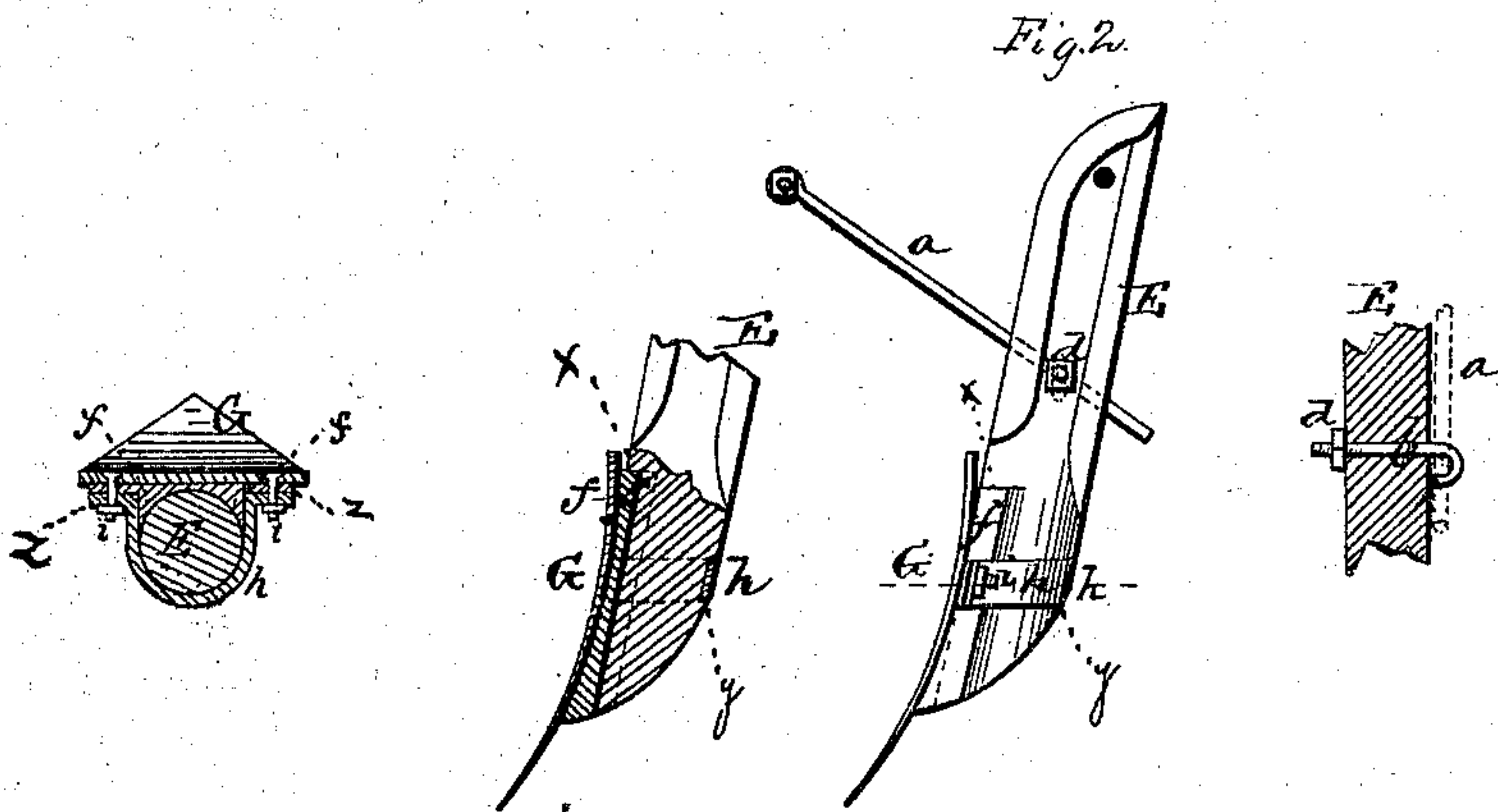
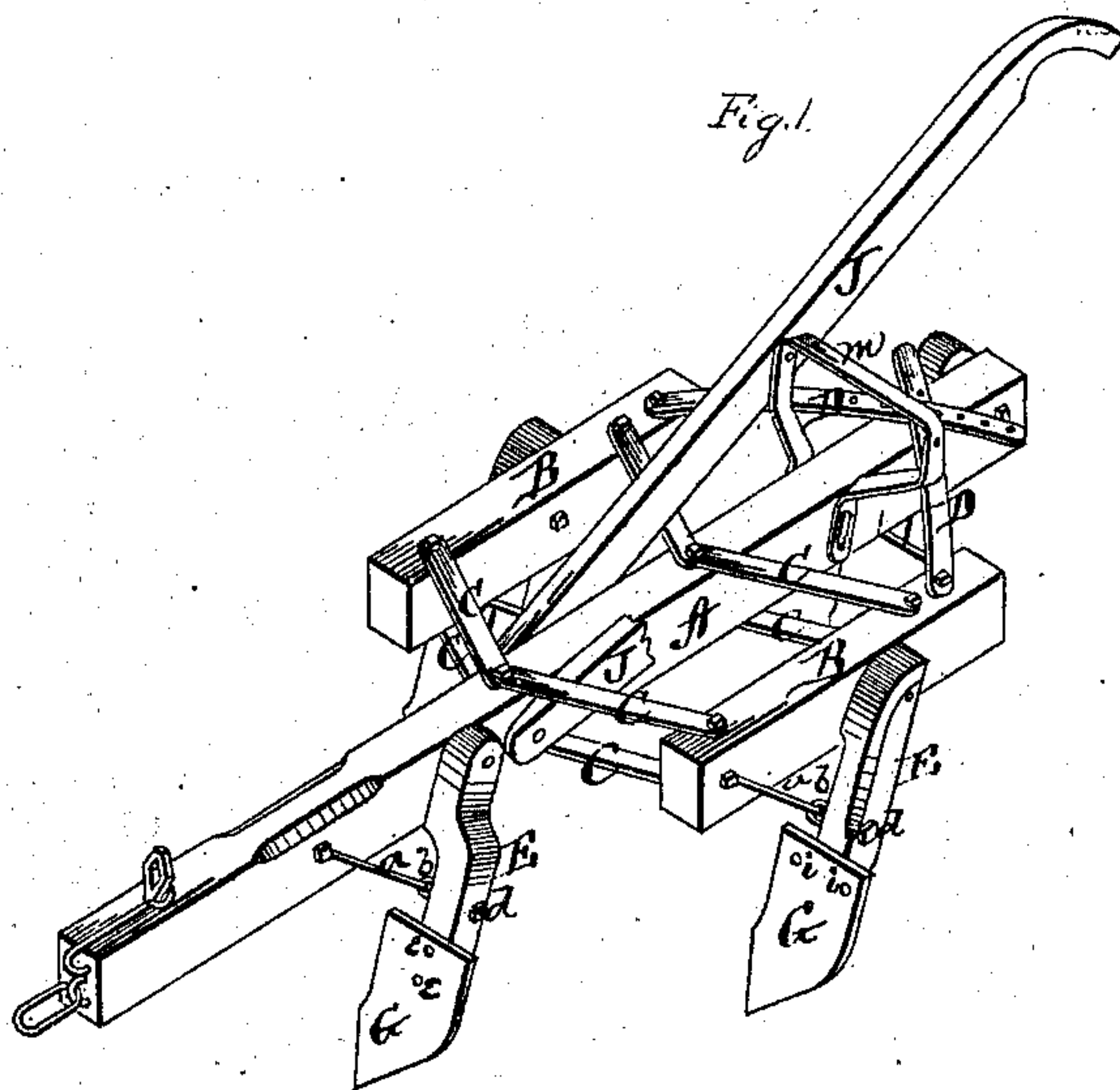


