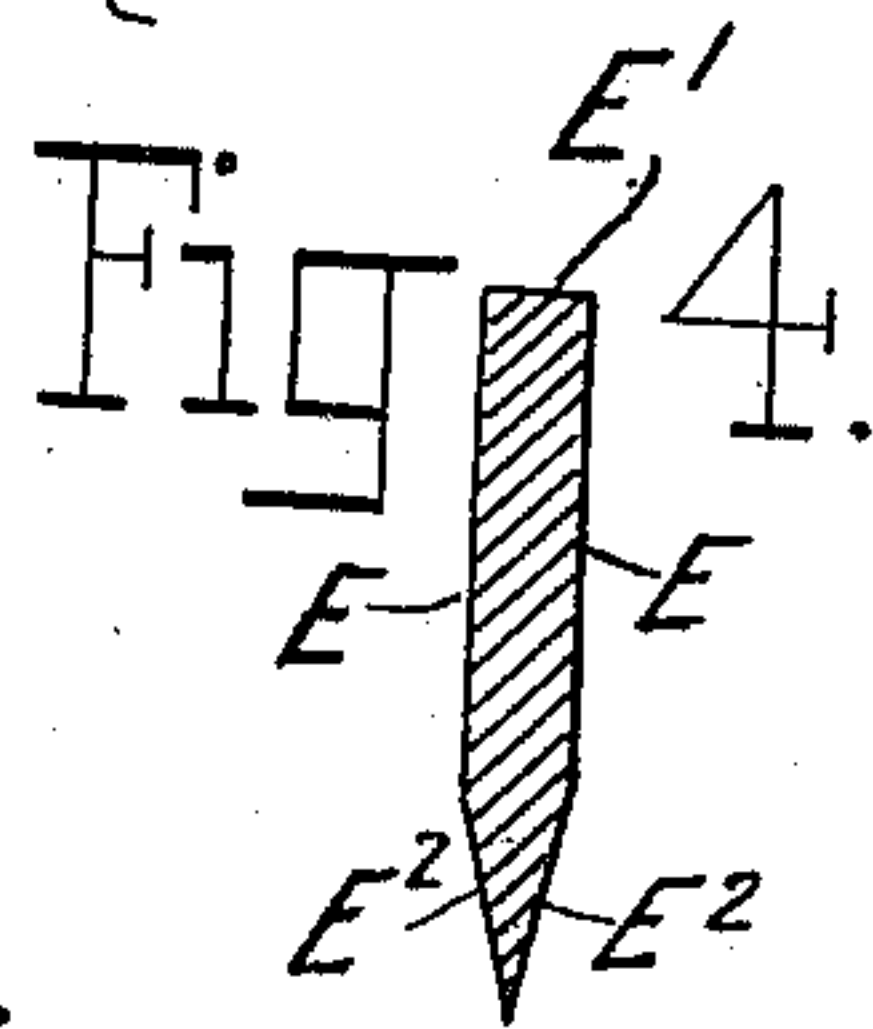
