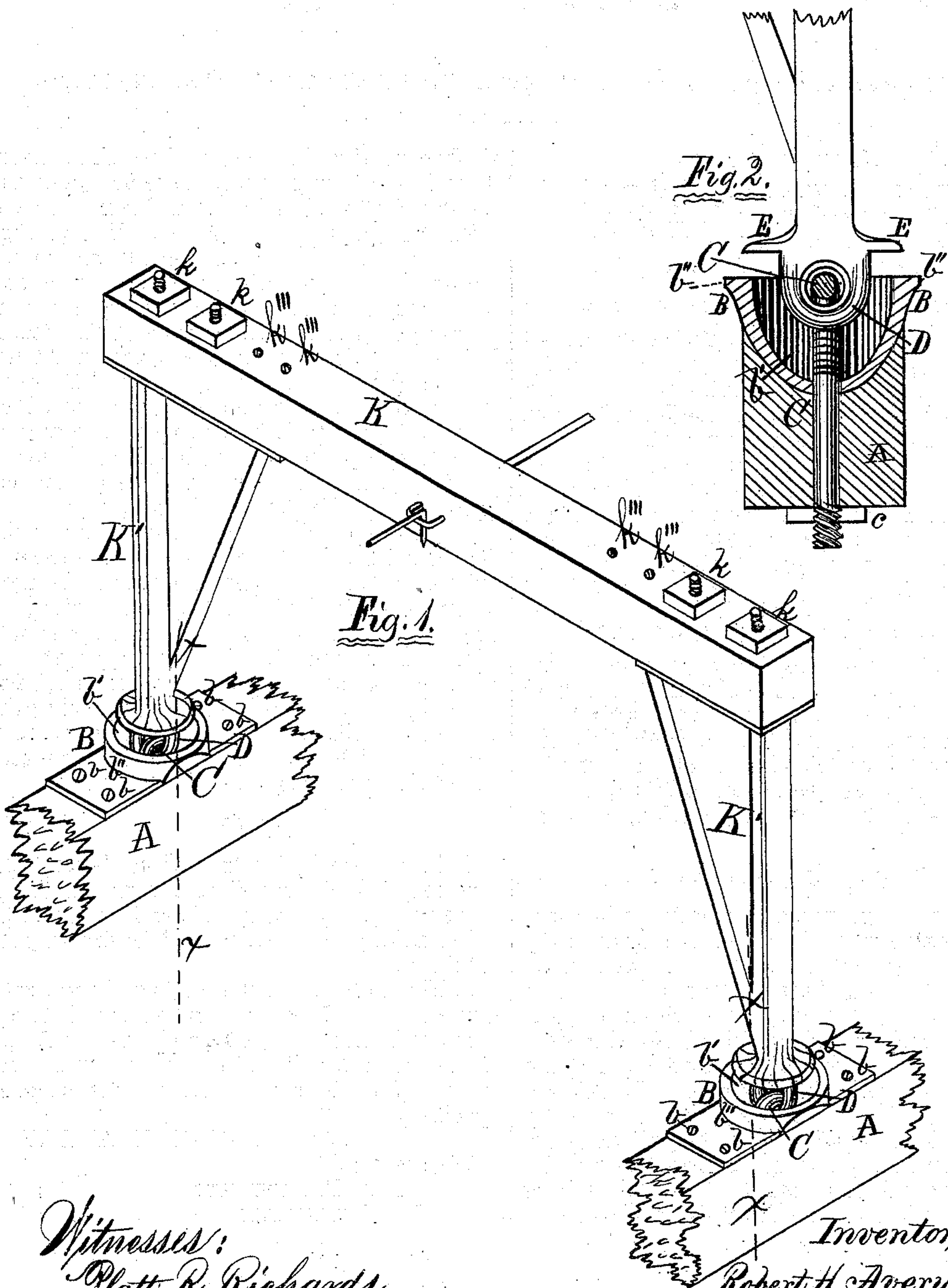


ROBERT H. AVERY.
Improvement in Cultivators.

No. 127,293.

Patented May 28, 1872.



Witnesses:
Blatt R Richards.
J. J. Trumcliff.

Inventor,
Robert H. Avery,
by W. B. Richards,
his Atty.

UNITED STATES PATENT OFFICE.

ROBERT H. AVERY, OF GALESBURG, ILLINOIS.

IMPROVEMENT IN CULTIVATORS.

Specification forming part of Letters Patent No. 127,293, dated May 28, 1872; antedated May 17, 1872.

SPECIFICATION.

I, ROBERT H. AVERY, of Galesburg, in the county of Knox and State of Illinois, have invented certain Improvements in Cultivators, of which the following is a specification:

Nature and Objects of the Invention.

The nature of my invention relates to an improved stop-joint or coupling, more especially adapted for use with my cultivator, for which I obtained Letters Patent of the United States December 27, 1870; and the invention consists in a simple joint for attaching the rear elevated coupling K to the beams A A, which shall allow of perfect freedom of movement to the extent desired, and shall act as a stop to said movements at the time desired, all as hereinafter fully described.

Description of the Accompanying Drawing.

Figure 1 is a perspective view of my invention, with the elevated coupling K of my former patent, and a detached view of a part of the plow-beams A A; scale three inches to one foot. Fig. 2 is a vertical sectional view of that part of Fig. 1 crossed by the line *x x*, and on the plane of said line; scale six inches to one foot.

General Description.

Letters A A represent the beams, which are connected the same in front and rear as in my patent of December 27, 1870. K represents the elevated bar, shown by the same letter in said patent. K' K' are the brackets supporting the bar K, and adjustably attached thereto by bolts and nuts *k k k* and holes *k''' k''' k'''*, the same as in my said former patent. B is a plate secured to the upper side of the beam A by screws *b b b b*, and having a semi-spherical recess, *b'*, in its upper side. C is an eye-bolt, the eye part of which rests in the recess *b'*, and the shank of which passes down through a hole in

the bottom of said recess and through the beam A, and is held by a nut, *c*. D is an eye on the lower end of the bracket K', and is interlocked with the eye of the eye-bolt C. E is a flange on the lower end of the bracket K, and at the upper side of the eye D, flat on its lower face, and circular at its exterior surface, as shown. The upper circumferential edge of the recess *b'* is surrounded by a ring, *b''*, with a flat upper face, as shown. The eyes C and D are so interlocked and so arranged in the recess *b'* as to hold the flange E a little above the ring *b''* when the plow beams A are horizontal in every direction, and the brackets K perpendicular thereto, as shown in both drawings.

It will be plainly seen, on inspection of the drawing, that if either plow-beam A is thrown over slightly to the right or left, or is elevated or depressed in front or rear, the outer edge of the flange E will strike against the upper side of the ring *b''* and stop the further progress of the irregular motion. In this manner the improved joint described will aid in keeping the plows from tilting over too far in some positions, in which my patent aforesaid, as constructed, would not do.

Claims.

1. The plates B, constructed as shown, with a recess, *b'*, and ring *b''*, and arranged to operate with flange E, eye D, and eye-bolt C, substantially as described, and for the purpose set forth.

2. The plate B, constructed as shown, with a recess, *b'*, and ring *b''*, and arranged to operate with flange E, eye D, and eye-bolt C, and the beams A A and elevated coupling K, substantially as described, and for the purpose specified.

ROBERT H. AVERY.

Witnesses:

PLATT R. RICHARDS,
J. J. TUNNICLIFF.