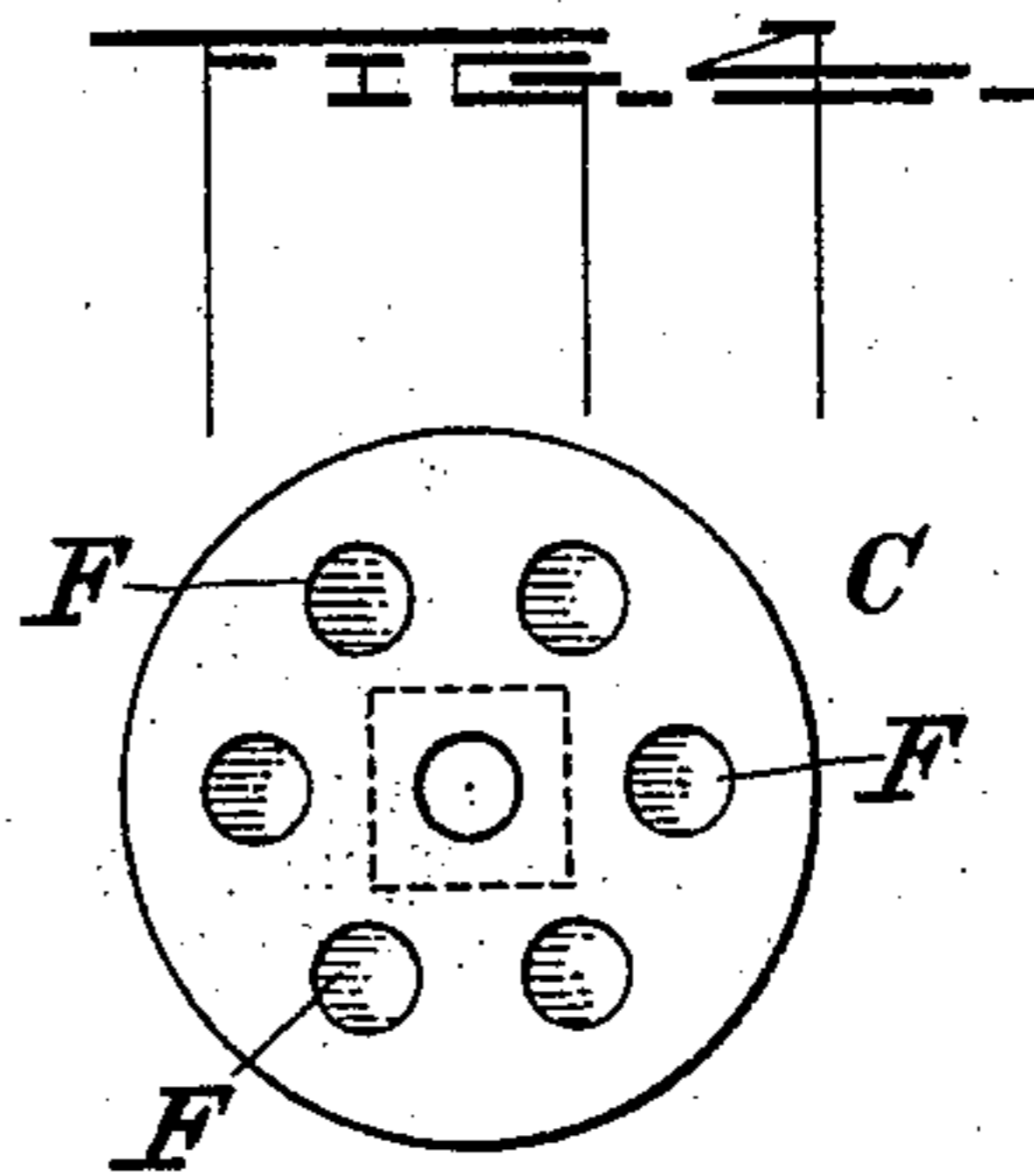
