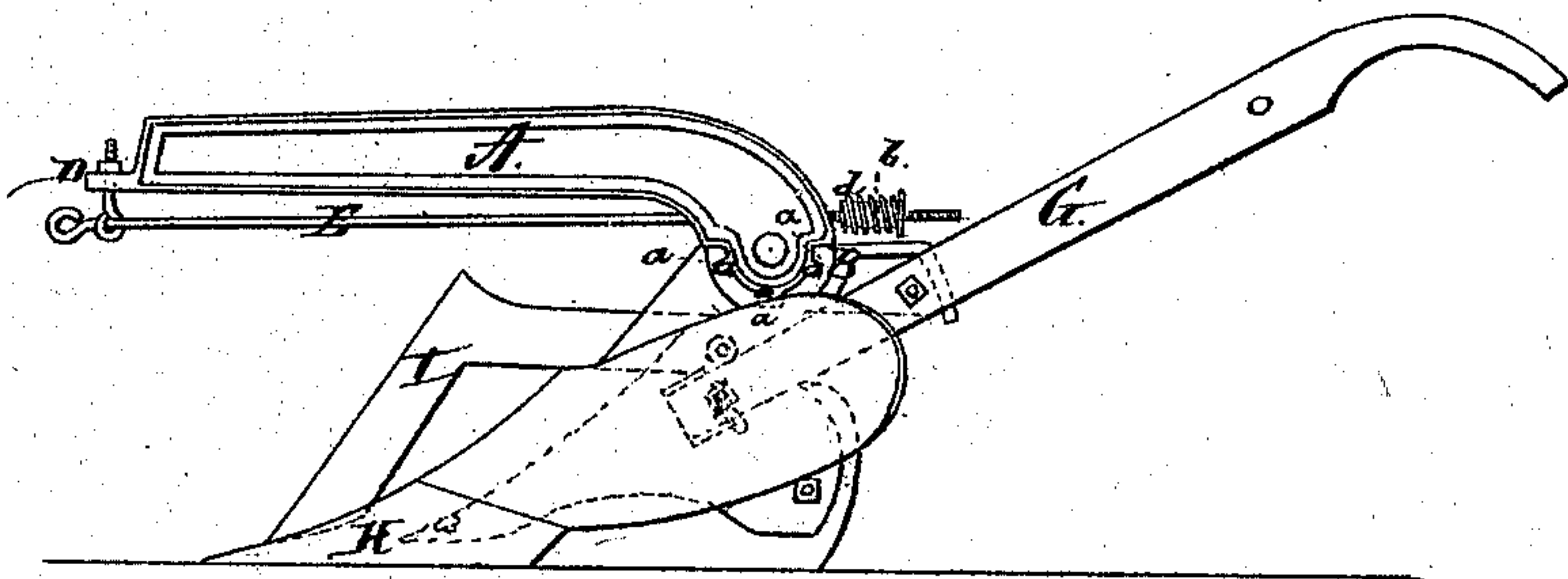


*J. J. Hall,  
Flour.*

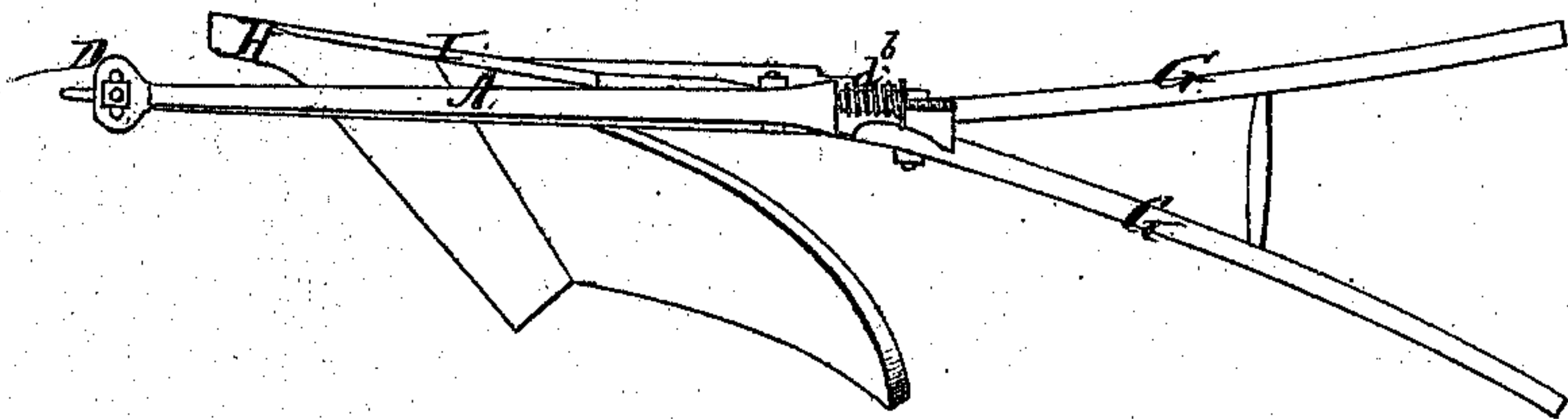
No. 105673.

