

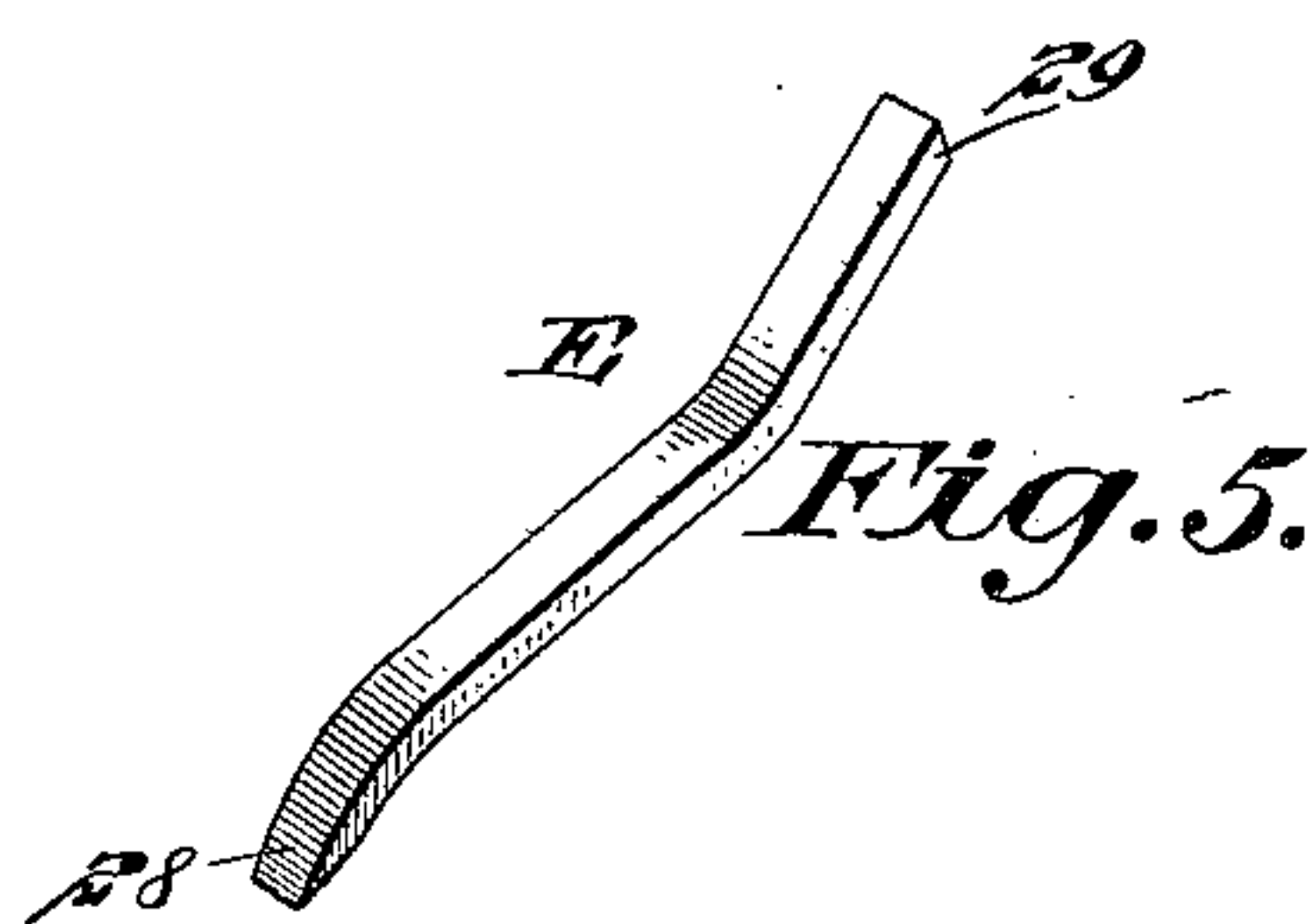