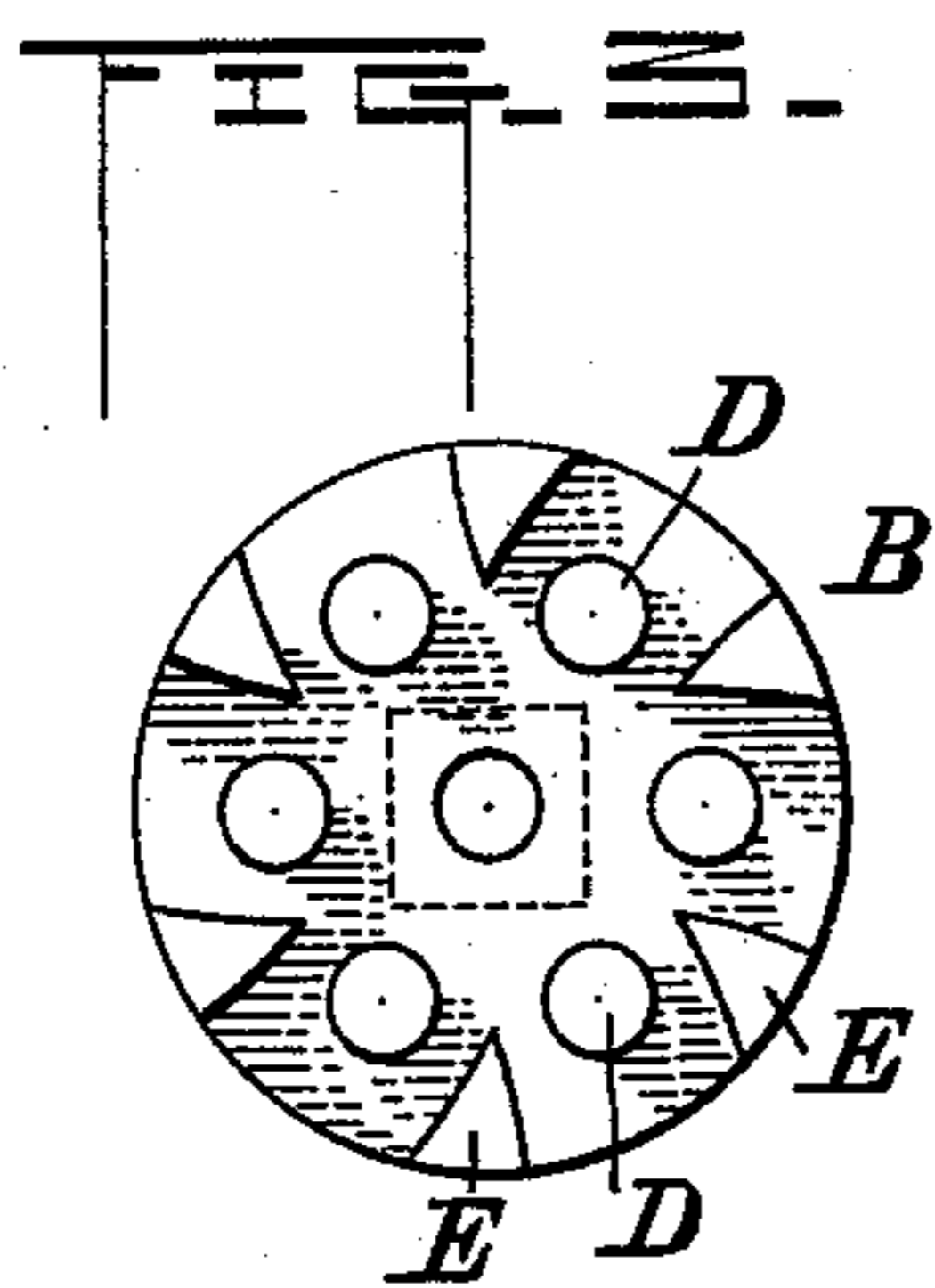
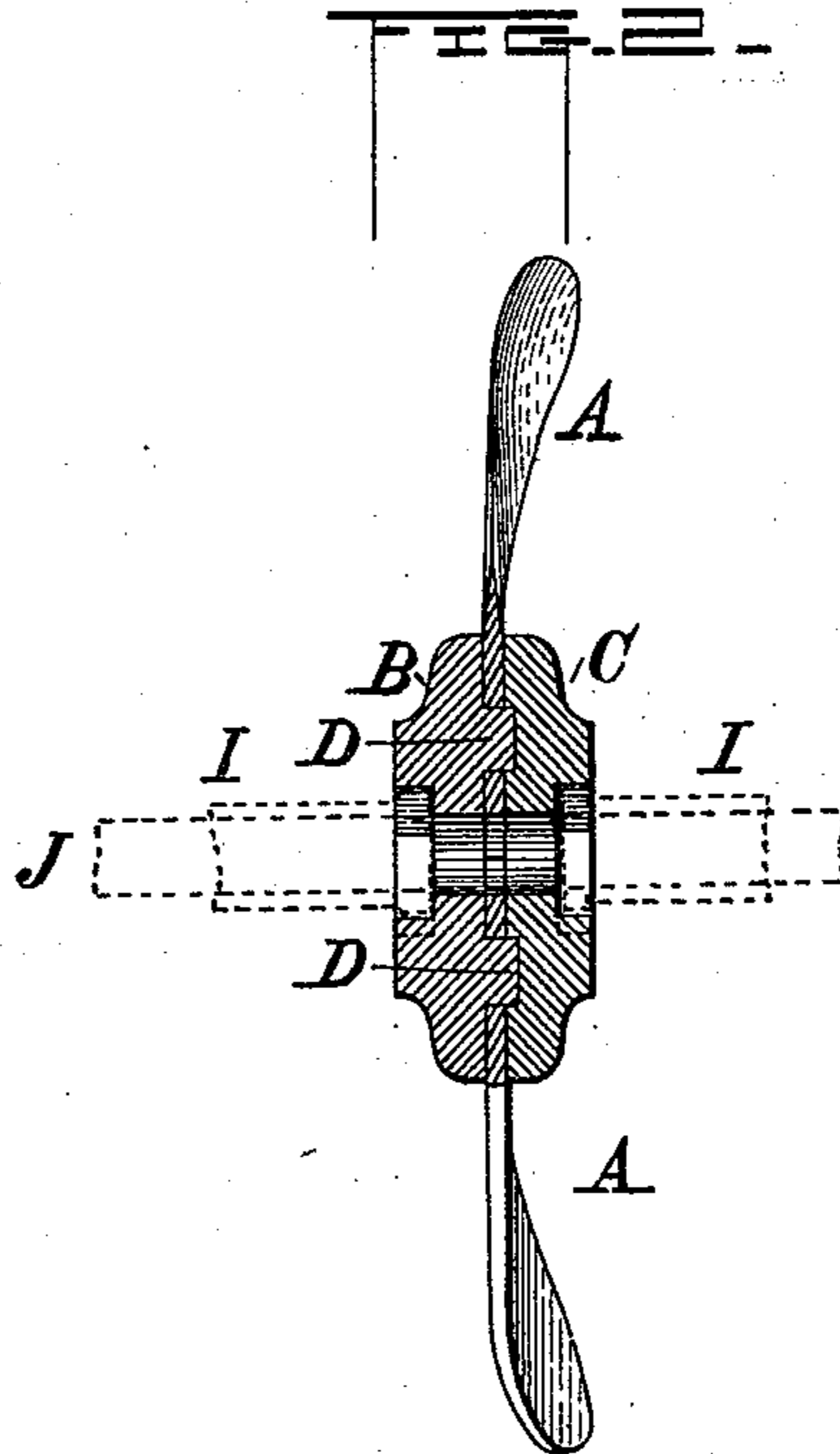
