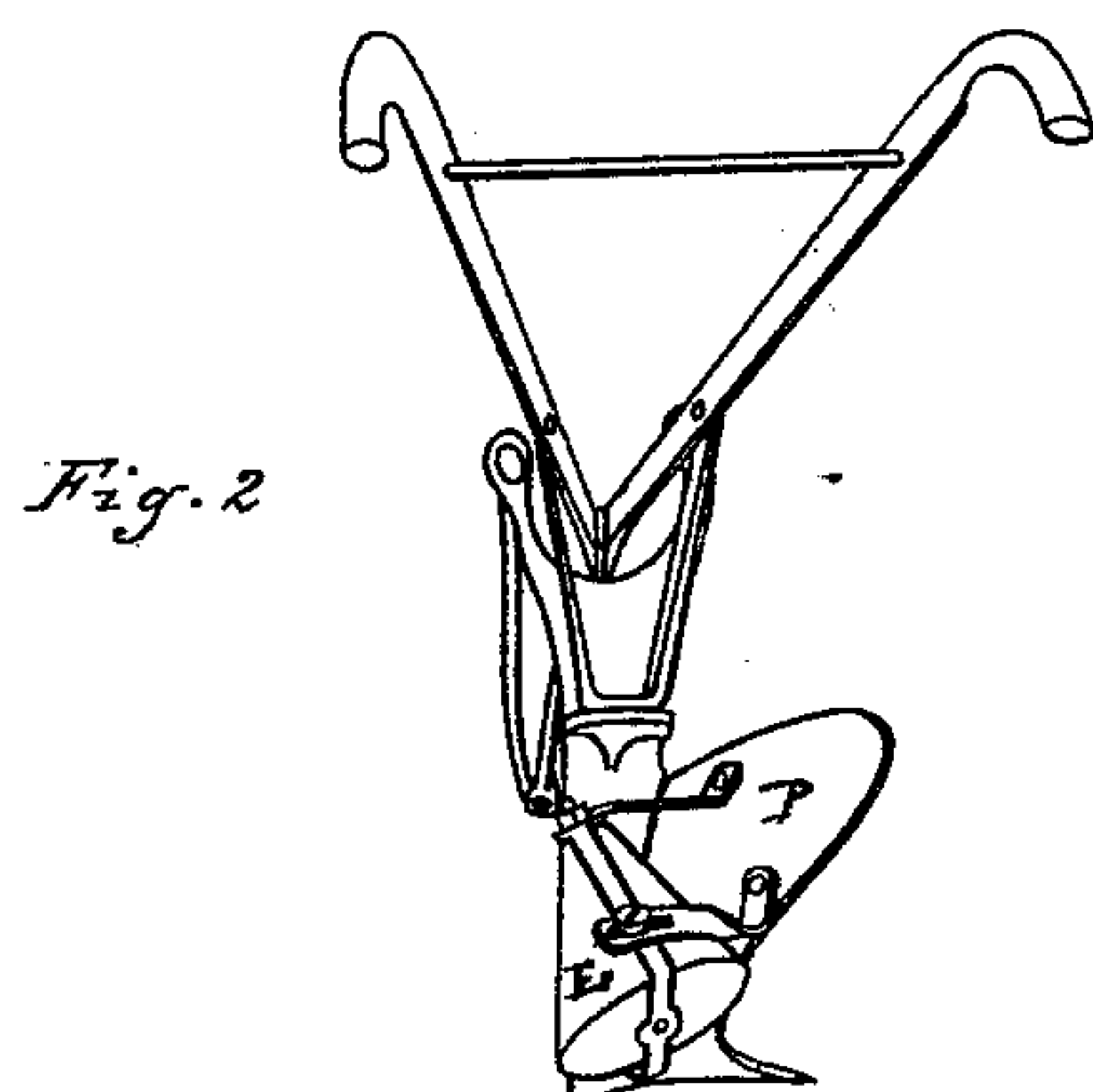
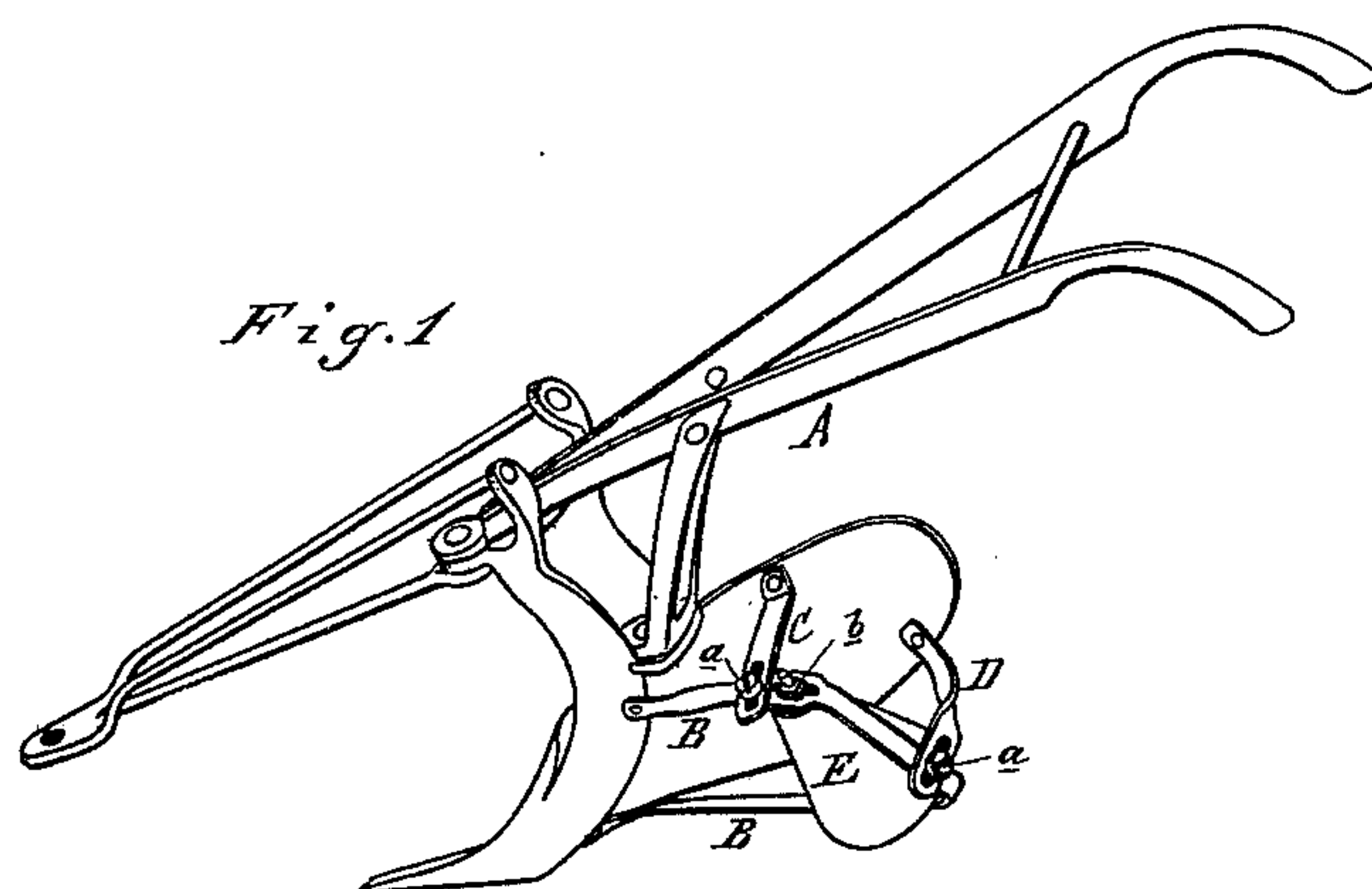


