

(No Model.)

H. LISTERUD.

PLOW.

No. 327,562.

Patented Oct. 6, 1885.

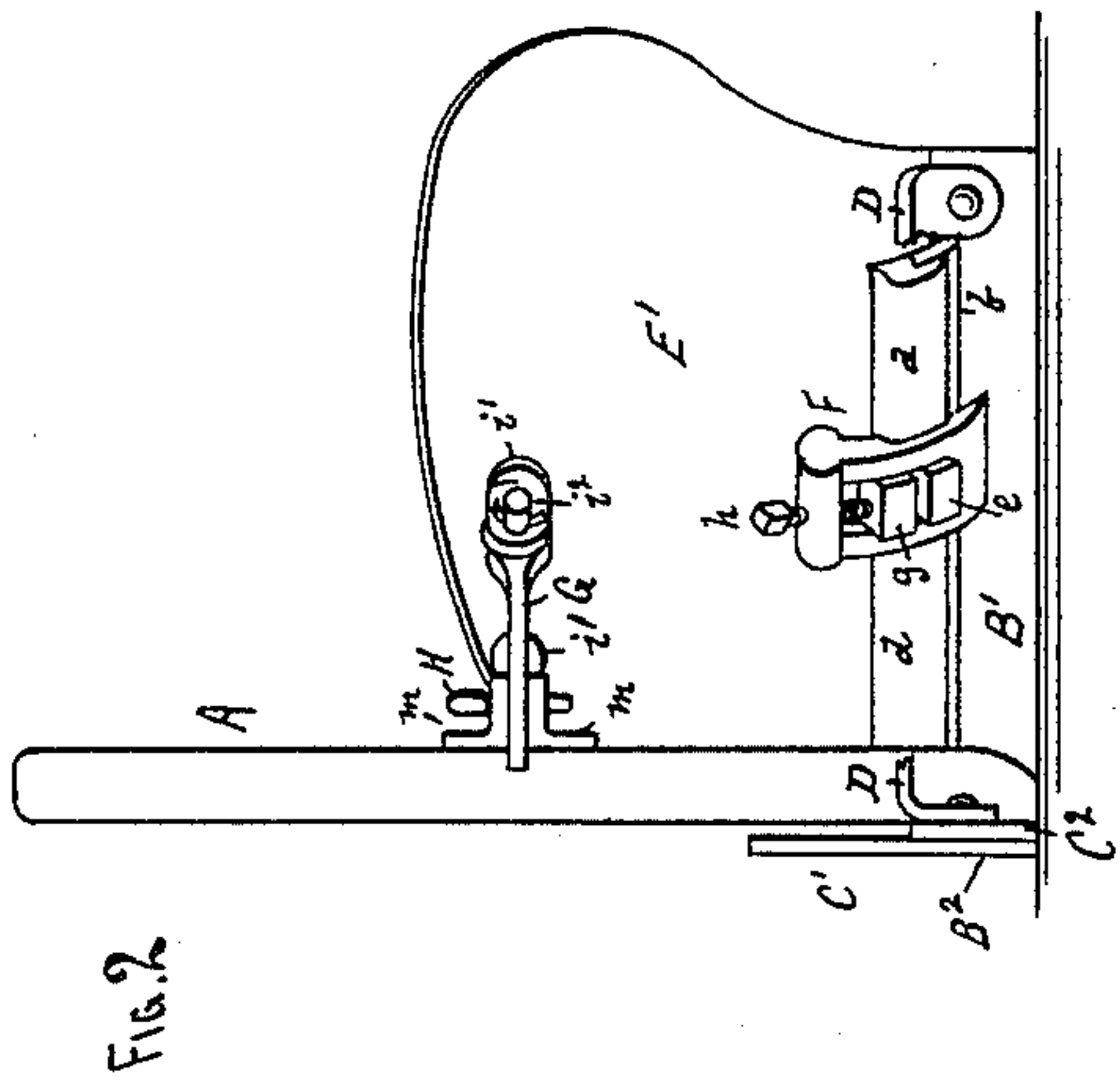


FIG. 2