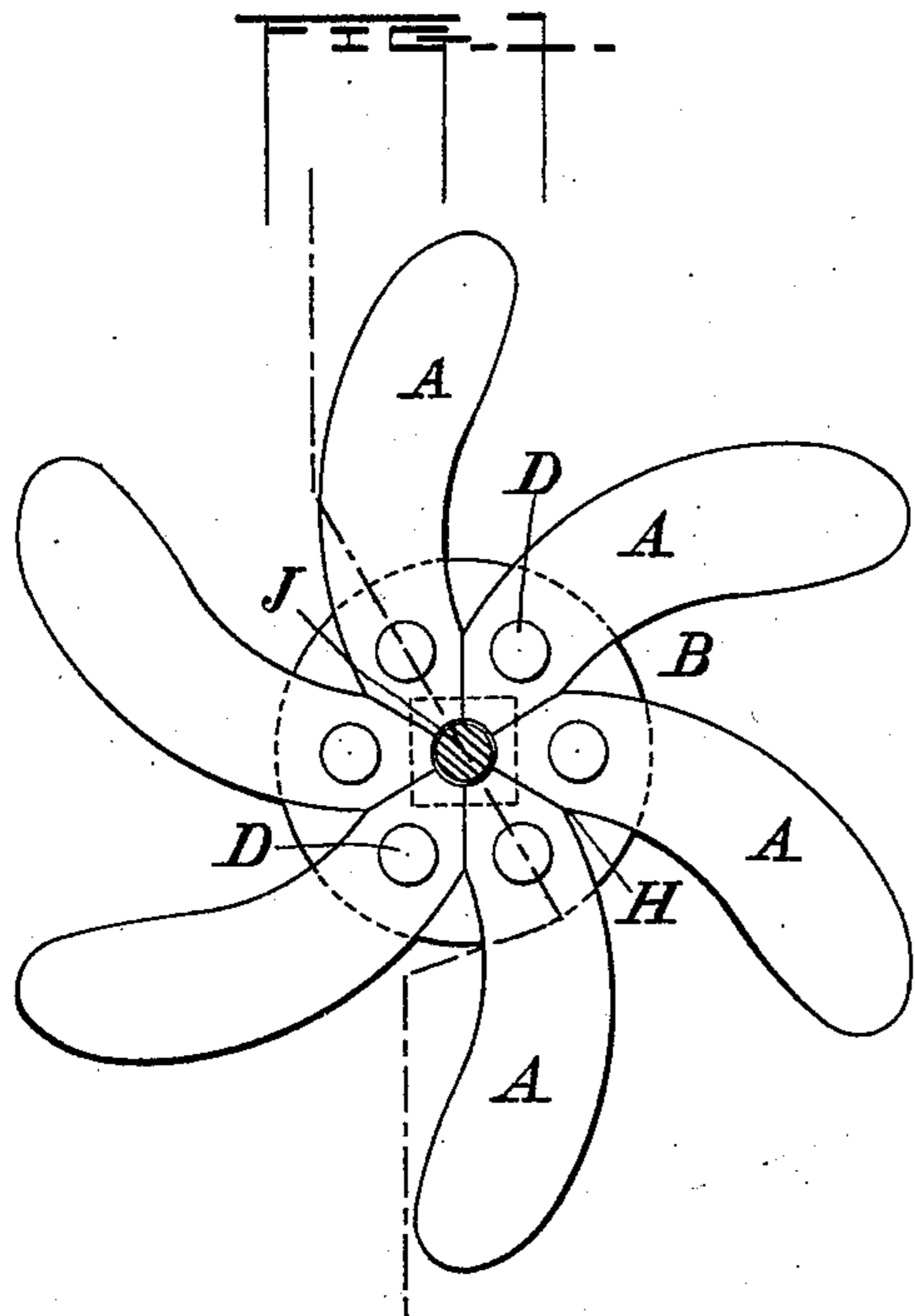