B. WITTER.

Cultivators.

No. 135,872.

Patented Feb. 11, 1873.



Witness:

Jas. B. Hutchinson  
 C. L. Evert.

Inventor.

Benjamin Witter  
 per. Alexander Mason  
 Attorneys.

# UNITED STATES PATENT OFFICE.

BENJAMIN WITTER, OF SHERRILL'S MOUNT, IOWA.

## IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. 135,872, dated February 11, 1873.

*To all whom it may concern:*

Be it known that I, BENJAMIN WITTER, of Sherrill's Mount, in the county of Dubuque and in the State of Iowa, have invented certain new and useful Improvements in Cultivators; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification.

The nature of my invention consists in the mode of attaching cultivator-teeth to the standard, 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 drawing, in which—

Figure 1 is a perspective view of a cultivator; and Fig. 2 is an enlarged detached view, showing the mode of attaching the teeth to the standards.

A represents the center beam of a cultivator with side beams B B connected by bars C C, and adjusted by means of the bars D D. E E represent the standards pivoted to their respective beams, and adjusted at any angle desired by rods *a*, eyebolts *b*, and nuts *d*, as shown. G G represent the shovels attached to the lower ends of the standards E E. Those attached to the standards on the center beam A are simply fastened by bolts *e e*, while those on the standards attached to the side beams are provided on their rear sides with a concave block, *f*, fitting the rounded lower end of

the standard, and fastened by means of a metal strap, *h*, which passes around the standard, and its ends bent outward and secured to the ears *z z* of the block *f* by bolts *i i*, which pass through the ends of the strap, the ears *z z*, and the shovel. It will be seen that the lower ends of each standard E are provided with a round tenon, and that the formation of this tenon leaves a shoulder, *x*, at the top thereof, so that when the concaved block *f* is fitted on the tenon the top of the block rests under the shoulder. The rear part of the tenon is provided with a groove, *y*, within which the band *h* lies, so that when the band, block, and shovel are attached to the standard the shoulder *x* and groove *y* will prevent any upward movement of the parts on the standard. By this means these shovels may be turned to either side, as desired, to throw the dirt out or in. J J are the handles, which are braced and adjusted at the desired height by means of a bent and slotted bar, *m*, attached to the center beam A.

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

The beam E with round tenon at its lower end, shoulder *x*, and groove *y*, in combination with the concaved block *f* with ears *z z*, the shovel G, strap *h*, and bolts *i i*, all substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 20th day of September, 1872.

BENJAMIN WITTER.

Witnesses:

PETER FREES,

FRANZ HILLEMUNKER.