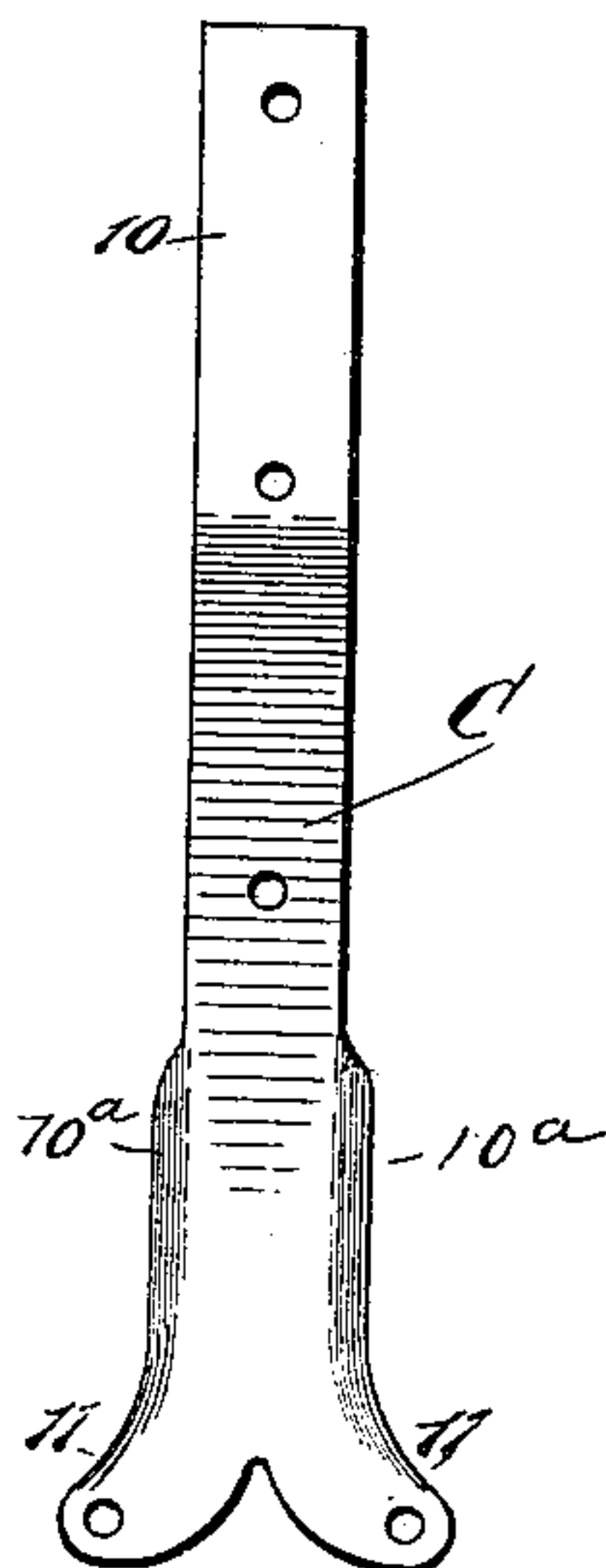
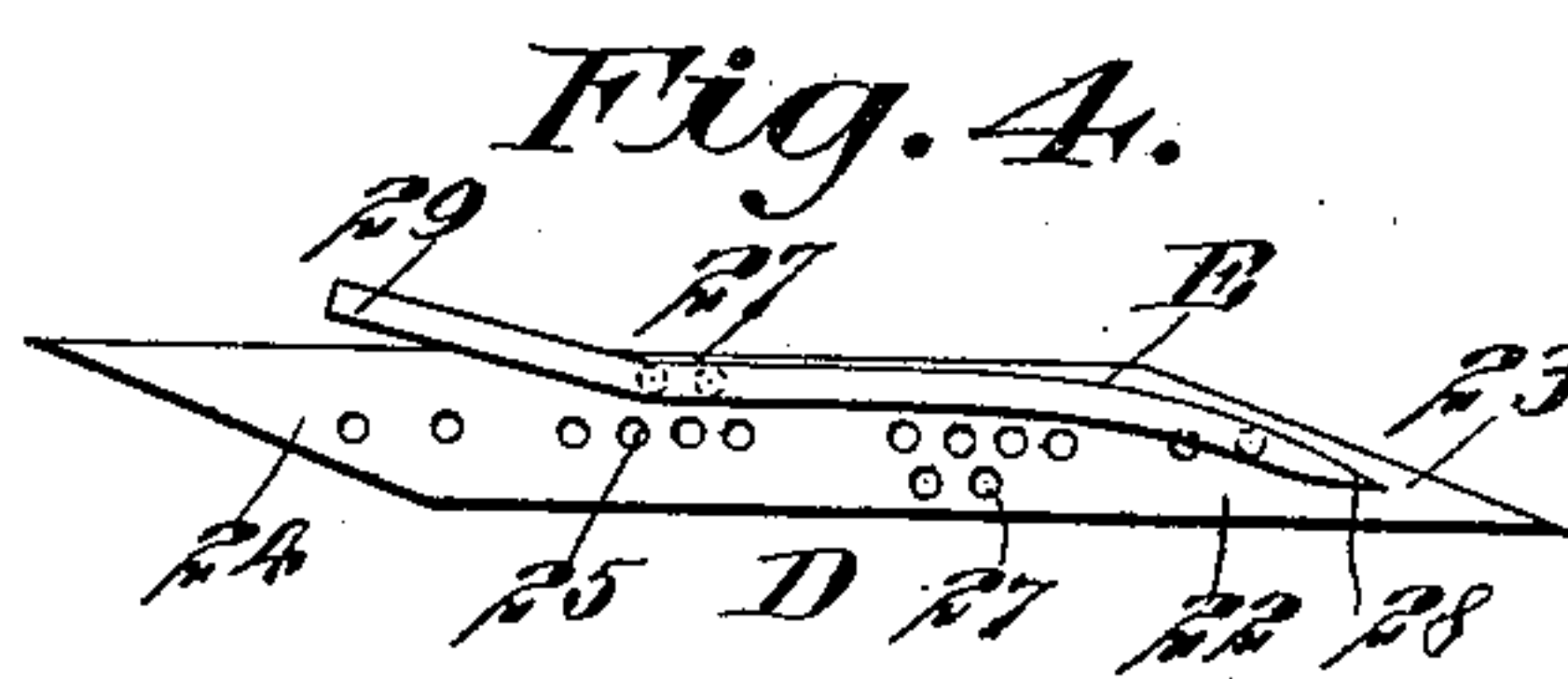