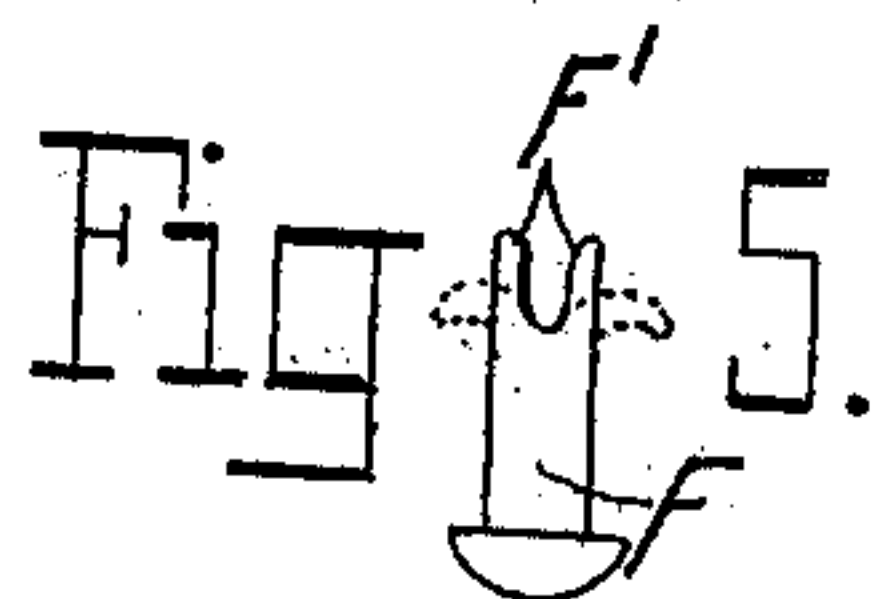
