J. D. HUSBANDS, Jr.

Diamond Saws.

No. 152,378. Patented June 23, 1874.

Fig. 1.

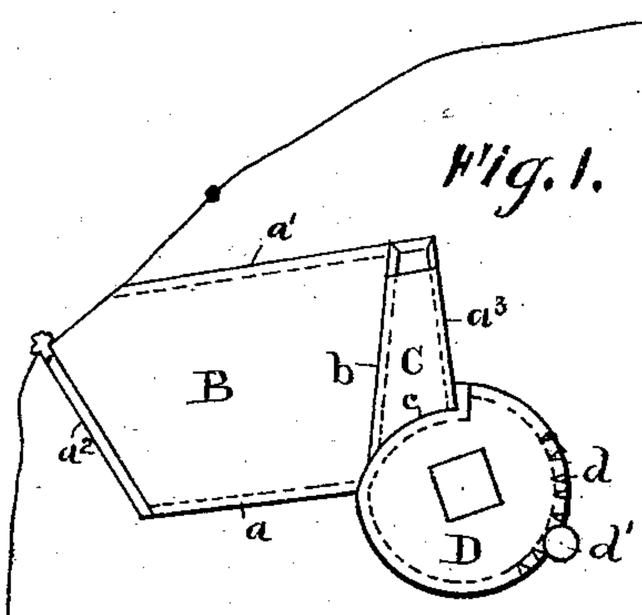
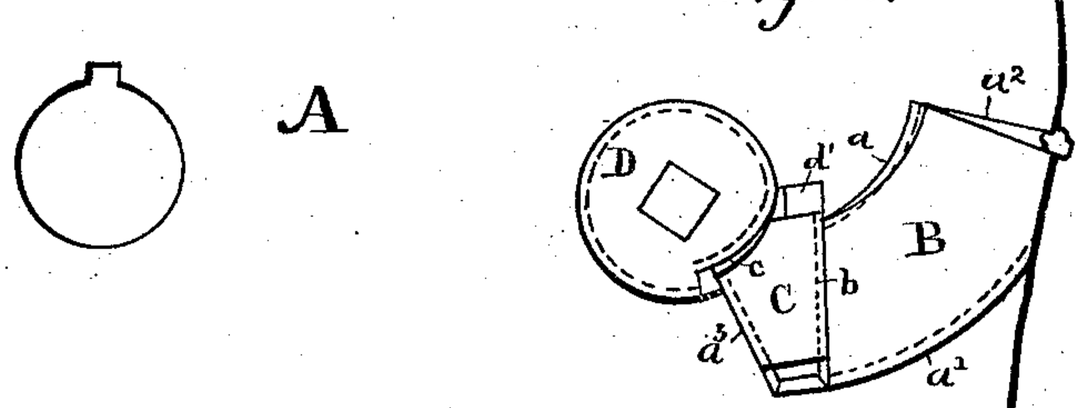


Fig. 2.



Witnesses,

Chas. Keiser

Geo W. Hyndm.

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per

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attys.

UNITED STATES PATENT OFFICE.

JOSEPH D. HUSBANDS, JR., OF ST. LOUIS, MISSOURI, ASSIGNOR OF ONE-HALF HIS RIGHT TO JOSEPH W. BRANCH, OF SAME PLACE.

IMPROVEMENT IN DIAMOND SAWS.

Specification forming part of Letters Patent No. **152,378**, dated June 23, 1874; application filed November 1, 1873.

To all whom it may concern:

Be it known that I, JOSEPH D. HUSBANDS, Jr., of the city and county of St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Diamond Saws, of which the following is a specification:

This invention relates to inserting and securing diamond or other cutting points or teeth in saws; and consists in a press-plate for holding the point, one or more wedges of any suitable form, and a cam for tightening the press-plate and wedge. A rivet is applied to either the wedge or cam to secure them in position.

Figures 1 and 2 are face views of a saw, illustrating my invention.

A is the saw-plate, which is constructed with recesses to receive the teeth and inserted parts. B is the press-plate, between which and the inclined edge a^2 of the saw-plate are clamped the cutting-points. The plate B is provided with V-shaped grooves on its sides, in which fit tongues a a^1 on the saw-plate, to form ways or guides. The edge b of the press-plate is inclined, and between it and the part a^3 of the saw-plate is inserted a wedge, C, on the segmental part c of which engages the cam D, which forces the press-plate against the incline a^2, to fasten the cutting-point. Both the cam D and wedge C are provided with V-shaped grooves, fitting tongues on the saw-plate, which form guides to prevent their getting out of place. After the cutting-point has been securely fastened a rivet, d', is applied to notches d in the cam, as in Fig. 1, or between the wedge and the saw-plate, as in Fig. 2.

The diamond or cutting point is first inserted between the press-plate B and the incline a^2; the cam D is then turned so as to drive the wedge C, which will cause the press-plate so to move forward as to firmly clamp the cutting-point. The rivet d' is then inserted to keep the parts in proper position.

The following is claimed as new:

1. The combination of a saw-plate, a press-plate for holding a movable cutting-point, one or more wedges of any suitable form, bearing on the press-plate, and a rivet for holding said wedge or wedges, substantially as set forth.

2. The rivet d', in combination with the trapezoidal press-plate B, wedge C, cam D, and saw-plate A, substantially as set forth.

3. The trapezoidal press-plate B, seated and secured between the parts a a^1 a^2 of the saw-plate, as and for the purpose specified.

In testimony of said invention I have hereunto set my hand in presence of witnesses.

JOSEPH D. HUSBANDS, JR.

Witnesses:

WILLIAM W. HERTHEL,

GEO. W. HYNSON.