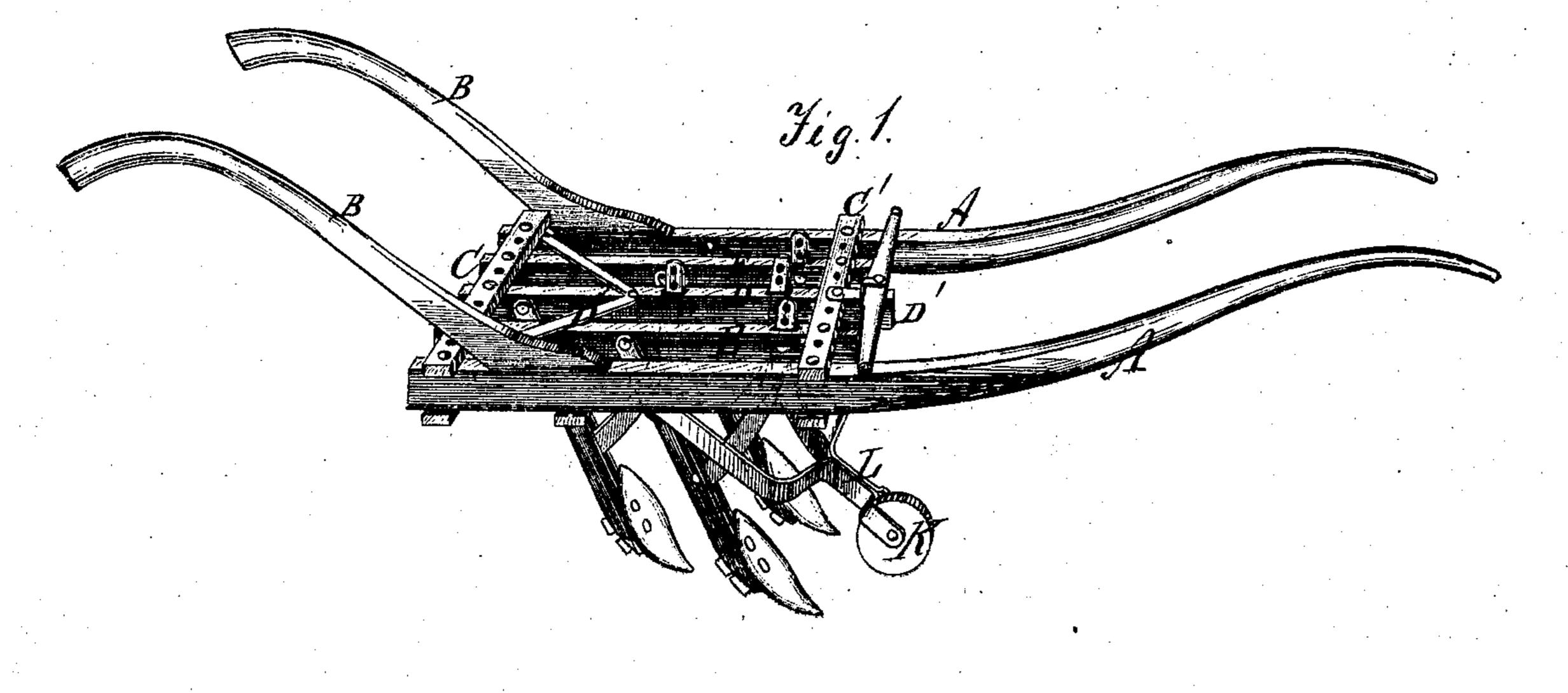
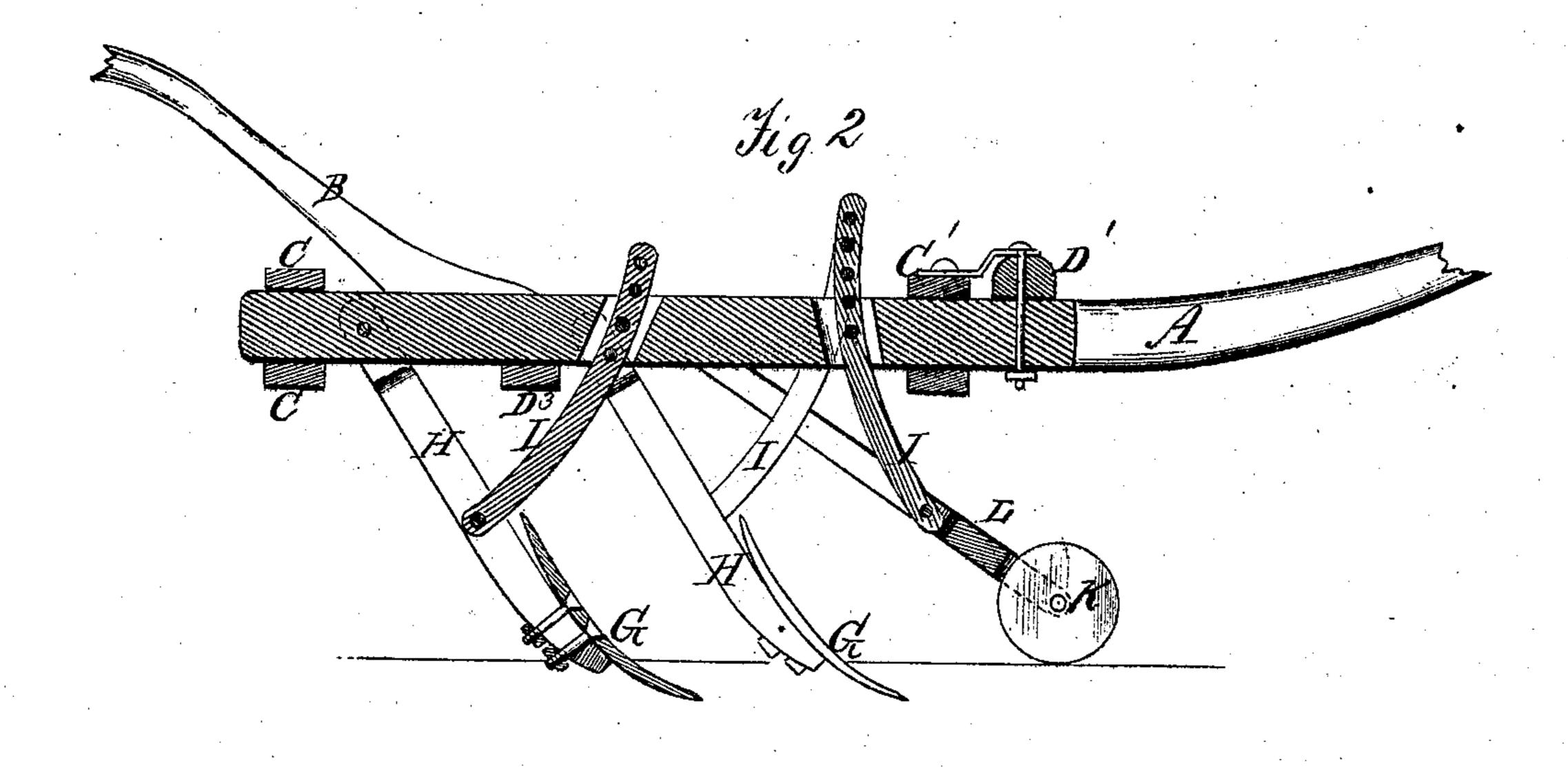
## T. E. C. BRINLY.

