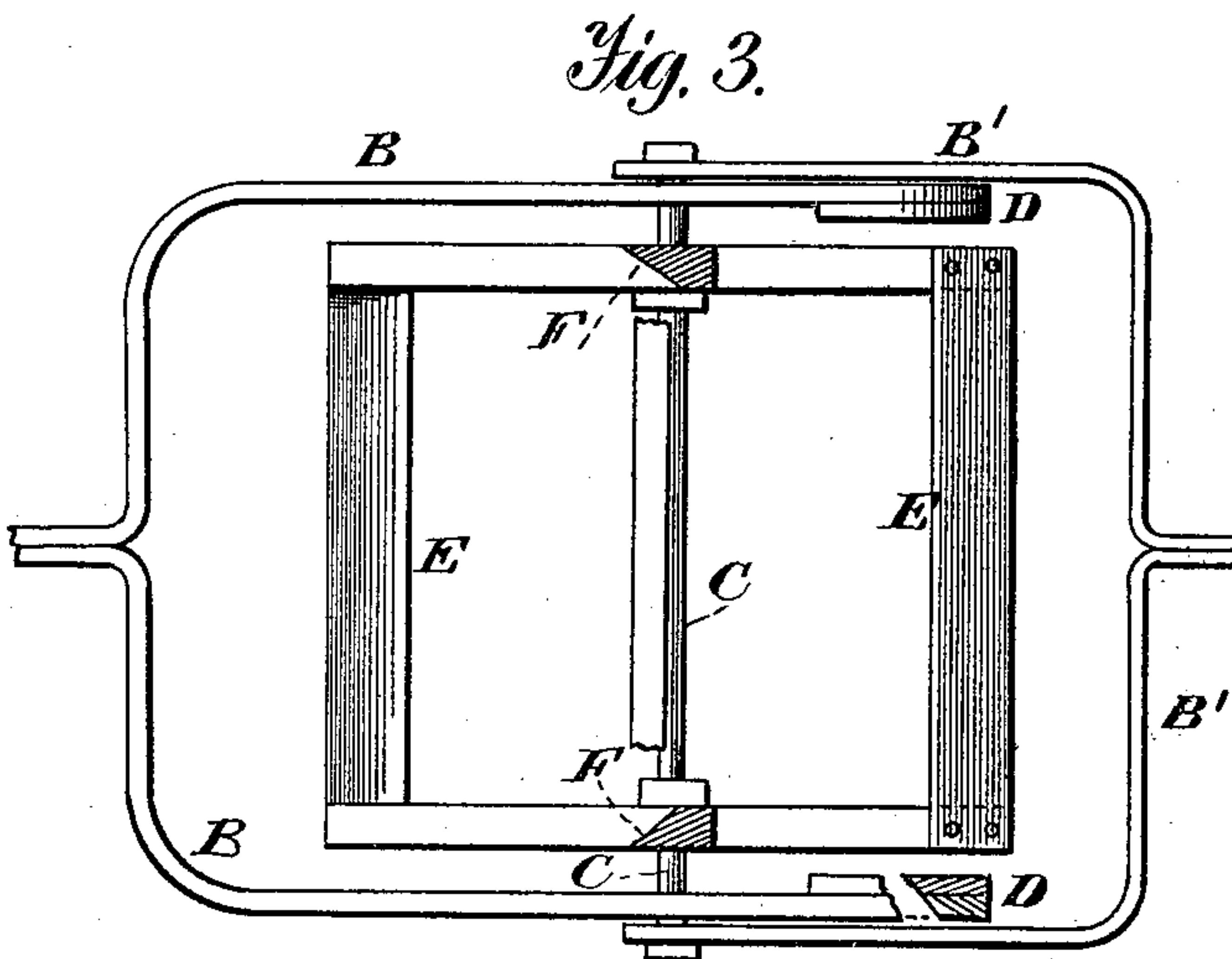
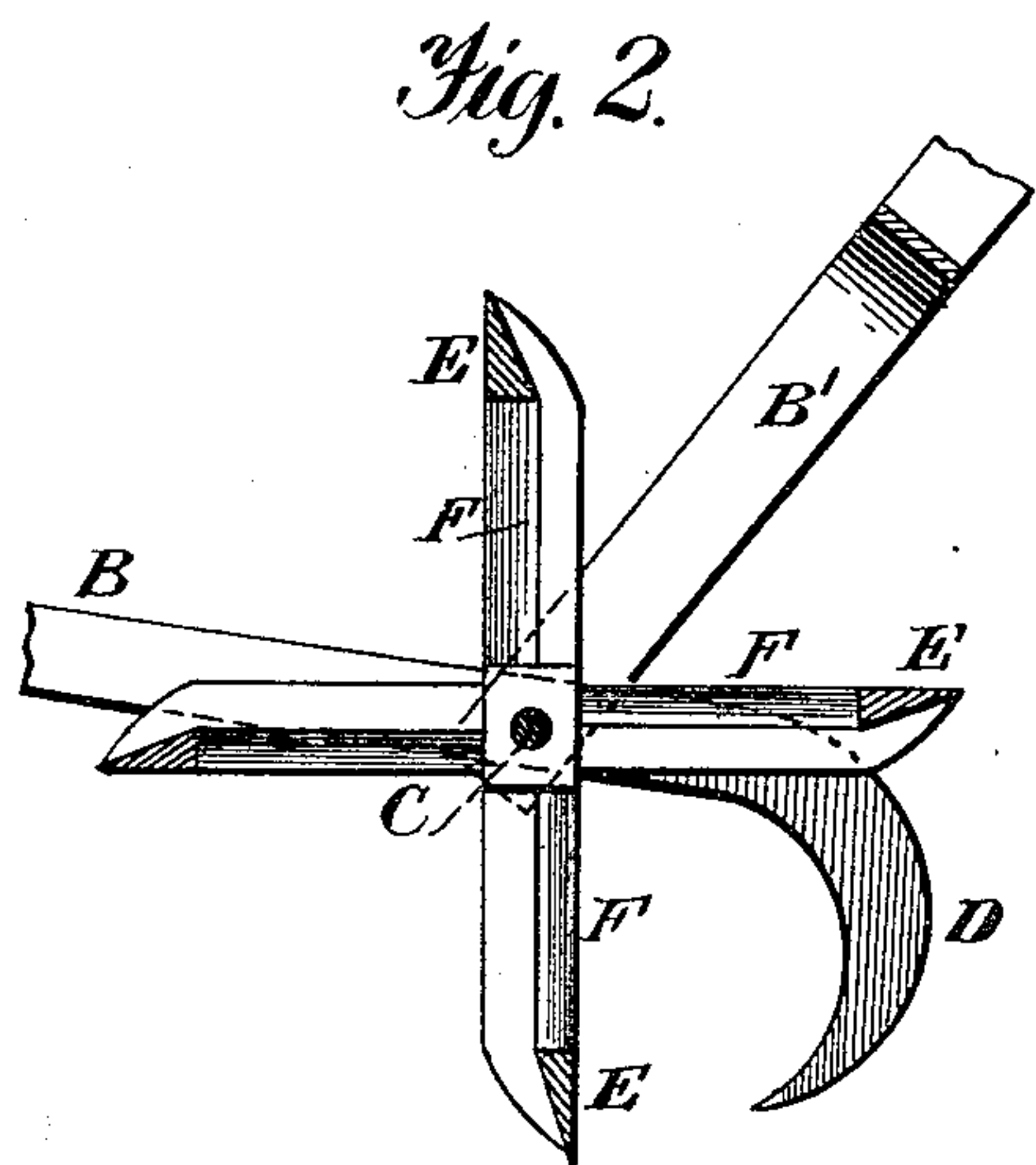