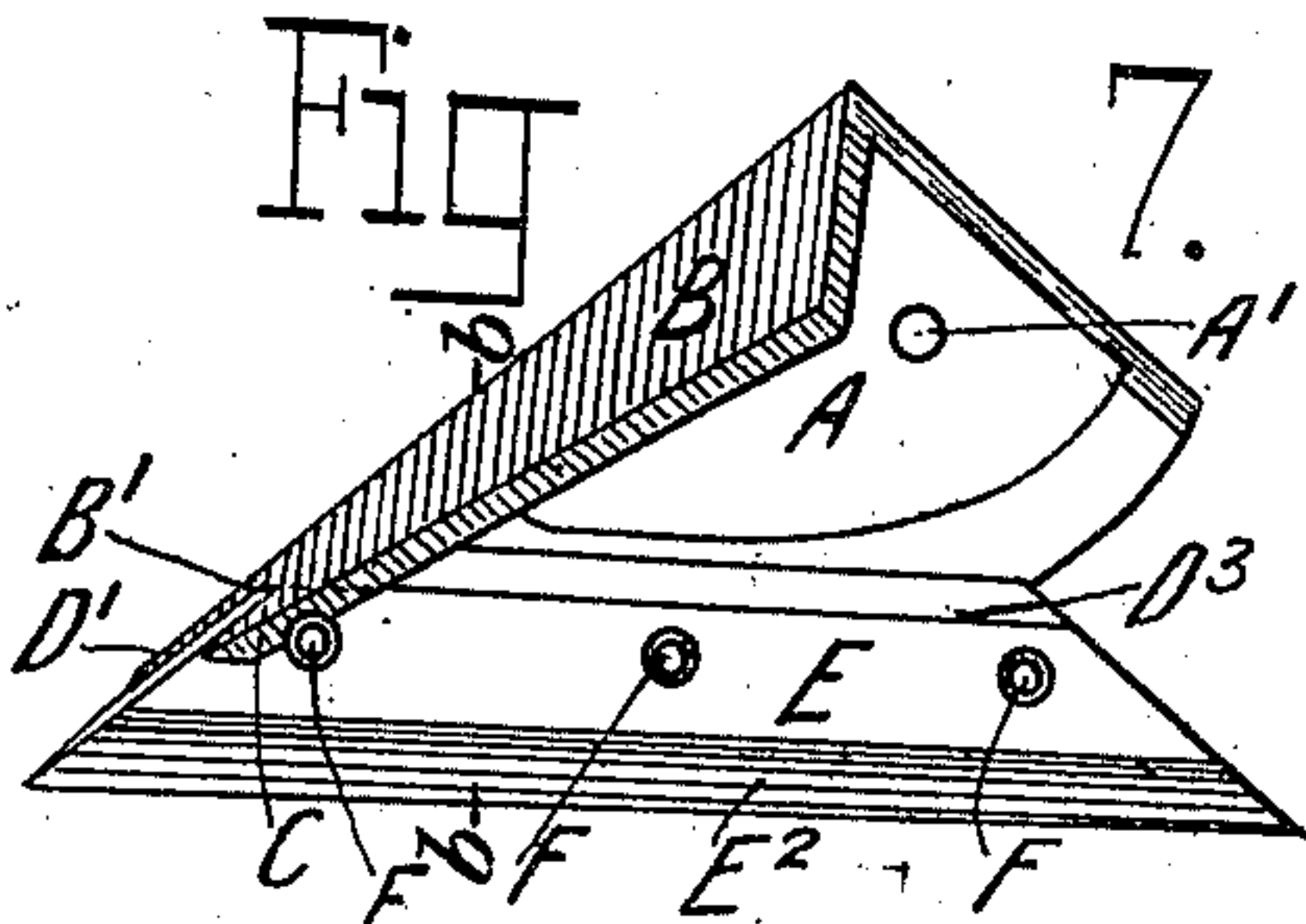
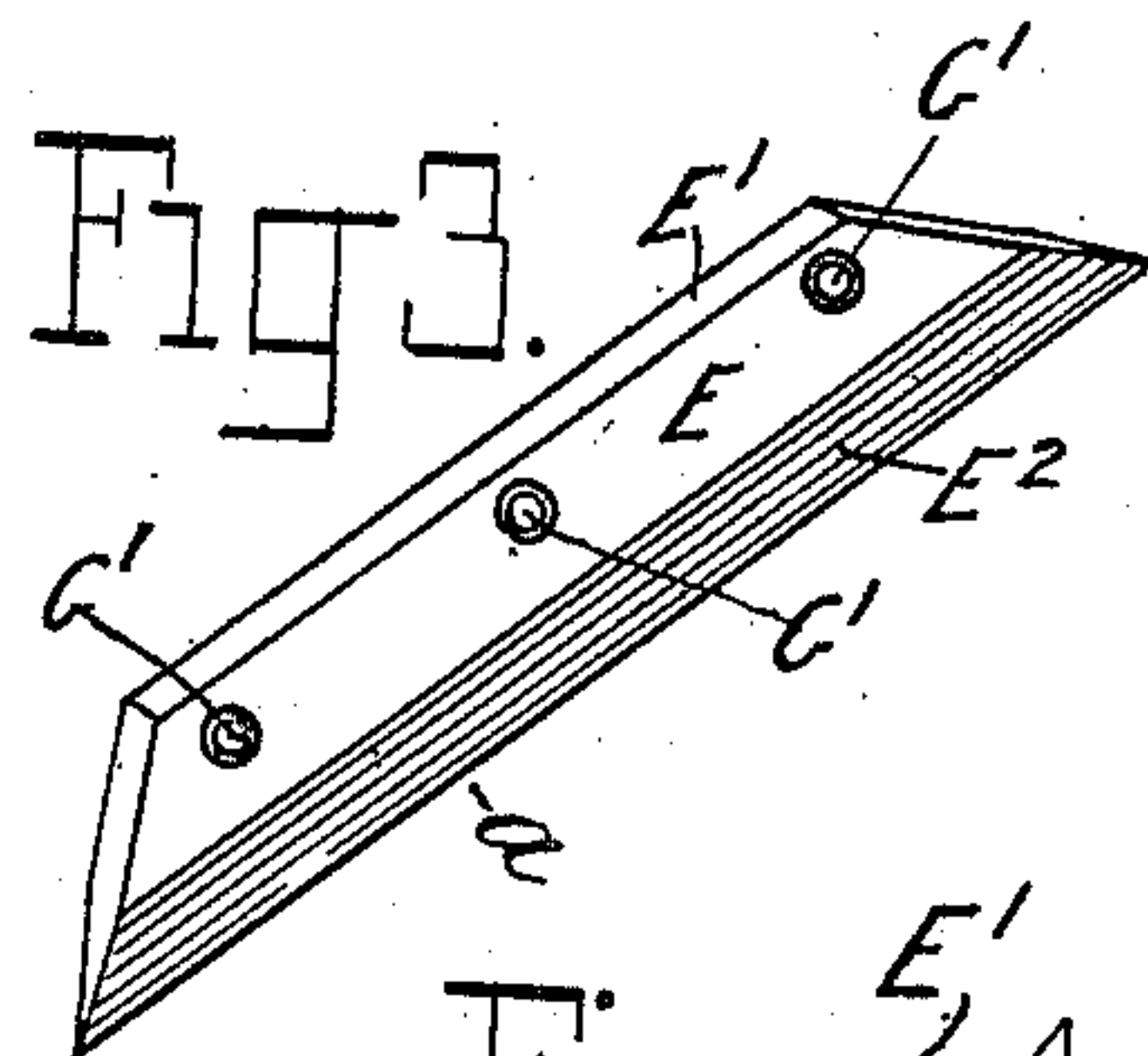