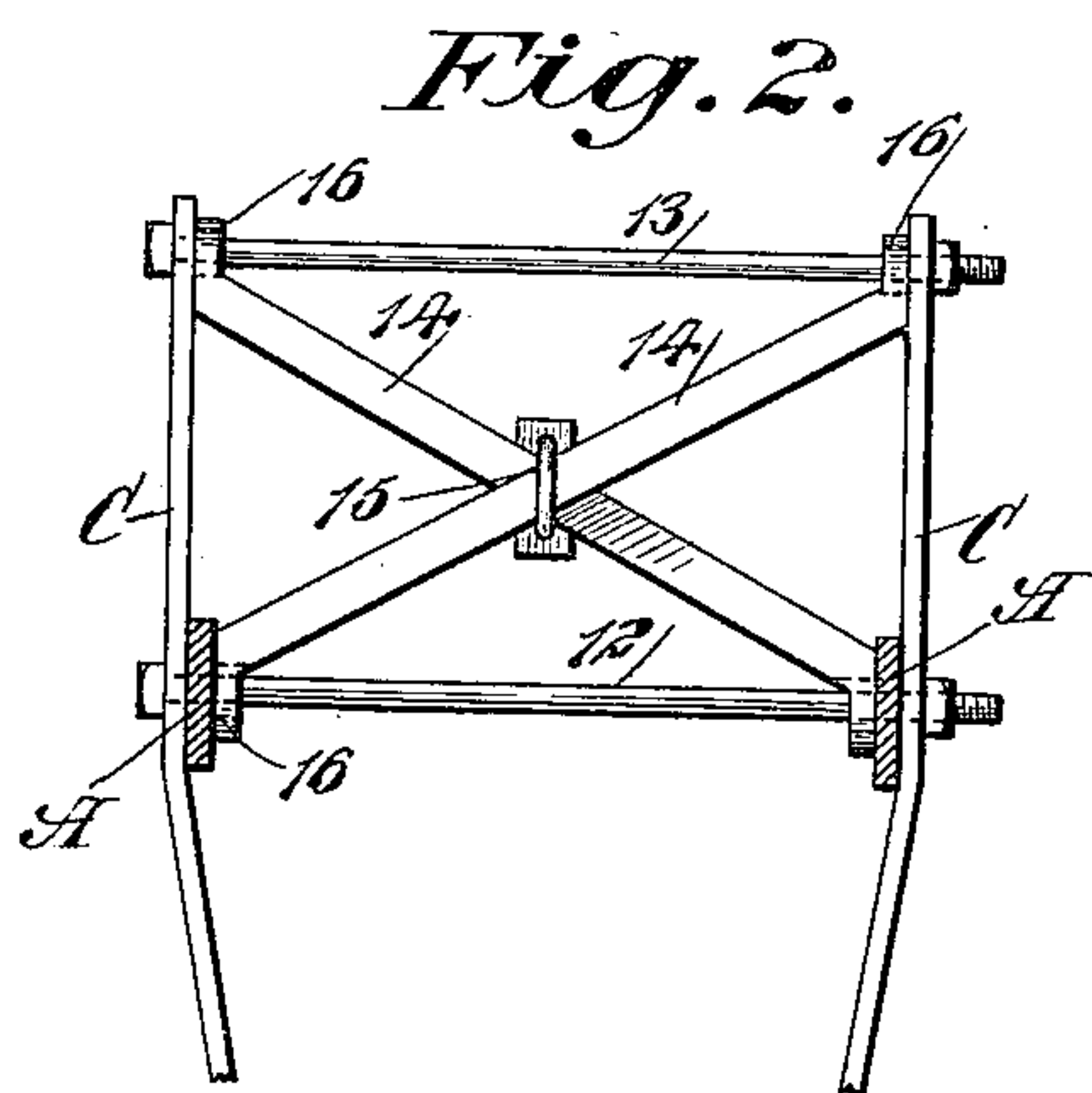
