

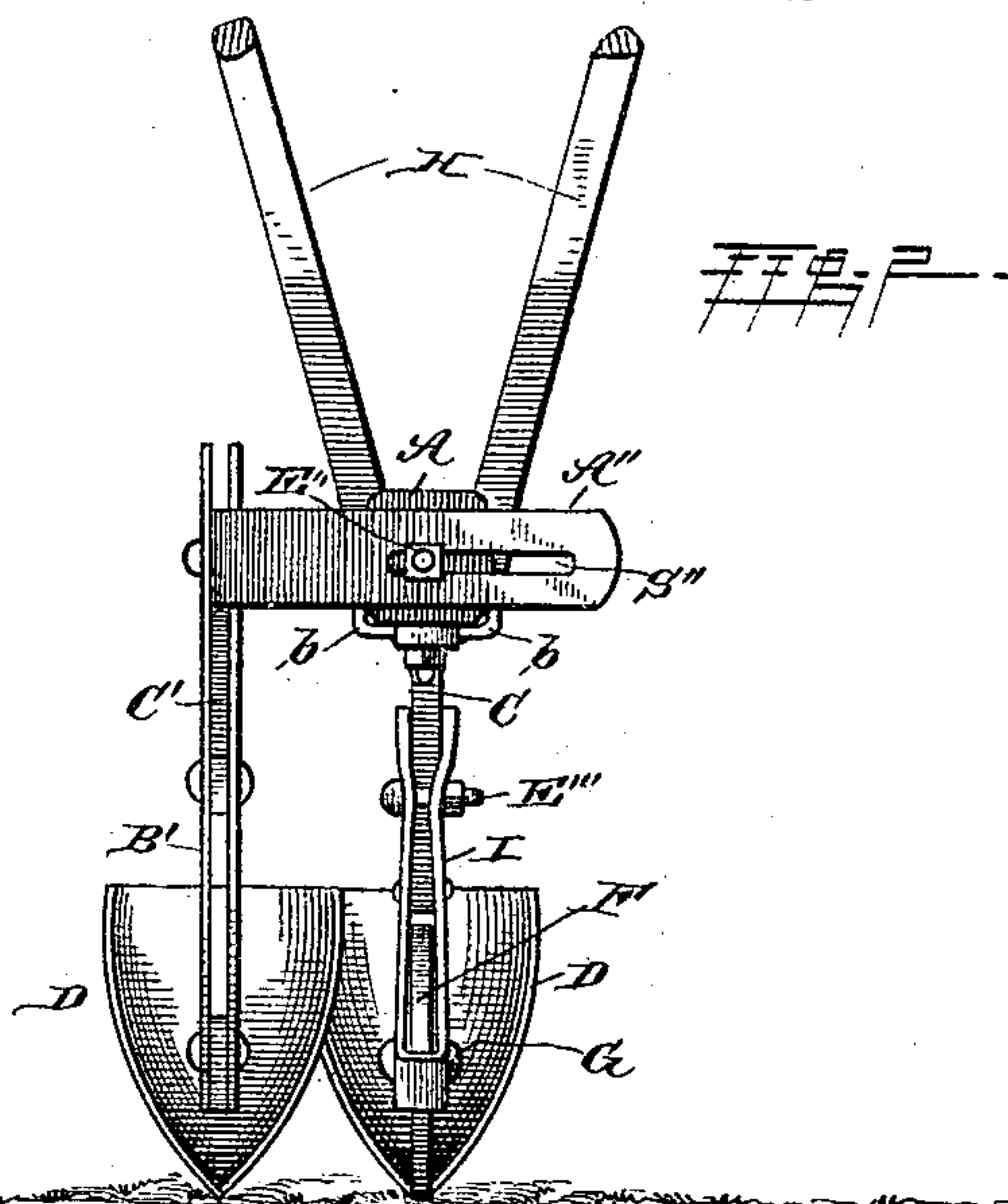