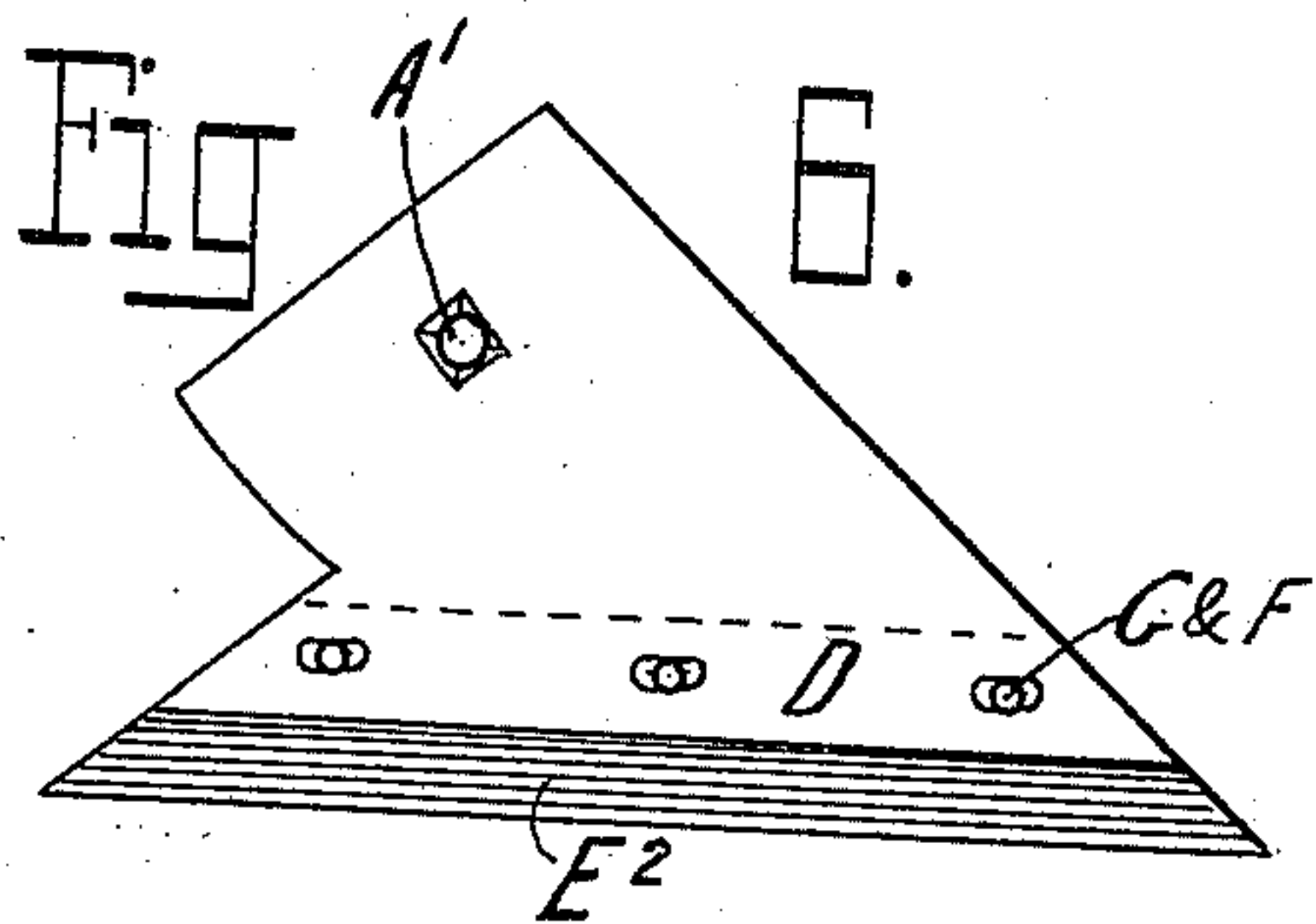