Improvement in Cultivators.

No. 116,147.

Patented June 20, 1871.





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## United States Patent Office.

THOMAS E. C. BRINLY, OF LOUISVILLE, KENTUCKY.

## IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. 116,147, dated June 20, 1871.

To all whom it may concern:

Be it known that I, Thomas E. C. Brinly, of Louisville, in the county of Jefferson and State of Kentucky, have invented a certain Improvement in Shaft-Cultivators; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the annexed drawing making part of this specification, in which—

Figure 1 is a perspective view of the improved cultivator. Fig. 2 is a vertical longi-

tudinal section.

The same letters of reference are employed in both figures in the designation of identical

parts.

This invention, having for its object the improvement of what are termed shaft-plows or cultivators, consists in a novel construction and arrangement of the parts, as will be generally described in the following description and specifically pointed out in the claim.

The frame of the cultivator is of rectangular form, and each side beam is extended forward a sufficient length to form one thill, A, of the shafts. The handles B are secured upon the rear end of such beams. The shovels, three in number, are hung to the longitudinal beams, arranged parallel to the side beams, and fastened between double cross-beams C C and C' C' at each end of the frame. The central one of these longitudinal beams, marked D, is permanently fixed in place, and to its forward end the single-tree D<sup>1</sup> is pivoted upon a stout bolt suitably stayed in the ordinary manner. The connection of this beam with the side beams of the frame is further strengthened by a triangular stay, D2, as clearly indicated in Fig. 1, and an additional cross-bar, D<sup>3</sup>. The beams E and F are adjustable laterally in the double cross-bar, the latter being provided with a series of bolt-holes for that purpose, as shown. The shovels G are suspended from their respective beams DEF by iron standards H, which are made of flat iron, doubled so as to form a slot from the beams down to the lower extremity of the standards. The slot is made of sufficient width on top to receive the beams, to which the standard is then pivoted by means of a bolt. The shovels, which may be double-pointed ones, as shown, are secured to the standards by two bolts, which pass through the shovels, and, project-

ing through the slot in the standard, are clamped thereto by nuts, as clearly indicated in Fig. 2. The shovels can thus be readily reversed or adjusted up or down on the standards. The shovels and standards are held in the proper position by stays or braces I, which are, at one end, pivoted in the slot of the standards, and, extending obliquely upward, pass through slots i in the beams, to which they are then secured by pins, by preference wooden pins, so that should the shovel come in contact with a root the pin may break and allow the standard to swing back and prevent its breakage. The upper ends of the braces have a number of pin-holes for the purpose of adjusting the shovels at any inclination desired. The depth to which the shovels shall enter the earth is regulated by a small wheel, K, running on top of the ground in front of them. This wheel is hung by its journals in a frame, L, which consists of two bars of iron coming in contact just above the fork, with which they embrace the wheel, and thence diverging to be pivoted, respectively, to the side beams of the frame. A brace, M, similar to the braces I, serves to hold the frame and wheel in place, and regulates its height with reference to the points of the shovels.

What I claim as my invention, and desire

to secure by Letters Patent, is-

The herein-described shaft-cultivator, composed of a rectangular frame, the elongated side beams of which form the shafts A A, and carry at the rear the handles B B, fixed central beam. D tied to the side beams by triangular stay D², laterally-adjustable beams E and F, slotted iron standards H, which are provided with adjustable shovels G and adjustably connected to their respective beams D E F by braces I, and the gauge-wheel K, hung in a frame, L, which is suspended from the side beams of the main frame, and raised or lowered by means of a brace, M, passing through the beam D, all the parts being constructed and arranged substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

T. E. C. BRINLY.

Witnesses:

JOHN WOLPERT, G. W. FALLIS.