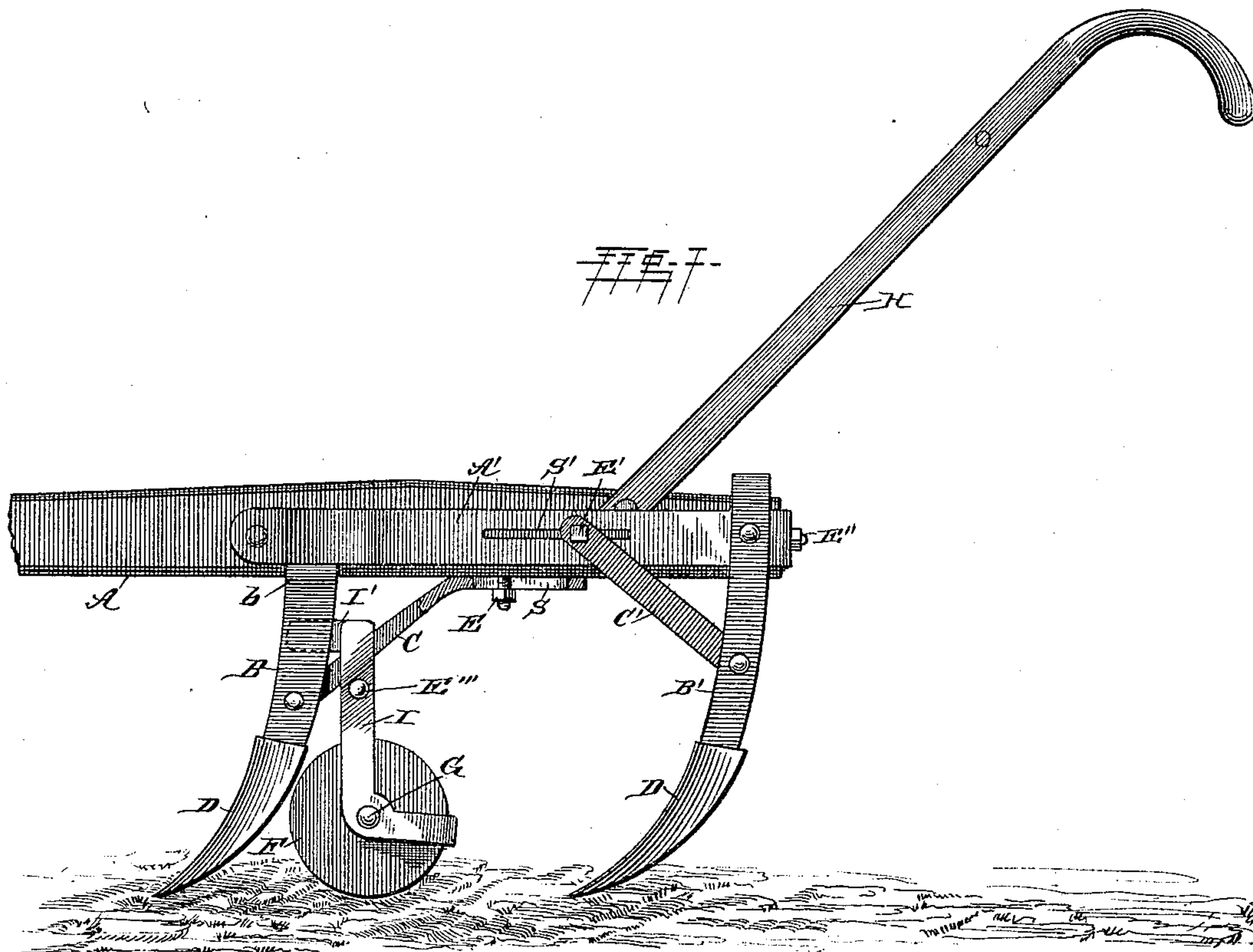
(No Model.)