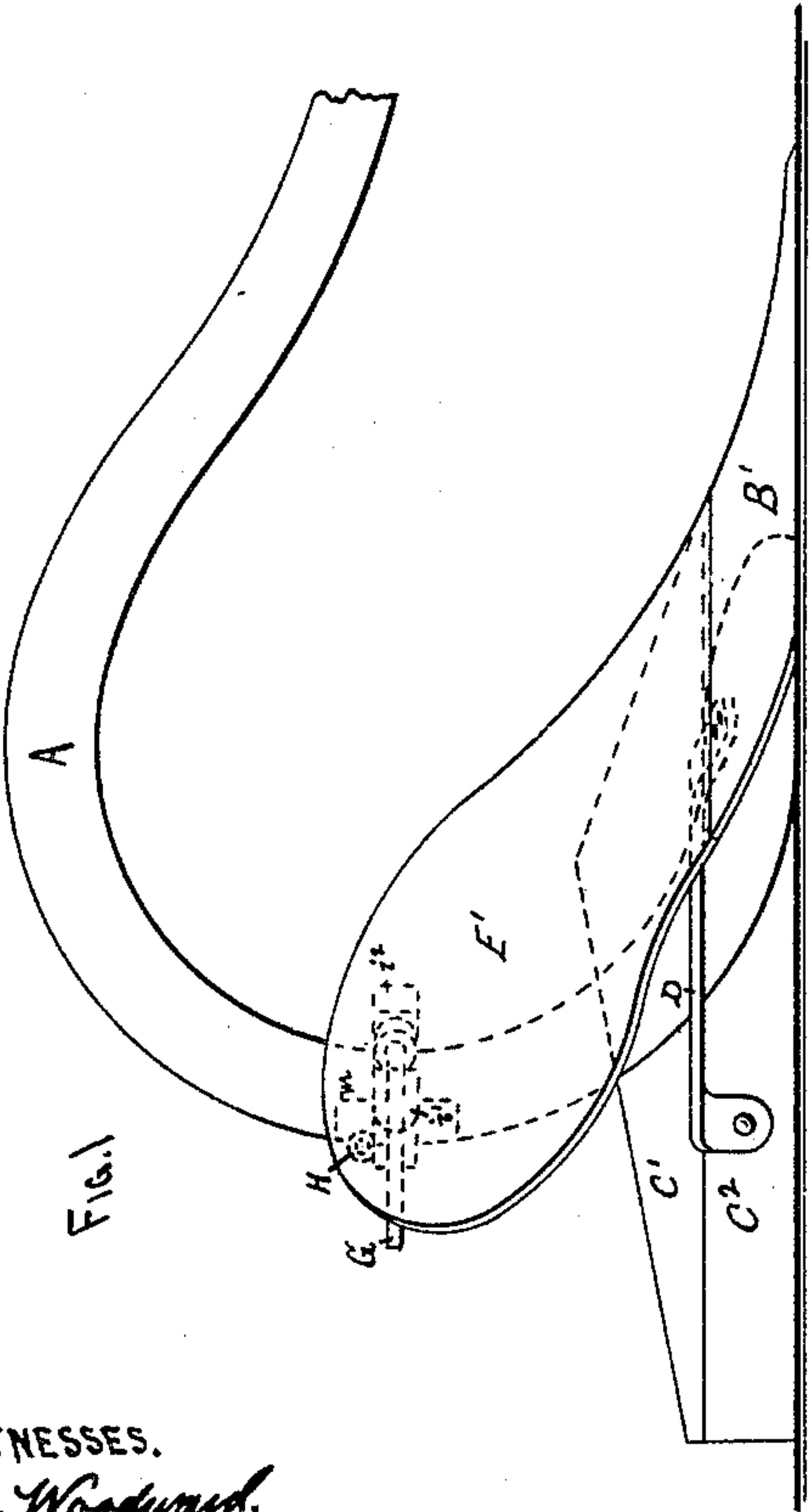
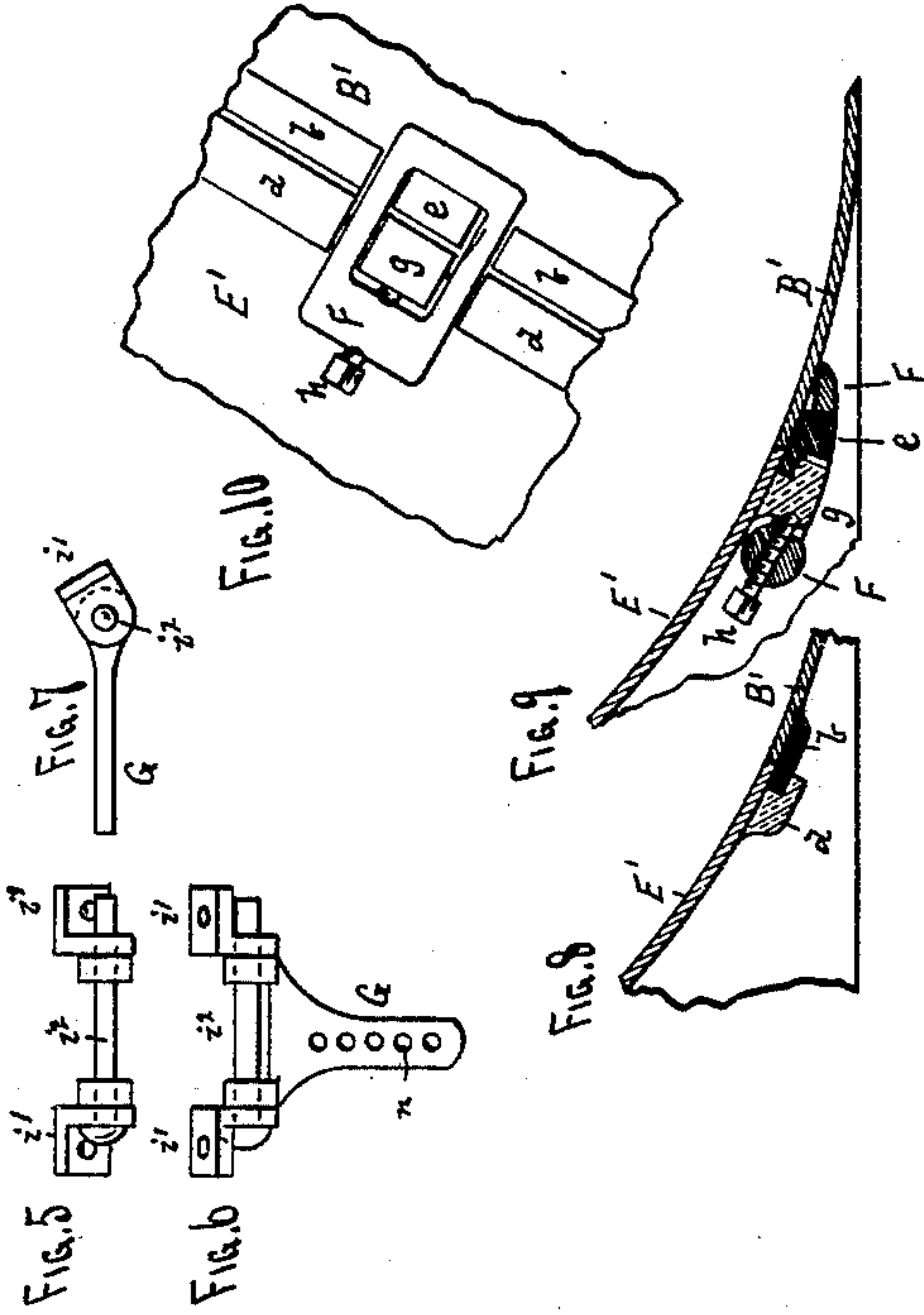