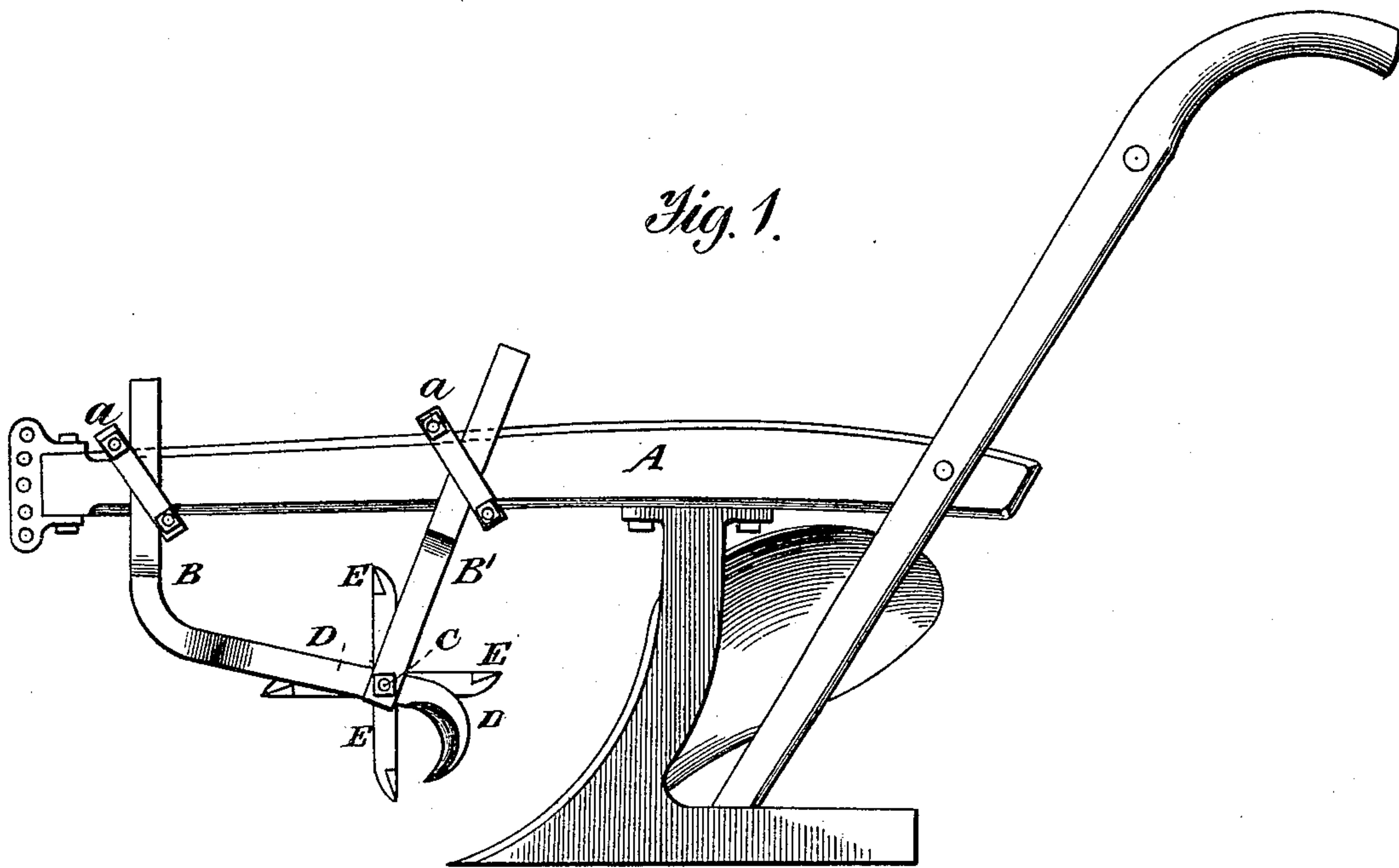