*Patented July 26, 1870*

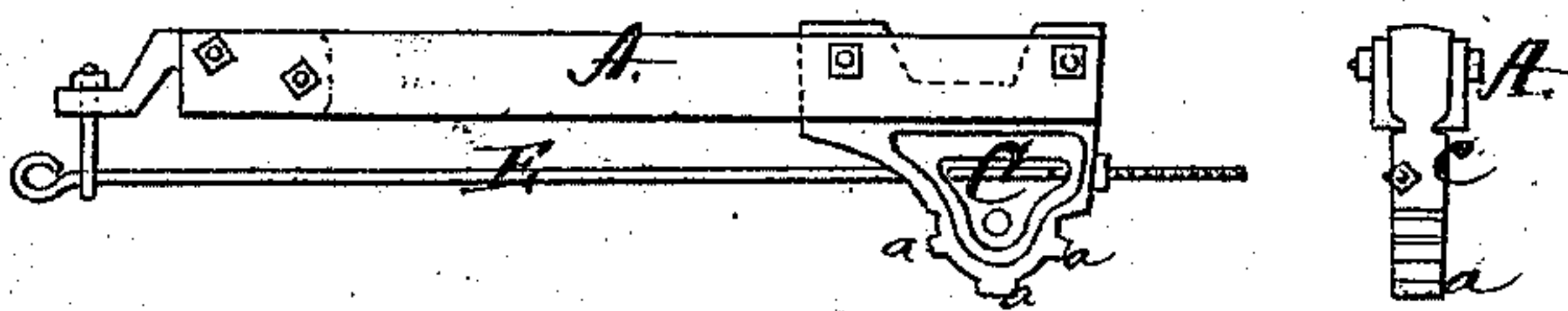
*Fig. 1.*



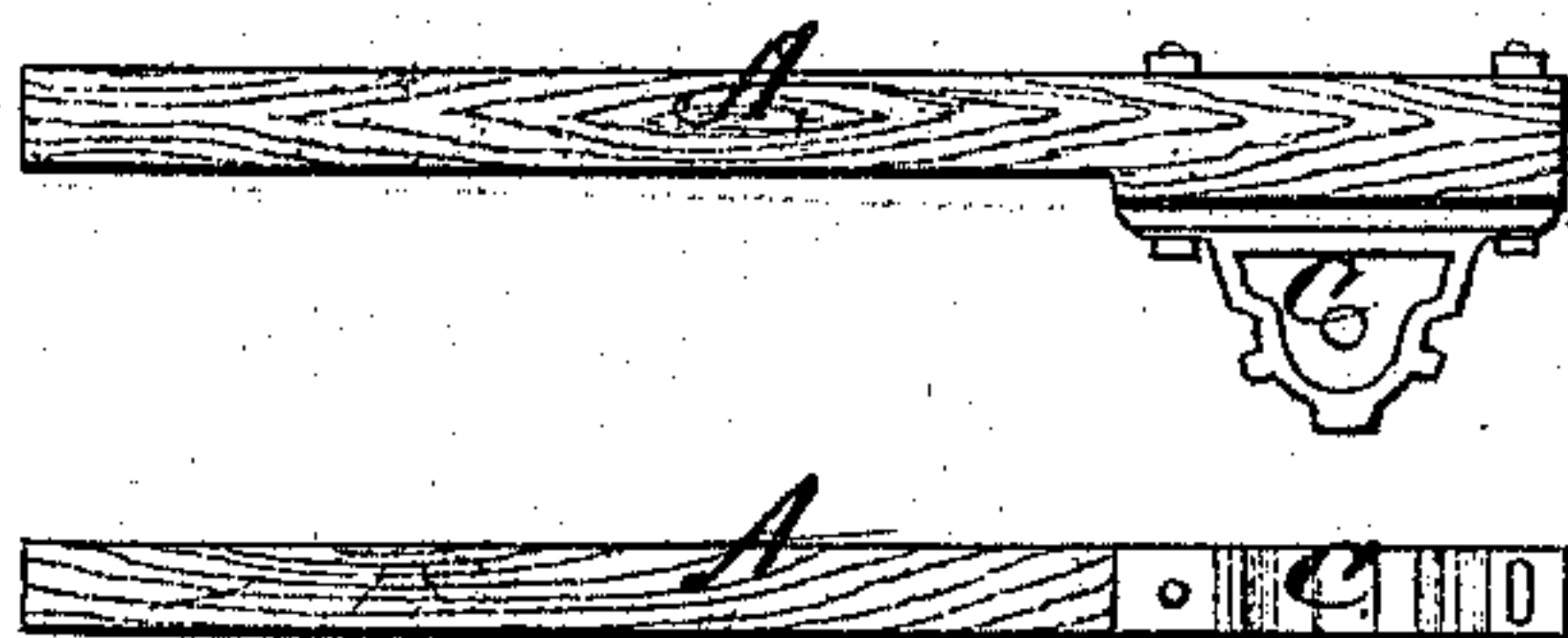
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



