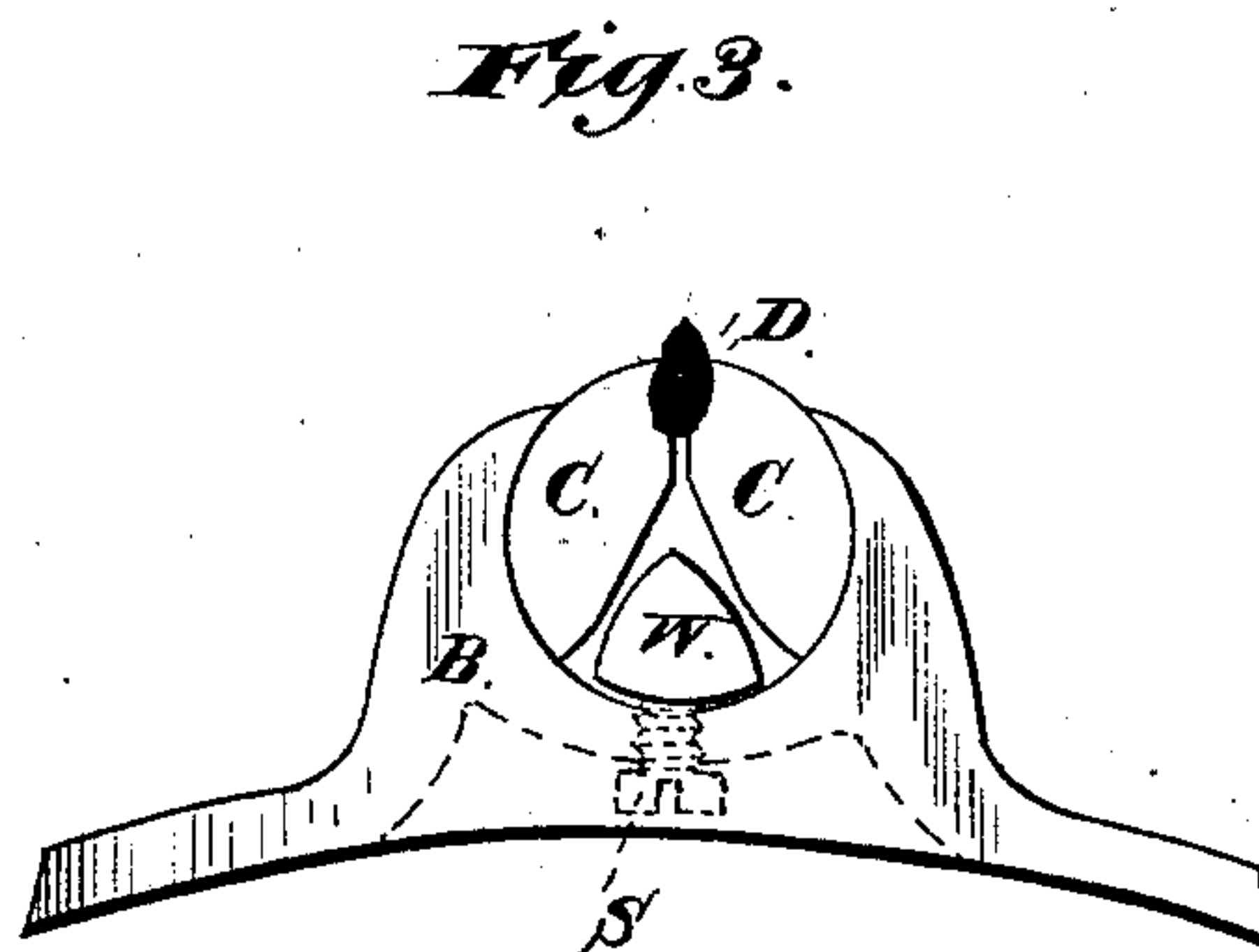