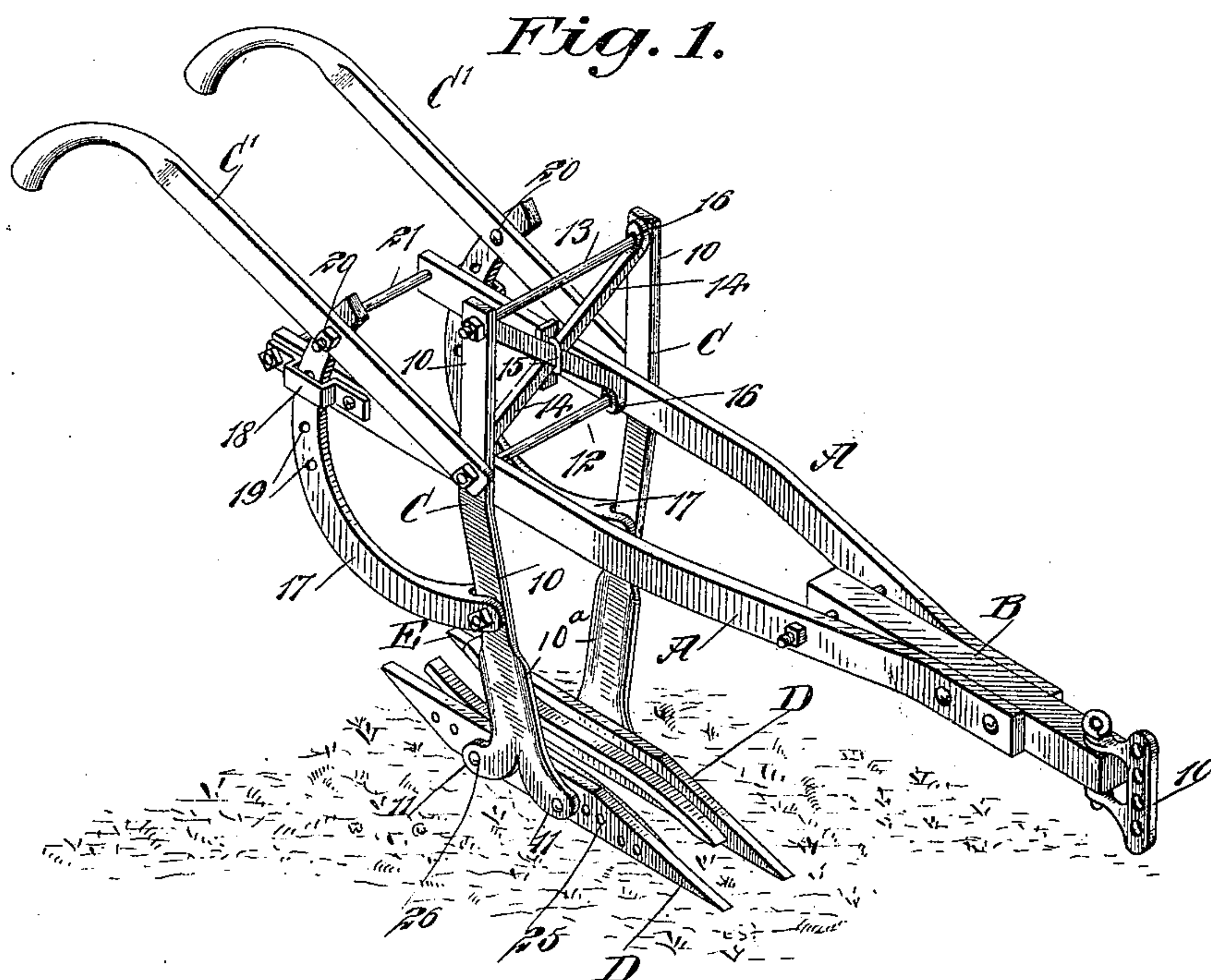
**No. 644,470.**

