

S. E. FLETCHER.

Improvement in Sub-Soil Plows.

No. 133,216.

Patented Nov. 19, 1872.

Fig. 1.

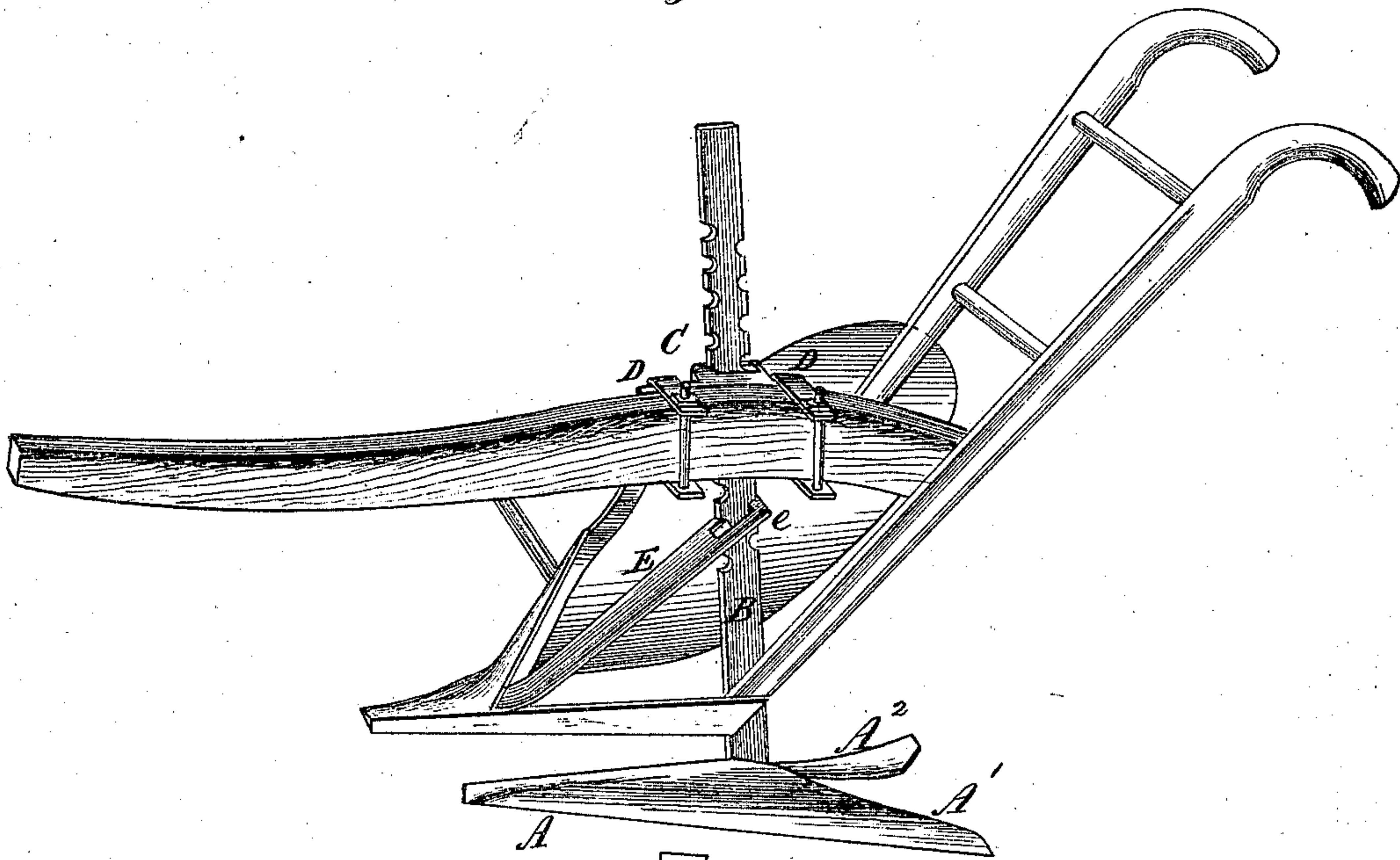
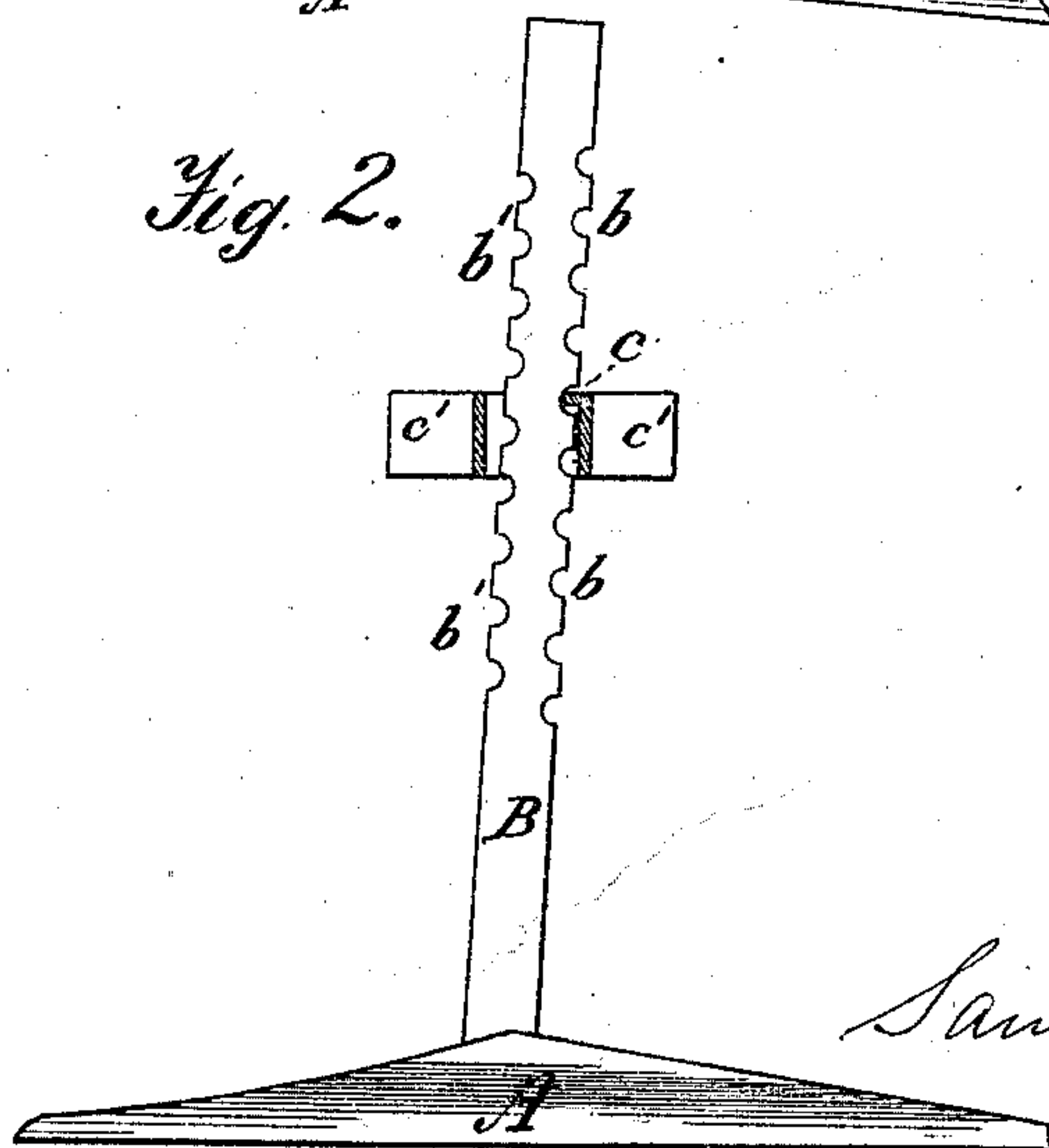