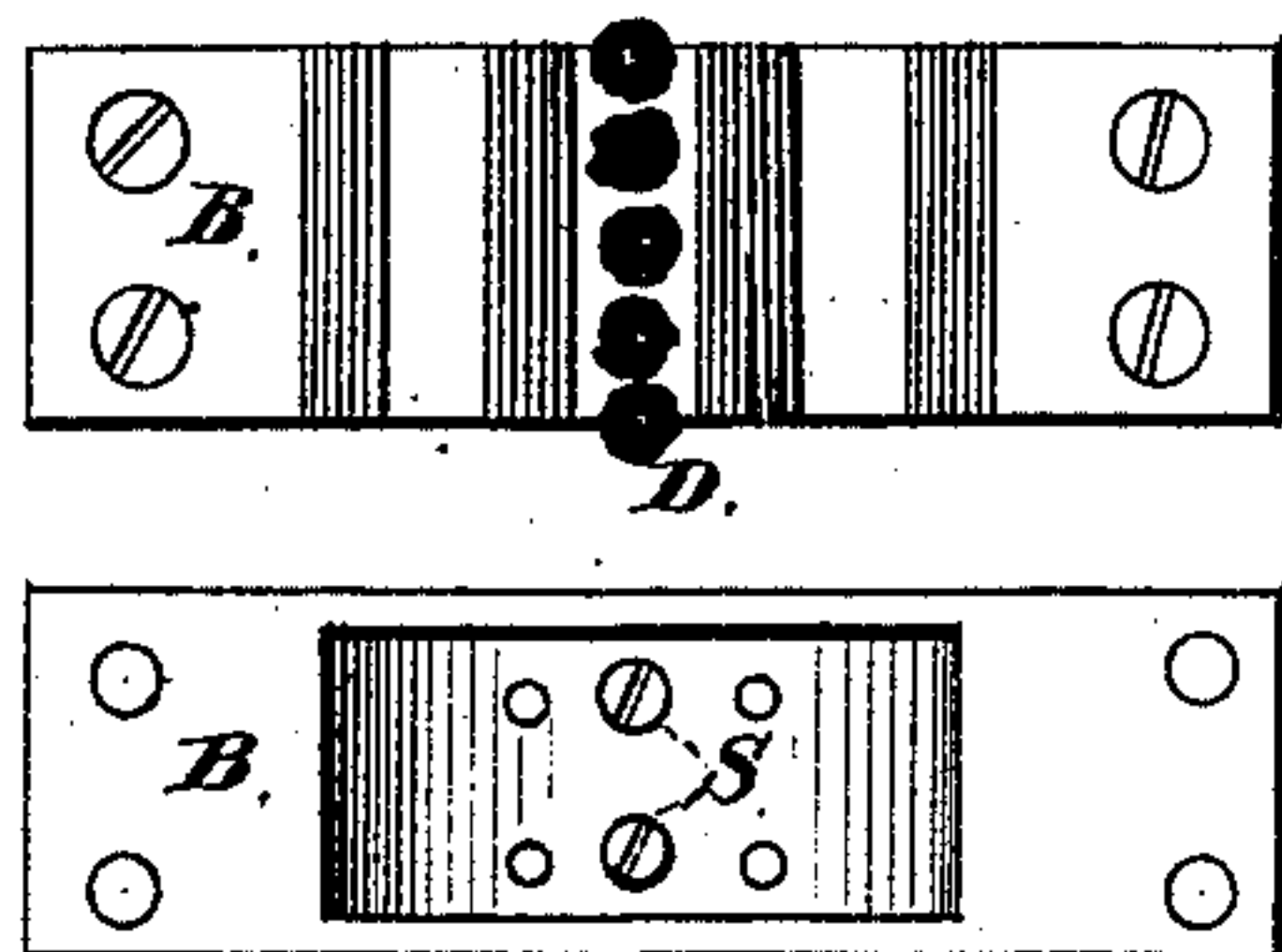
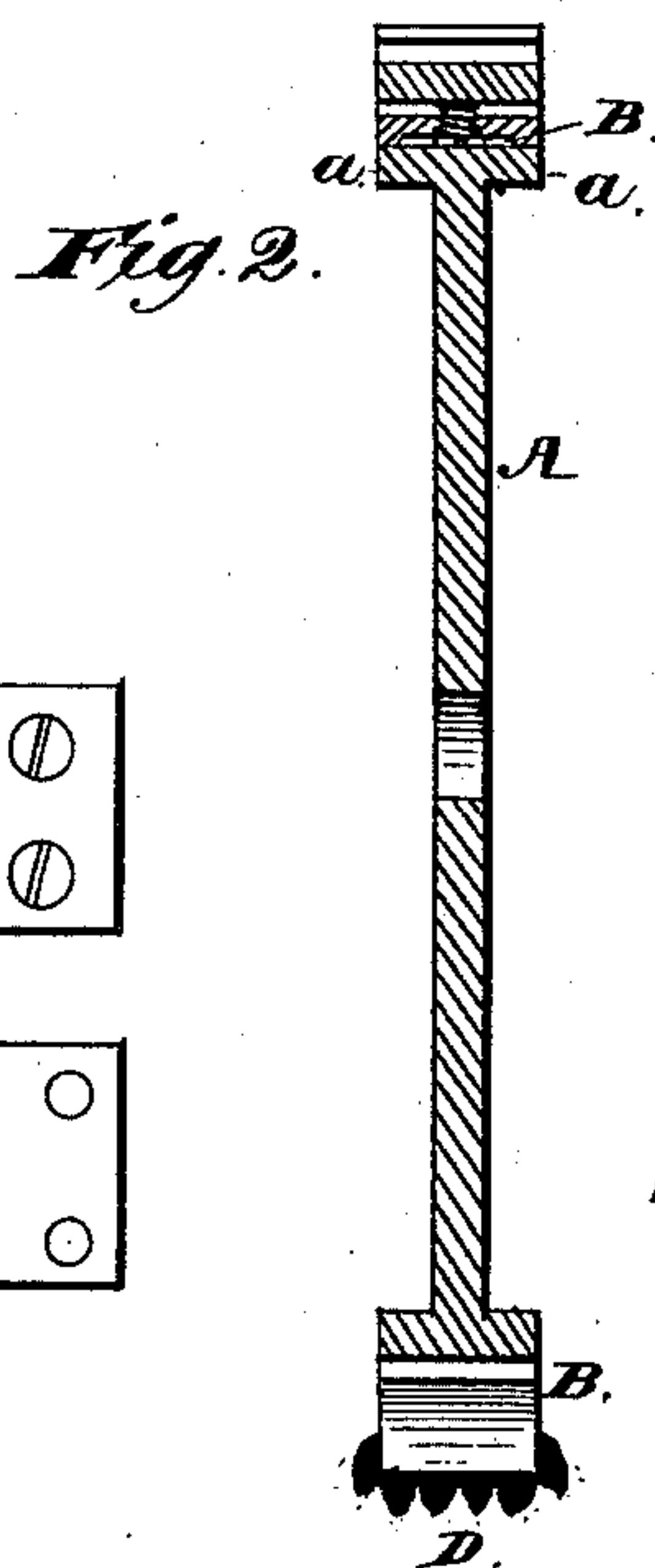