W. F. SCHMIDT.  
BEET PLOW.

**Patented Feb. 27, 1900.**

(No Model.)

(Application filed Aug. 19, 1899.)



WITNESSES:

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# UNITED STATES PATENT OFFICE.

WILLIAM FRANK SCHMIDT, OF BLANCO, CALIFORNIA.

## BEET-PLOW.

SPECIFICATION forming part of Letters Patent No. 644,470, dated February 27, 1900.

Application filed August 19, 1899. Serial No. 727,799. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM FRANK SCHMIDT, of Blanco, in the county of Monterey and State of California, have invented a new and Improved Beet-Plow, of which the following is a full, clear, and exact description.

The object of my invention is to improve upon the construction shown in the patent granted to me for a device of like character, No. 627,209, and dated June 20, 1899. These improvements consist in simplifying the construction of the standards carrying the points and lifters and providing for lateral and vertical adjustment of the standards relative to the main frame and rendering said standards reversible, and, further, in furnishing braces for the standards at their upper ends and so constructing the points that they may be turned end for end and laterally adjusted, so that they may extend for a greater or a less distance in advance of the standards.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of the improved plow. Fig. 2 is a vertical section through the frame, illustrating the upper portion of the frame-standards in front elevation and likewise showing the braces for the standards in front elevation. Fig. 3 is a side elevation of one of the standards. Fig. 4 is an inner face view of one of the points and a lifter in position on the point, and Fig. 5 is a detail perspective view of one of the lifters.

The frame of the plow consists of two side bars A, which diverge at their rear ends and converge at their forward ends, receiving between their forward ends a beam B, provided with a suitable clevis 10, and this beam B may be rigidly attached to the frame or may be secured thereto in an adjustable manner, if desired.

Two standards C are employed, one at each side of the frame, and these standards are located at the rear of the longitudinal center of the frame. Each standard consists of a straight upper section 10 and a lower section

10<sup>a</sup>, which inclines downwardly and in direction of the longitudinal center of the frame to a greater or less extent. A part of the lower portion 10<sup>a</sup> of each standard is provided with a cutting edge, and each standard C terminates at its lower end in a bifurcated foot 11, the members of the foot being carried one forwardly and the other rearwardly. In the event that the cutting edges of the standards should become worn these standards may be interchanged, the right-hand standard being carried to the left-hand side of the frame, and vice versa.

The standards are attached to the frame by a bolt 12, loosely passed through the standards and the side bars A of the frame, the said bolt being provided with one or more nuts at each of its ends, and the handles C' are secured to the standards by the same bolt 12, as shown in Fig. 1. The upper ends of the standards C are connected by a second and parallel bolt 13, likewise provided with one or more nuts at its ends, and the upper portions of the standards C are strengthened through the medium of cross-braces 14, which braces are connected where they pass one another by means of a clip or clamp 15, of any desired construction, and each brace terminates in an eye 16 or a slot, as desired. The bolts 13 and 12 pass loosely through the said eyes or slots, as shown in dotted lines in Fig. 2.