Fig. 2.



Witnesses.

D. R. Barnes
D. R. Barnes.

Inventor.

Samuel E. Fletcher
by

Sonno H. O'Connell

UNITED STATES PATENT OFFICE.

SAMUEL E. FLETCHER, OF BALLSTOWN, INDIANA, ASSIGNOR OF ONE-HALF
HIS RIGHT TO FREDERICK TALKENBERG, OF SAME PLACE.

IMPROVEMENT IN SUBSOIL-PLOWS.

Specification forming part of Letters Patent No. 133,216, dated November 19, 1872.

To all whom it may concern:

Be it known that I, SAMUEL E. FLETCHER, of Ballstown, in the county of Ripley and in the State of Indiana, have invented a new and useful Improvement in Subsoil-Plows; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the annexed drawing making a part of this specification, in which—

Figure 1 is a perspective view of a surface-plow having my improved subsoil-plow attached. Fig. 2 is a sectional view to show the manner of fastening the standard of the subsoil-plow to the plow-beam.

The same letters of reference are used in both figures in the designation of identical parts.

To enable those skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

The share A of the subsoil-plow terminates in rear of the standard B in two diverging wings, A¹ and A², the opening between which permits the slice cut off by the forward portion of the share to fall back to the bottom of furrow, while the wings continue to crumble it upon each side of the cut made by the standard. In this way the subsoil will be

most thoroughly broken up to form a soft and porous bed for the reception of the seed. The standard B has a series of notches, *b*, cut upon one edge, one or the other of which is engaged by a laterally-projecting lip, *c*, of the slide C, which embraces the standard, and has flanges *c' c'* to be passed under clips D when the subsoil-plow is to be attached to a surface plow-beam, as shown in Fig. 1. The subsoil-plow may be held at any required depth by means of this slide C engaging with the notches *b*. Upon the rear side or edge of the standard is another series of notches, *b'*, which are engaged by the loop, *e*, of a tie rod or bar, E, the opposite end of which is bolted under the mold-board of the surface-plow, thus strengthening the standard B at the same time that it keeps its notches *b* engaged with the lip *c* of the slide C.

What I claim as my invention, and desire to secure by Letters Patent, is—

A subsoil-plow composed of the share A, standard B having notches *b*, slides C *c c'*, and tie-rods E *e*, substantially as described.

SAML. E. FLETCHER.

Witnesses:

HENRY DALLMAN,

JOHN H. SEVERINGHAUS.