A. C. SCHRAM.
Plow.

No. 222,313.

Patented Dec. 2, 1879.



Attest:

A. Barthel
Charles J. Hunt

Inventor:

A. C. Schram
By Atty
Thos. S. Sprague

UNITED STATES PATENT OFFICE.

ADELBERT C. SCHRAM, OF FLINT, MICHIGAN.

IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. **222,313**, dated December 2, 1879; application filed September 2, 1879.

To all whom it may concern:

Be it known that I, ADELBERT C. SCHRAM, of Flint, in the county of Genesee and State of Michigan, have invented an Improvement in Plows, of which the following is a specification.

The nature of this invention relates to new and useful improvements in the construction of plows; and the invention consists, first, in forming the land-side of a plow of a single conical roller supported with its apex upward, and inclined to present a vertical face outward; second, in mounting such a roller so that its inclination in the line of draft can be adjusted, adapting the plow for plowing at different depths; and, third, in mounting such roller so that it can be adjusted laterally in addition to the adjustment of its inclination in the line of draft, all as more fully hereinafter set forth.

Figure 1 is a perspective view of my improved plow. Fig. 2 is a rear elevation.

In the accompanying drawings, which form a part of this specification, A represents a plow provided with the usual standard, beam, handles, and mold-board, the ordinary land-side being omitted. Secured to the land-side of the standard in any convenient manner is one end of a frame, B, which extends rearward, downward, and forward, the opposite end being properly secured to the standard at or near its foot.

C D are braces, one end of each of which is secured to the inner face of the mold-board, their opposite ends being slotted, as shown, through which slots bolts *a* pass, and are threaded into the frame B.

E is a truncated metal cone, which revolves

upon a shaft through its axial center, the lower end of which is stepped or secured in the lower horizontal portion of the frame B, while its upper end passes through a slot in the frame, and has upon its end a nut, *b*, by means of which the shaft may be adjusted to regulate the pitch of the roller as may be desired.

When it is desired to cut a deep furrow, the upper end of the roller land-side is thrown forward and secured in place by means of the nut and slot *b*, and the land-side is adjusted rearward when it is desired to cut a shallow furrow.

By means of the braces C D the land-side can be adjusted to the line of draft, and it can also be thrown out, so as to be used as a stubble-plow, and by this manner of arrangement and construction of parts the friction upon the land-side is materially diminished, which necessarily lessens the draft.

What I claim as my invention is—

1. In a plow, a land-side formed of a single conical roller supported with its apex upward, and inclined to present a vertical face outward, substantially as described and shown.

2. The conical roller E, forming the land-side of the plow, and mounted in devices whereby its inclination in the line of draft can be adjusted to adapt it for plowing at different depths, as described and shown.

3. The conical vertical roller land-side E, mounted in a frame and capable of lateral and longitudinal adjustment of its inclination, substantially as shown and described.

ADELBERT C. SCHRAM.

Witnesses:

A. BARTHEL,
H. S. SPRAGUE.