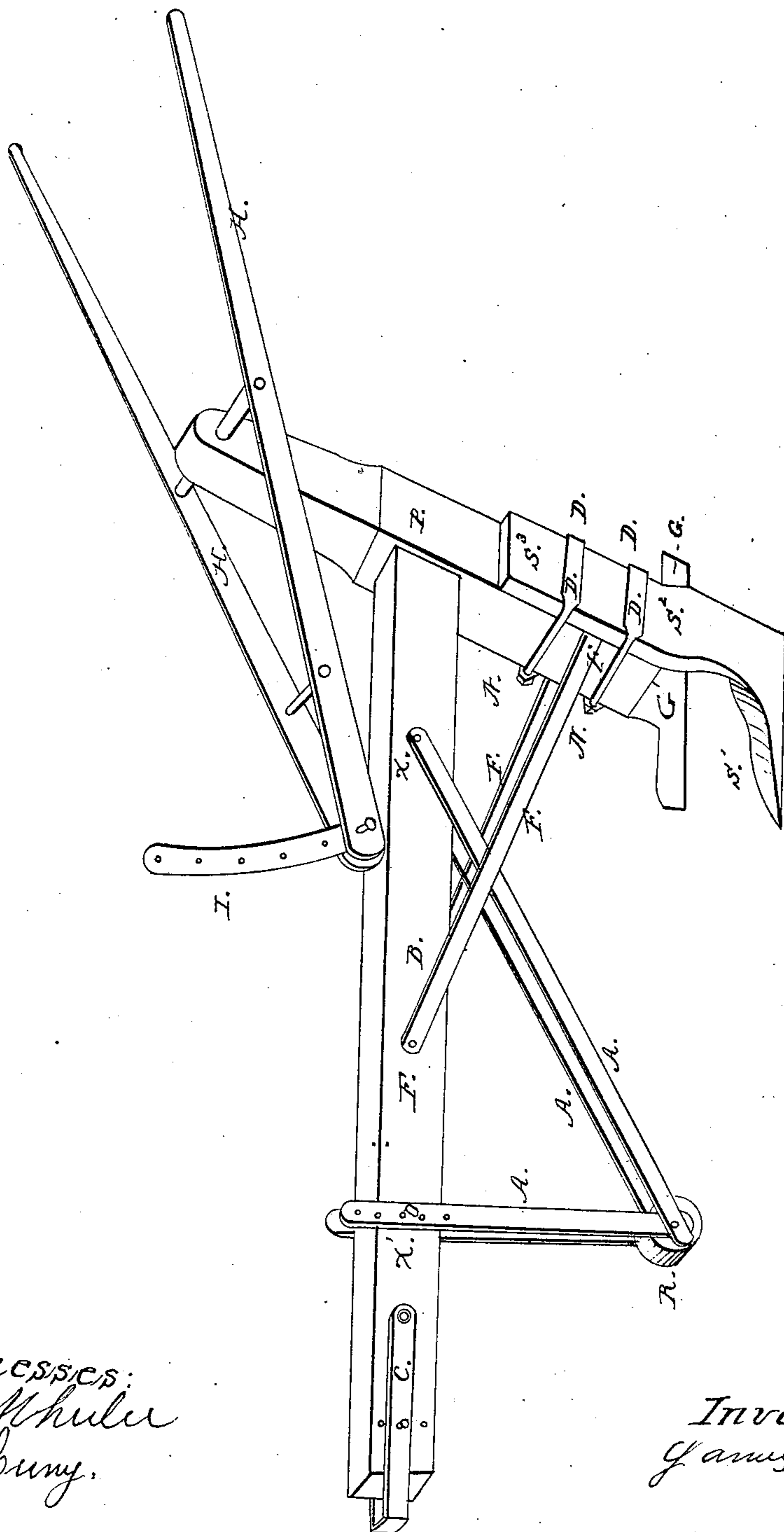


J. BROOKS.  
Ditching-Plow.

No. 29,357.

Patented July 31, 1860.



Witnesses:  
A. M. Miller  
W. J. Cunn.

Inventor:  
James Brooks.

# UNITED STATES PATENT OFFICE.

JAMES BROOKS, OF ROMULUS, NEW YORK.

## IMPROVEMENT IN DITCHING-PLOWS.

Specification forming part of Letters Patent No. **29,357**, dated July 31, 1860.

*To all whom it may concern:*

Be it known that I, JAMES BROOKS, of the town of Romulus, county of Seneca, and State of New York, have invented a new and useful Ditching-Plow; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification.

As a basis of my improvement or invention I adopt the old-fashioned frame of the shovel-plow, the beam, post, and handles shown at B, beam P, post, and H H handles, the last adjustable by means of segment I, which receives a pin that fastens the handles at a given height on this frame. I place an adjustable clevis, C, so as to change, when necessary, the point of traction. With the arms A A A, connected with the the beam at X X, I bolt at R a pulley, R. These arms and the pulley are adjustable. I also construct of iron or steel a peculiarly-shaped colter-share, as seen at S<sup>3</sup> S<sup>2</sup> S', S<sup>3</sup> being the upper end, the width corresponding with the thickness of the post.

S<sup>2</sup> represents a slight outward curve of the share, so as to bring the upper part clear of the ditch when in operation.

S' is a share, on the inner side of the colter, shaped like a common small plowshare. This plowshare I fasten to the post with clamps,

as seen at d d D D and secured by nuts N N. This colter-share is thus adjustable. Opposite this share, on the reverse of the post, I place a guide-bar, G G, shaped like an inverted T, or simply straight without the arms, made of boiler-iron, wood, or any other suitable material. This guide-bar I use simply as a guide bearing against the side of the progressing ditch, or by making it sharp I suffer it to cut as well as guide. This guide-bar is also slightly bent, so as to clear the ditch at its upper part.

To use this plow, I adjust the ground wheel or pulley at about four inches above the bottom of the share and pin it fast. The guide-bar I also place above ground at first. I then cut a furrow, and, coming back on the opposite side of the begun ditch, I cut again. Shovelers follow and throw out the dirt. I then change clevis so as to alter the point of traction and cut deeper and alternate as before, so going on until the ditch is finished.

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

The combination and arrangement of the guide-bar and colter-share, substantially as described and herein set forth.

JAMES BROOKS.

Witnesses:

A. WHEELER,  
W. F. CURRY.