FIG. 1

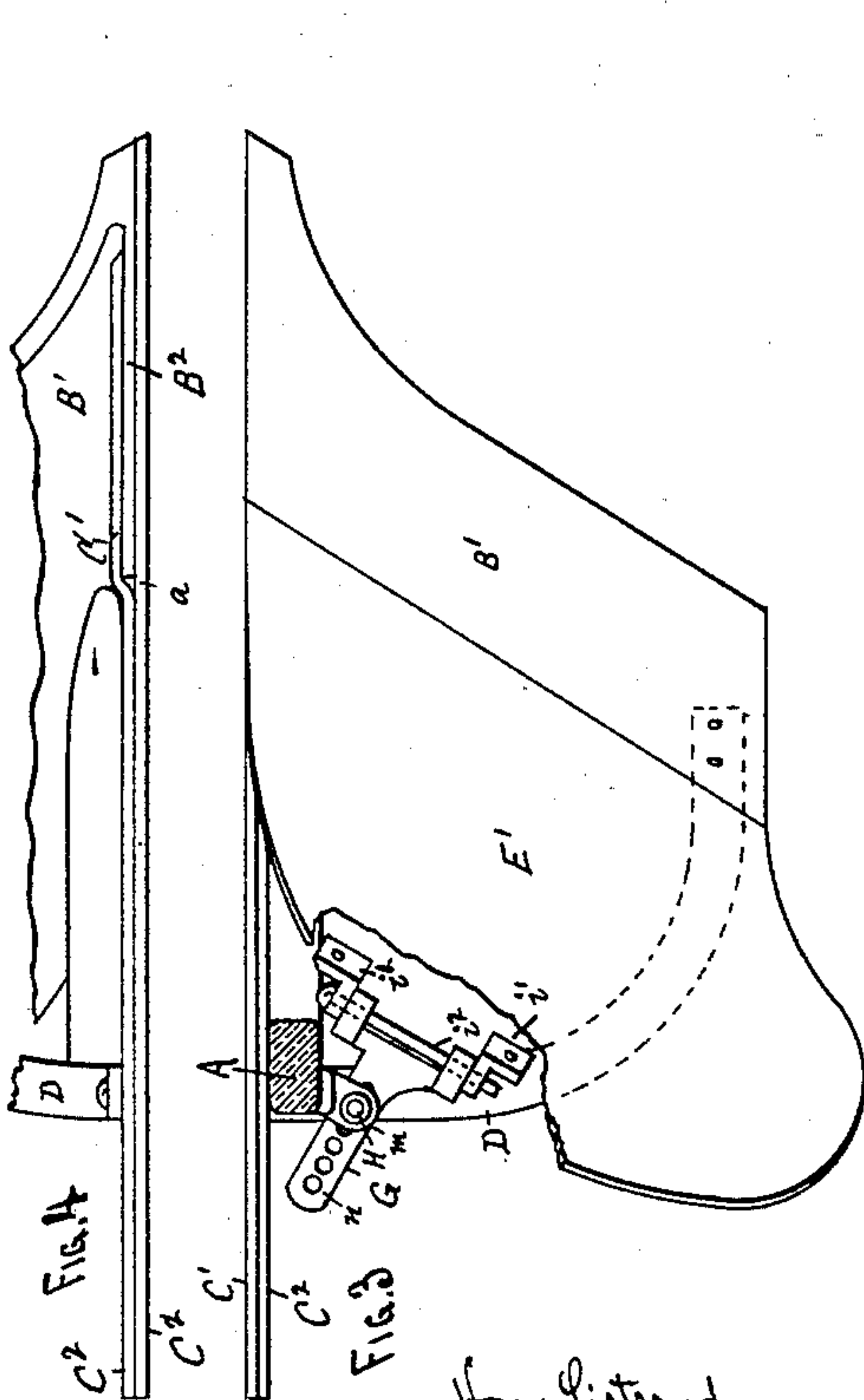


FIG. 3

FIG. 4

WITNESSES.  
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# UNITED STATES PATENT OFFICE.

HANS LISTERUD, OF SACRED HEART, MINNESOTA.

## PLOW.

SPECIFICATION forming part of Letters Patent No. 327,562, dated October 6, 1885.

Application filed March 2, 1885. Serial No. 157,454. (No model.)

*To all whom it may concern:*

Be it known that I, HANS LISTERUD, a subject of the King of Norway and Sweden, who has declared his intention of becoming a citizen of the United States, and a resident of Sacred Heart, in the county of Renville, in the State of Minnesota, have invented certain new and useful Improvements in Plows, of which the following specification is a full, clear, and exact description, reference being also had to the accompanying drawings, in which—

Figure 1 is a side elevation, Fig. 2 is a rear elevation, and Fig. 3 is a plan view, of a plow with my improvements attached thereto. Fig. 4 is a bottom plan view of a portion of the "landside," showing the manner of constructing it and uniting it to the share. Figs. 5, 6, and 7 are detached details of the mold-board-adjusting lever. Fig. 8 is a cross-section of the joint between the mold-board and share. Fig. 9 is a similar view of the same at the point where the yoke-clamp is attached. Fig. 10 is a rear plan view of the part as shown in Fig. 9.