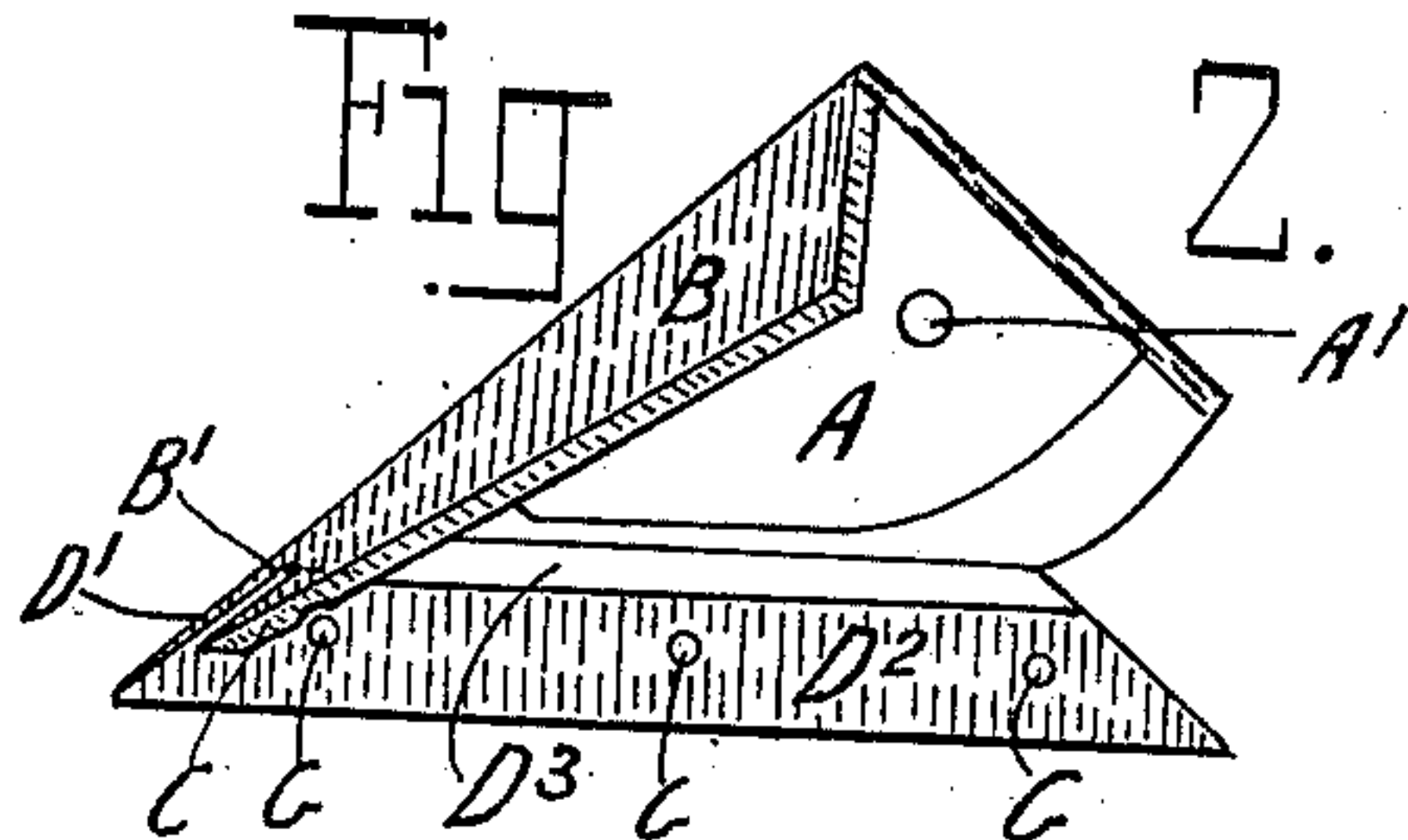