Witnesses:  
 C. L. Everb  
 A. R. Marr

*Inventor:*

J. W. Hall  
per  
Alexander Mason  
Atty.



# UNITED STATES PATENT OFFICE.

JOSEPH D. HALL, OF CANTON, OHIO, ASSIGNOR TO WILLIAM KINGSWORTH,  
OF SAME PLACE.

## IMPROVEMENT IN PLOWS.

Specification forming part of Letters Patent No. **105,673**, dated July 26, 1870.

*To all whom it may concern:*

Be it known that I, JOSEPH D. HALL, of Canton, in the county of Stark and in the State of Ohio, have invented certain new and useful Improvements in Plows; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of a "plow," as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawings, in which—

Figure 1 is a side elevation, and Fig. 2 a plan view, of my plows. Figs. 3 and 4 show different modes of constructing the plow-beam.

A represents the plow-beam, which is rounded at its rear end and provided with projections *a a*, said projections fitting snugly in notches or recesses on the side of the standard B, at its upper end, the beam and standard being then secured together by a bolt passing through them, the projections and notches acting as a lock to hold them firmly together. By this arrangement, if a beam breaks, it can be replaced without taking the plow to pieces or throwing it away.

The plow-beam A may be constructed of various materials—cast-iron, wrought-iron, or wood. The cast-iron beam is shown in Figs. 1 and 2. In Fig. 3 is represented the wrought-iron beam, formed of two bars made of angle-iron L shape, between the rear ends of which is inserted a metal block, C, provided with projections *a a*, the same as above described. The sides of the block C are grooved for the insertion of the flange or angle of the bars, and the whole firmly secured together by bolts. In Fig. 4 is represented the wooden plow-beam,

on the under side of which the block C is secured by bolts, the rear bolt passing through an elongated slot in the block, so as to give land when three horses are attached to the plow.

At the front end of the beam A is the clevis D, either attached to or forming part of the beam, for convenience in attaching the draft-rod E. This rod passes through the rear end of the plow-beam, and is at its rear end provided with a rubber spring, *b*, around which is a coil-spring, *d*. These two springs combined save breakage if the plow should meet any obstructions. The springs may be taken off and the rod fastened by a nut, as shown in Fig. 3, making it a stationary rod.

The handles G G are pivoted by a bolt through the rear end of the standard B, and their lower ends clamped together and fastened by a bolt passing through a slot in the standard. By changing the position of the bolt in said slot the handles may readily be adjusted to suit the person working the plow.

In the share H is a groove, in which the front end of the colter I rests, its rear end being secured in any suitable manner to the standard. This groove in the share obviates the necessity of any other fastening for the colter at the front end.

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

The arrangement, in a plow, of the beam A, with notches *a a*, standard B, with corresponding recesses, grooved share H, colter I, draft-rod E, with springs *d b*, and handles G G', pivoted to the standard B, and made adjustable, all substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 1st day of March, 1870.

JOSEPH D. HALL.

Witnesses:

CHAS. A. THURSTON,  
S. SLANKER.