In plowing it is found that with a fast-moving team the furrows are turned more smoothly and better results accomplished with a plow having a low inclination than with a plow having a high inclination, whereas the opposite is the fact if a slow team is used; hence a plow arranged with an adjustable mold-board whereby its inclination may be adapted to the team used with it, is a desirable article, and to produce such a device is one of the objects of the present invention.

The invention also consists in the manner of constructing the frame of the plow, and in the manner of uniting the share and mold-board.

A is the beam of the plow, which may be constructed in any desired manner, the one shown in the drawings being of the ordinary cast-steel pattern.

B' is the share, having a short section, B<sup>2</sup>, to which the landside is bolted. The landside consists of two flat plates, C' C<sup>2</sup>, forked at *a*, where they embrace the section B<sup>2</sup> of the share, and are bolted thereto, as shown in Fig. 4. By this means a very firm joint is made between the landside and share, and without adding any weight to the plow.

D is a curved brace connecting the outer end of the share B' with the rear part of the landside, whereby the share is stiffened and supported. By this construction it will be seen the share, landside, and beam are firmly connected, and are entirely independent of the mold-board.

E' is the mold-board, with its lower edge fitting closely against the upper edge of the share, so that no uneven surface will occur between them to interfere with their perfect action.

Upon the rear of the upper edge of the share a plate, *b*, is secured, which laps over the joint between the share and mold-board, and fits beneath another plate, *d*, upon the lower rear edge of the mold-board, as shown in Fig. 8. At the center the plate *b* is provided with a projection or lug, *e*, while the plate *d* is provided with a similar lug, *g*, the two lugs being opposite each other, and adapted to receive a yoke-frame, F, having a set-screw, *h*, by which it may be firmly attached to the lugs. The lower lug, *b*, is slightly undercut, and the lower cross-bar of the yoke is formed to fit beneath it, so that the yoke-frame, after being secured in place, will not slip off from the lugs.

The upper edge of the lug *g* is provided with a countersink, into which the point of the screw *h* fits, to prevent the yoke from slipping off from the lugs.

Upon the back of the mold-board, near its top, are secured two ears, *i'*, into which one end of a lever, G, is pivoted by a bolt or rivet, *i*<sup>2</sup>, while the other end of the lever passes backward between two ears, *m*, on the beam A. The free end of the lever G is provided with perforations *n*, down through which, and also through the ears *m*, a pin, H, passes, as shown. By this means the lever G may be held in a fixed relation to the beam at whatever point desired within the limit of the perforations *n*.

By loosening the set screw *h* the yoke F will be released, and leave the upper part of the mold-board free to be moved forward or backward by setting the pin H in one of the holes *n* in the lever G nearer to or farther away from the mold-board, and thus alter the angle of inclination of the mold-board at will. If, as before stated, a fast team is used, then the rear of the mold-board will be lowered,



and if a slow team is used the rear of the mold-board will be elevated. Thus the inclination can be easily and quickly adapted to the team attached to the plow to secure there-  
5 from the best possible results.

I claim an important advantage by the method shown of uniting the mold-board and share, and also by the use of the clamping-yoke F, as by this form of overlapping joint  
10 no opening can ever occur between the parts, while, by the use of the yoke F and its set-screw *h*, the parts are firmly clamped together, and a tight joint assured, no matter at what point the mold-board may be set.

15 Having described my invention and set forth its merits, what I claim is—

1. A plow-share having a lip, *b*, and lug *e* attached thereto, in combination with a mold-

board, E', having plate *d* and lug *g*, said plate *d* adapted to overlap said lip *b*, and a yoke-  
20 frame, F, provided with set-screw *h*, and adapted to be attached to said lugs, substantially as set forth.

2. The combination of share B', having lip and lug *b e*, mold-board E', having plate and  
25 lug *d g*, yoke-frame F, having set-screw *h*, beam A, and adjustable perforated lever G, connecting said mold-board and beam, substantially as and for the purpose set forth.

In testimony whereof I have hereunto set  
30 my hand in presence of two subscribing witnesses.

HANS LISTERUD.

In presence of—

HANS GRIMMOND,  
ERIC ERICSON.