J. E. W. & C. W. SMITH.

PLOW.

No. 353,828.

Patented Dec. 7, 1886.



WITNESSES

Jos. A. Ryan
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INVENTOR

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UNITED STATES PATENT OFFICE.

JOB E. W. SMITH AND CLAYTON W. SMITH, OF JASPER, FLORIDA.

PLOW.

SPECIFICATION forming part of Letters Patent No. 353,828, dated December 7, 1886.

Application filed July 30, 1886. Serial No. 209,525. (No model.)

To all whom it may concern:

Be it known that we, JOB E. W. SMITH and CLAYTON W. SMITH, citizens of the United States, residing at Jasper, in the county of Hamilton and State of Florida, have invented certain new and useful Improvements in Plows; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

Our invention relates to improvements in plows, and is fully described, explained, and claimed in this specification, and shown in the accompanying drawings, in which—

Figure 1 is a side elevation of a double-shovel plow embodying our improvements, a part of the brace C being shown in section. Fig. 2 is a rear elevation of same.

In these views, A is an ordinary plow-beam, having the usual handles, H.

A' is a supplemental beam, having its front end bolted to the side of the beam A, and provided at its rear end with a transverse extension, A'', lying across the rear end of the plow-beam. In this extension A'' is formed a horizontal slot, S'', and a bolt, E'', passes through the slot and into the rear end of the beam, thus securing the rear end of the supplemental beam to the main beam and at the same time permitting lateral adjustment of the supplemental beam. Two plow-standards, B B', having substantially the same construction, are fastened, one to the beam A, near the front end of the supplemental beam A', and the other to the supplemental beam at a point near the junction of the extension A''. Each of these standards is formed preferably of two flat bars of iron clasping the beam to which the standard is fastened, and pivoted thereto by a single bolt passing through the standard and beam. The standard B is braced by means of a rod, C, whose lower end lies between the bars that form the standard, while its upper end is bolted to the lower face of the beam A, the securing-bolt E passing through a longitudinal slot, S, in the brace, thus providing for angular adjustment of the standard. The standard B' is similarly secured to the supplemental beam A' by means of a rod, C', pivoted to the standard and bolted to the beam, the securing-

bolt in this case passing through a slot, S', in the beam.

Shovels or other plows, D D, of any desired form, are secured to the standards by means of any approved fastening, the form of the plows and their connection with the standards being no part of our present invention.

Immediately behind the standard B, and preferably directly under the beam A, is a wheel, F, pivoted in a hanger, I, by means of a bolt, G, which passes through the hanger and the center of the wheel. The hanger may have any desired construction, and be fastened to the plow-beam or its attachments in any practical manner; but we prefer the construction and method of attachment illustrated in the drawings. The hanger, as shown, consists of two approximately parallel bars, either independent or formed from a single bar bent at its center. Each of the two parallel bars is bent in its own plane to form three parts—a vertical or nearly vertical part, I, an extension, I', extending forward from the upper end of the part I, and a rearward extension, I'', at the lower end of the part I. The wheel F lies between the two bars, the center of the wheel and the bolt G being at the junction of the parts I' I'' of the bars, and the parts I'' acting as scrapers on opposite faces of the wheel. The upper ends of the bars lie on opposite sides of the brace-rod C, and the extensions I' are drawn together and lie between the bars b b, that form the standard B. A single bolt, E'', passes through the two bars of the hanger, just below the brace C, and the tightening of the nut on this bolt secures the hanger in any desired position. On loosening the nut the hanger may be moved upward and backward from the position shown in Fig. 1 to any other position, the vertical adjustability being required to compensate for differences in the height or position of the plows D D. The position of the wheel F with reference to the longitudinal center of the plow-beam is such that the wheel supports practically all the weight of the entire structure, so that the plow rests on a rolling instead of a sliding support, thus greatly lessening the draft. We prefer to place the wheel directly back of the point of the front plow, D, in order that the wheel may travel in the bottom of the furrow; but its po-

sition in this regard may be somewhat changed without materially affecting its operation.

It is evident that the means shown for effecting lateral adjustment of the standard B' and for giving angular adjustment to both the standards may be used whether the wheel F be used or not, and also that the arrangement of the wheel may be employed independently of the double-plow construction shown and described.

We are aware that it is not broadly new to combine with a plow-beam a supplemental beam provided with means for lateral adjustment; and we are further aware that in plows already in common use various means are adopted for securing angular adjustment of the plow-standards with reference to the plow-beam. We believe, however, that the devices shown and described herein for the accomplishment of both these objects are the best, simplest, and most practical thus far invented, and that they are novel to the extent set forth in the claims relating thereto.

Having now described and explained our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination, with the plow-beam A

and the adjustable supplemental beam A', having the slotted transverse extension A'', of standards attached to the beams, respectively, and plows attached to the standards, substantially as and for the purpose set forth.

2. The combination of the plow-beam A, standard B, and brace C with the hanger I, adjustably fastened to the standard and brace, and the wheel F, pivoted in the hanger and adjustable with reference to the standard, substantially as shown and described.

3. The combination of the plow-beam A, the standard B, made up of the bars *b b*, the oblique brace C, the hanger I, made up of two bars clasping the brace C, and having extensions I' lying between the bars *b b*, the clamping-bolt E'', and the wheel F, pivoted between the bars of the hanger, substantially as and for the purpose set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

JOB E. W. SMITH.
CLAYTON W. SMITH.

Witnesses:

JNO. M. CALDWELL,
ALFRED B. SMALL.