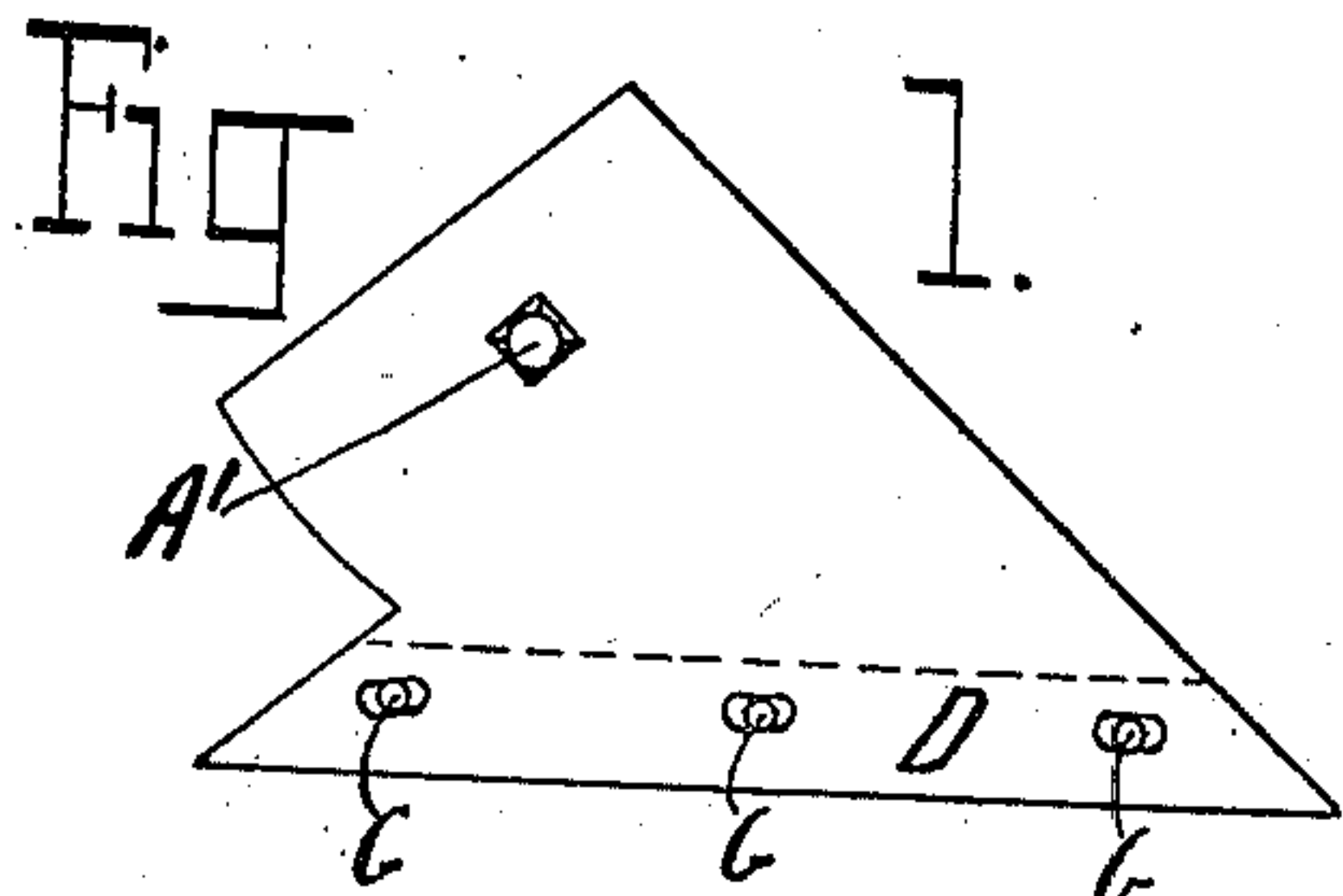