(No Model.)

M. L. UNGER.
PLOW ATTACHMENT.

No. 344,424.

Patented June 29, 1886.



Witnesses.
A. Ruppert
J. C. Sathrop

Inventor
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Per
Thomas P. Simpson
Atty

UNITED STATES PATENT OFFICE.

MARTIN L. UNGER, OF NELSON, NEBRASKA.

PLOW ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 344,424, dated June 29, 1886.

Application filed March 1, 1886. Serial No. 193,548. (No model.)

To all whom it may concern:

Be it known that I, MARTIN L. UNGER, a citizen of the United States, residing at Nelson, in the county of Nuckolls and State of Nebraska, have invented certain new and useful Improvements in Plow Attachments; and I do 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

The invention relates to that class of plows which are employed to break up corn-ground covered with cornstalks of the same or a previous year's growth, the same lying on the surface in all directions. These stalks are difficult to turn under nicely with the plow alone, and hence rotary disk-cutters have been used in front of the plow, so as to cut them up into comparatively small pieces. Practically these disk-cutters accomplish the object very imperfectly, and my object is to use means which will do it more thoroughly.

Figure 1 of the drawings is a side elevation showing my invention applied to a plow. Fig. 2 is a longitudinal vertical section of my attachment; and Fig. 3 is a plan view of the same, partly broken away.

In the drawings, A represents the plow-beam, on which are arranged the well-known obliquely-placed clamps *a a*. In these are

held at a greater or less elevation on the beam the two frames B B', connected together on the bolt or rod C. The frame B carries the two curved knives D D at the ends, while on the rod C rotates the cross-choppers E and the radial knives F, the choppers pressing on the ground and causing the desired rotation. The four radial cutter-arms F are notched at the ends, and the horizontal chopper-blades E may be fastened thereto in any suitable manner. The knives D D have a forward cut, the knives F a backward cut, and the choppers E a transverse cut. Thus it is seldom that a stalk escapes being cut up into two or more pieces.

Having thus described all that is necessary to a full understanding of my invention, what I claim as new, and desire to protect by Letters Patent, is—

1. The combination, with a plow-beam, of the clamps *a a*, frames B B', rod C, and rotating choppers E F, all in front of the plow, as shown and described.

2. The rotating choppers E, secured to the ends of radial cutting-arms F, in combination with the fixed cutters D, said choppers and knives being supported on a rod, C, suspended from the plow-beam, as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

MARTIN L. UNGER.

Witnesses:

E. D. HOBBS,
A. W. MOCK.