(No Model.)

C. MAUL.
CULTIVATOR TOOTH.

No. 528,603.

Patented Nov. 6, 1894.



Witnesses
R. F. Osgood
C. G. Crumell

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UNITED STATES PATENT OFFICE.

CHRIS MAUL, OF BROCKPORT, NEW YORK, ASSIGNOR TO THE D. S. MORGAN
& COMPANY, OF SAME PLACE.

CULTIVATOR-TOOTH.

SPECIFICATION forming part of Letters Patent No. 528,603, dated November 6, 1894.

Application filed November 23, 1893. Serial No. 491,711. (No model.)

To all whom it may concern:

Be it known that I, CHRIS MAUL, a citizen of the United States, residing at Brockport, in the county of Monroe, in the State of New York, have invented certain Improvements in Cultivator-Teeth, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to certain improvements in cultivator teeth, which improvements are fully described and illustrated in the following specification and the accompanying drawings, the novel features thereof being specified in the claims annexed to the said specification.

In the accompanying drawings representing my improvements—Figure 1 is a side elevation of a set of revolving spading teeth,—the collar next the observer being removed. Fig. 2 is a section, on the line 2—2, Fig. 1. Fig. 3 shows the inner surface of one of the collars. Fig. 4 shows the inner surface of the opposing collar.

In the accompanying drawings A A represent a set of revolving cultivator teeth, of the style which are now generally known as spading teeth, projecting radially outward from a central axis, and being curved and bent at their outer ends in any suitable manner to adapt them to the purpose. Each tooth is formed as a separate blade, extending inward between the collars B C to or nearly to the central axis, and secured in place by a lug D on one of the collars projecting through an opening in the inner end of the blade. Between the edges of the teeth, the angular shaped lugs E project from one of the collars to a distance corresponding with the thickness of the teeth. The lugs D are preferably made to enter recesses F in the face of the collar C. In this way the collars are compelled to revolve together, and the blades are more firmly supported. The edges of the inner ends of the blades are beveled, on radial lines, as indicated at H, Fig. 1, so that they

abut against each other, and are thus prevented from turning on the lugs, if the latter be made round, as shown.

Any suitable number of blades may be employed, and any suitable number of sets of blades may be connected together by a central rod J into a gang or section,—the sets being separated from each other by suitable spools I, having heads at their ends adapted to engage with recesses in the outer surfaces of the collars, so that the sets are compelled to revolve together. These sets or gangs may be employed in any suitable type of cultivating or spading implement,—their construction being such that they are cheap and durable, and permit of easy repair in case of broken teeth. The rod J is provided with a thread and nut, so that the whole structure is held firmly together.

I claim—

1. The combination, with a set of radially arranged perforated curved spading teeth, having their inner ends beveled to form abutting edges, of opposing collars located on opposite sides of the teeth, one of said collars being provided with integral projecting lugs adapted to engage between the sides of adjacent teeth, and one of the said collars being provided with integral lugs adapted to engage in the perforations of the teeth, substantially as described.

2. The combination, with a set of radially arranged perforated spading teeth, having their inner ends beveled on the edges, of opposing collars located on opposite sides of the teeth, one of the said collars being provided with integral lugs adapted to engage in the perforations of the teeth, and the other with recesses adapted to receive the ends of the lugs, substantially as described.

CHRIS MAUL.

Witnesses:

HENRY S. MADDEN,
WILLIAM P. MORGAN.