J. F. C. HODGES.
 PLOWSHARE.
 APPLICATION FILED DEC. 23, 1908.

989,361.

Patented Apr. 11, 1911.



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PLOWSHARE.

989,361.

Specification of Letters Patent.

Patented Apr. 11, 1911.

Application filed December 23, 1908. Serial No. 468,985.

To all whom it may concern:

Be it known that I, JOHN FRANCIS CUDGELLICO HODGES, a citizen of the Commonwealth of Australia, residing at German's Hill, near Orange, in the State of New South Wales, Commonwealth of Australia, farmer, have invented certain new and useful Improvements Relating to Plowshares; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to an improved plowshare, comprising a plowshare-casting having a gap or fork formation at its forward end linable with and contiguous to a shouldered bearing surface against which is seated a straight cutting blade made approximately of equal section throughout its length. The blade is secured to the under side of the plowshare-casting with removable fastenings, and it may be reversed when required. The bearing surface of the plowshare-casting forms a shrouding to partly cover the blade on its upper side leaving only the cutting surface and edge exposed to view, but the lower side is wholly exposed, excepting the small portion which fits into the gap formation.

The objects to be attained by this peculiar arrangement of the exposed surfaces are, the perfect rigidity of the blade, its freedom from lateral movement, and its retention against its seating, all of which are insured by having the larger surface exposed to frictional contact with the earth when the plow is in operation.

Referring to the accompanying drawings, which form part of this specification, and in which similar letters are used throughout the different views to indicate similar parts, Figure 1 shows, in elevation, the furrow side of the plowshare, without the blade. Fig. 2 shows, in elevation, the land side of the same share. Fig. 3 is a perspective elevation of the straight cutting blade. Fig. 4 is a sectional elevation on line *a-a* of Fig. 3, enlarged. Fig. 5 shows, in elevation, a fastening suitable for securing the blade. Fig. 6 shows, in elevation, the furrow side of the plowshare, with blade in position. Fig. 7 shows, in elevation, the land side view of Fig. 6. Fig. 8 is a sectional elevation on line *b-b* of Fig. 7, enlarged. Fig. 9 is a

perspective rearward and land side view of the share without the blade. Fig. 10 is a front perspective view of the share with blade in position.

The plowshare-casting delineated is approximately of the form known in the trade as "P" pattern. The recess A and bolt hole A¹ are the parts by which attachment can be made to a mold board of a plow, which it is not necessary, however, to show in the drawings, as the means for attachment vary with the pattern of plow. The "P" pattern shown is therefore to be regarded merely as a type of plowshare casting serving to illustrate the general application of the following improvements, whereby a complete plowshare is formed.

The land side flange B is bifurcated at its forward end B¹, for securing the point of the share. One prong C is part of the said flange, and in its normal position rests upon the ground, the other prong D¹ is part of the shrouding D, whose under side seating D² and the shoulder piece D³ serve as bearing surfaces to fit either of the sides E and the upper edge E¹ of the straight blade.

By shrouding as used in this application is meant that part of the plowshare casting constructed with a smooth inward face overlapping the blade and having a shoulder piece to firmly hold said blade in its original position. Bifurcated rivets F, as in Fig. 5, are suitable means for securing the blade in its position, the tangs F¹ being turned over in the countersunk holes G formed in the shrouding D. Pins or bolts would be equivalent means for securing the blade. Both lateral and vertical movement of the blade is prevented by the combined use of the seating D² and shoulder piece D³.

E² is the taper or cutting part of the blade. Only the upper surface appears exposed below the shrouding D.

On Fig. 8 horizontal earth lines are drawn to indicate how the exposed surfaces of the blade would be subjected to earth friction when in use, the upward pressure being upon the whole of the under side of the blade, while the downward pressure is upon the smaller exposed upper cutting part. The preponderating pressure from below will maintain the blade securely in its proper place against surface D² and shoulder D³.

The holes G¹ in the blade are equally spaced to coincide with holes G in the shroud-

ing, and occupy the same relative position with respect to the cutting points, therefore the blade may be reversed when desired.

The plowshare casting and reversible blade, when combined, form a complete plowshare. The former may have a longer life than the latter, in which case a duplicate blade of the shape shown may be substituted for the worn out blade.

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

An integral metallic piece which is re-

cessed in its under side and includes a vertical landside-flange bifurcated at its forward end, in combination with an elongated blade fastened into said recess and between said bifurcations and shaped at its forward end into a plow-point substantially as set forth. 15

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses. 20

JOHN FRANCIS CUDGELLICO HODGES.

Witnesses:

ARTHUR FITZGERALD SWINSON,

HUBERT HENRY GRIFFITH.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