The standards C are adjusted forwardly and rearwardly on the bolt 12, which serves as a pivot, through the medium of arched adjusting-bars 17, pivotally attached to the lower portions of the standards and passed through clamps 18, located upon the outer faces of the bars A of the frame at the rear. Each adjusting-bar 17 is provided with a series of apertures 19, and a bolt 20 is also provided for each adjusting-bar adapted to be passed through one of the handles and through an aperture 19 in the bar. The bolt 21 is passed through the rear ends of the bars A of the frame, and this bolt is also provided with one or more nuts at each end, and through the medium of the said bolt 21 the rear ends of the frame may be brought together, so as to cause the feet of the standards C to approach one another when desired, the bolts 12 and 13 and bars 17 having been suitably adjusted.



Each standard C is adapted to carry a point D, and, as shown in Fig. 4, each point consists of a blade having one of its ends 23 beveled from the upper edge downwardly to the lower edge, while its opposite end 24 is reversely beveled, the inclination extending from the lower edge upwardly to the upper edge. Each point is provided with a series of longitudinally-arranged apertures 25, so grouped that bolts 26 passed through the members of the foot-sections of the standards C may also be passed through any two of the apertures 25, thus admitting of the points extending to a greater or less degree forwardly beyond the standards, and the opposite inclination of the ends of the points admits of said points being turned end for end should one of the ends presented to wear become injured to any extent.

A lifter E is provided for each of the points D. These lifters are located on the inner faces of the points and are adapted to raise the beets from the soil when loosened by the points. These lifters may be adjusted to the points when they are reversed through the medium of series of apertures 27, located at opposite sides of the center of the said points, one series near the bottom edge and the other series near the upper edge, as shown in Fig. 4. Each lifter consists of a bar which is curved from a point at the rear of its center downwardly to its forward end, the forward end of each bar terminating in a point 28, while the rear ends 29 of the bars forming the lifters are given an upward and a rearward inclination, as is shown in both Figs. 1 and 5.

By tightening the bolt 13 and loosening the bolt 12 and likewise loosening the clamp 15 the bottom or foot portions of the standards may be opened or spread apart, and it is likewise evident that by a reverse adjustment of the bolts 12 and 13 the lower ends of the standards may be brought together. When the clamp 15 is tightened, the standards C are held from moving up or down. The points on the standards may be tipped up or down through the medium of the adjusting-bars 17, and the heels of the points and lifters may be drawn together by a proper manipulation of the bolt 21 at the rear end of the frame.

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

1. A beet-plow comprising a frame, standards adjustable upon said frame, and points adjustably and reversibly mounted at the feet of the said standards.

2. A beet-plow comprising a frame, standards adjustable upon the said frame, points adjustably and reversibly mounted at the feet of said standards, and lifters carried by the said points, adjustable with the points and capable of adjustment to the points when said points are reversed.

3. In a beet-plow, a frame, and reversible standards carried by said frame, the said standards being capable of vertical and lateral adjustment relative to the frame.

4. A beet-plow comprising a frame, standards for the frame, a pivot-bolt connecting the standards with the frame, and braces for the upper portion of the standards, the standards being adjustable on the frame and the braces adjustable relative to the standards.

5. In a plow, a frame, reversible standards for the said frame, a pivot-bolt passed through the standards and the frame, a second pivot-bolt connecting the standards above the frame, cross-braces loosely mounted on the said bolts, and a clamp for the said braces where the braces cross one another, as described.

6. In a plow, the combination, with a frame, a reversible standard at each side of the frame, a pivot-bolt connecting the standards with the frame, a connecting-bolt uniting the standards above the frame, and braces for the upper portion of the standards, loosely mounted on the said bolts, of points adjustably and reversibly connected with the foot-sections of the standards, lifters adjustable upon the said points, and means, substantially as described, for inclining the standards forwardly or rearwardly, and for contracting or expanding the rear end of the frame, as described.

WILLIAM FRANK SCHMIDT.

Witnesses:

AUGUST H. SCHMIDT,  
WILLIAM H. CLARK.