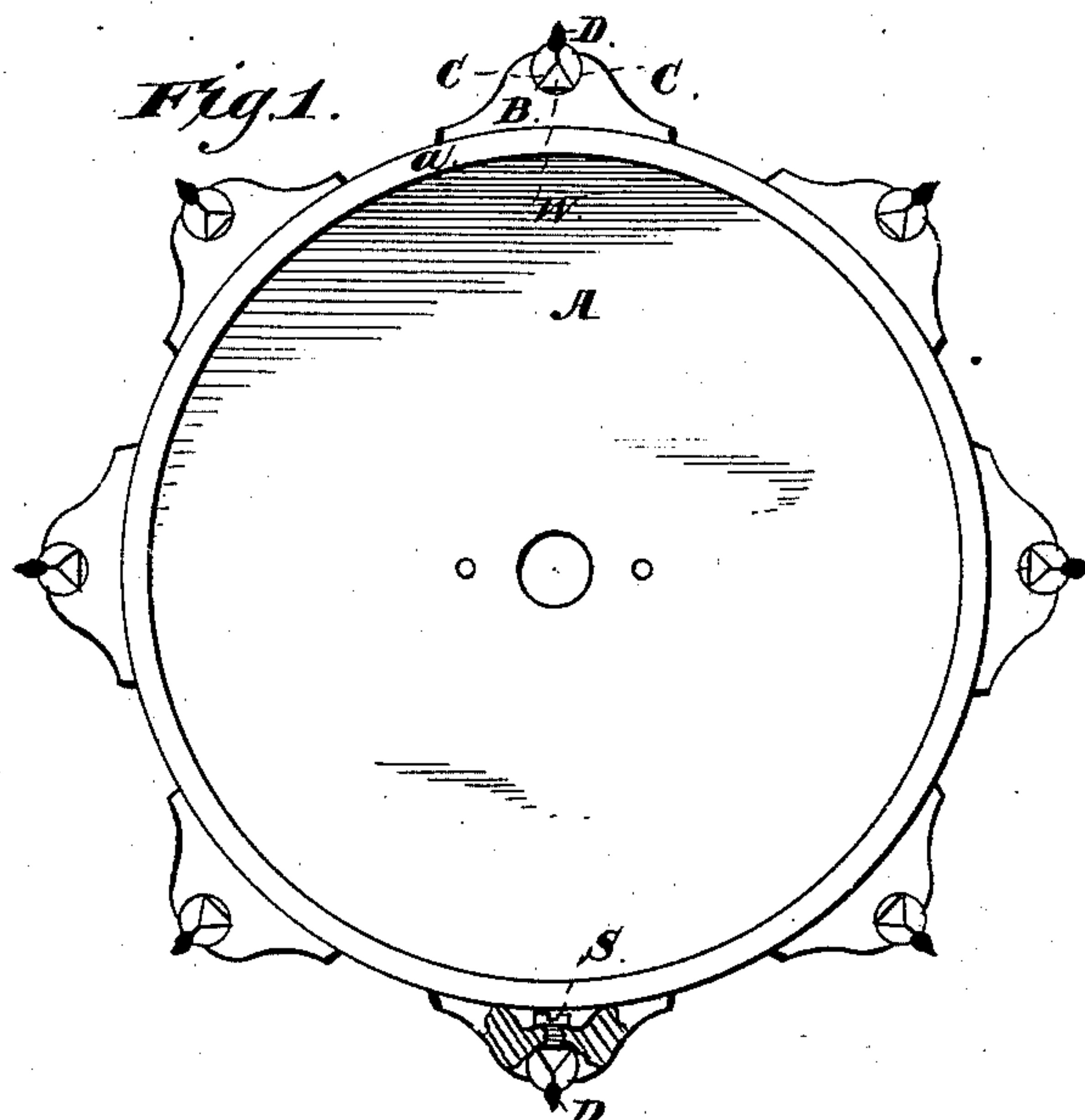


(No Model.)

J. LESHER.
CHANNELING SAW.

No. 285,633.

Patented Sept. 25, 1883.



Witnesses:
Charles S. Hyer.
Geo. Wm. Rea.

Inventor:
Joseph Lesher:
By James L. Norris.
Atty

UNITED STATES PATENT OFFICE.

JOSEPH LESHER, OF TOLEDO, OHIO.

CHANNELING-SAW.

SPECIFICATION forming part of Letters Patent No. 285,633, dated September 25, 1883.

Application filed May 17, 1883. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH LESHER, a citizen of the United States, residing at Toledo, in the county of Lucas and State of Ohio, have
5 invented new and useful Improvements in Channeling-Saws, of which the following is a specification.

This invention relates to improvements in circular saws more especially designed to chan-
10 nel rock for blasting and other purposes; and the invention has for its object to provide novel means for securing the diamond or other cutters in position on the periphery of the web or body of the saw. This object I accomplish in
15 the manner and by the means hereinafter described and claimed, and as illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of the saw; Fig. 2, a cross section taken through the body of
20 the saw and through one of the saddle-blocks, clamps, wedge, and screw. Fig. 3 is an enlarged end view of a saddle-block, showing the parts holding the diamonds in position; and Fig. 4 is a back and front view of a saddle-
25 block complete.

Similar letters refer to similar parts throughout the several views.

A represents the web or body of the saw, having an enlargement in the form of a flange,
30 *a a*, on each side of its extreme outer edge, thus forming a broad surface on the periphery. To this periphery are secured, by means of bolts, screws, or rivets, saddle-blocks B B, there being any number desired of them, according to
35 the diameter of the saw. The outer portion of this saddle-block B is constructed with a cylindrical opening crosswise of the block, in which opening are closely fitted two clamp-
40 blocks, C C, made of copper or other suitable soft metal, between the outer edges of which are bedded a row of black diamonds, D, or other suitable material for cutting rock. The
45 inner edges of the clamp-blocks C C recede from each other, thus forming a triangular opening, in which a triangular wedge, W, is

inserted, and set-screws S S, operated in a cavity on the concave side of the saddle-block B, forces the wedge W against the clamp-
blocks C C, which forces them outward, and, in turn, upward and around in the direction of
50 the curve of their periphery, thus securely clamping the material placed between their outer edges for cutting. A series of holes are tapped for the set-screws, so that a forward or
55 backward incline may be given to the wedge W, the clamp-blocks C C, and the cutters D, thus adjusting the cutters to a new edge without resetting them.

Having thus described my invention, what I claim as new, and desire to secure by Letters
60 Patent, is—

1. The combination of the web or body having the flanges at its periphery, the saddle-
block attached to the flanges and having a transverse opening, the clamp-blocks arranged
65 in the said opening and holding the cutter between their outer ends, the wedge arranged between the inner ends of the clamp-blocks, and the set-screw passing through the flange
70 on the web or body and acting on the wedge, substantially as and for the purpose described.

2. The combination of the web or body having the flanges at its periphery, the saddle-
block attached to the flanges and having a cylindrical transverse opening, the clamp-
75 blocks having circular outer faces and receding inner faces and arranged in the opening of the saddle-block, the triangular wedge arranged between the clamp-blocks, and the set-
80 screw passing through the flange on the web or body and acting on the wedge, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

JOSEPH LESHER.

Witnesses:

JOSEPH N. CLOUSE,
WILLIAM H. TUCKER.