J. DAWSON.

Improvement in Harrows.

No. 128,601. Patented July 2, 1872.

Fig. 1.

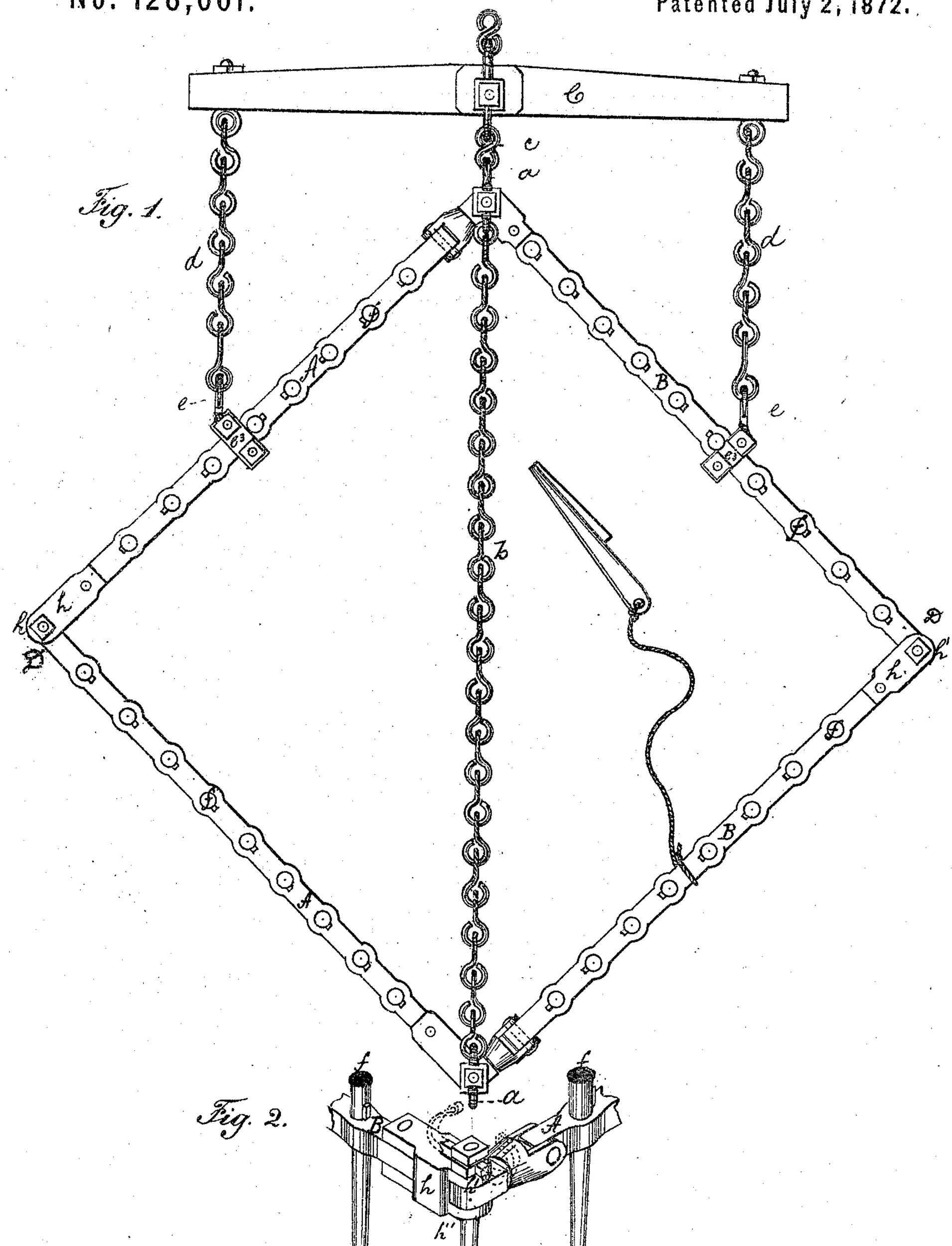

Fig. 2.

WITNESSES:

J. E. Werren.

A. Bentz

INVENTOR:

James Dawson, by

Geo. E. Brown,

Atty.

UNITED STATES PATENT OFFICE.

JAMES DAWSON, OF GREENWOOD, ILLINOIS.

IMPROVEMENT IN HARROWS.

Specification forming part of Letters Patent No. 128,601, dated July 2, 1872.

Specification describing a certain Improvement in Harrows, invented by JAMES DAWSON, of Greenwood, in the county of McHenry and State of Illinois.

This invention is an improvement on that for which Letters Patent were granted me bearing date October 25, 1870, said improvement relating to the harrow and also to the joints of the frame.

In the said patent it is set forth that the beams composing the frame of the harrow are jointed together at those extremities which form the side corners of the harrow, the end of one beam entering the space between forks formed on the extremity of the other, and in one piece with it.

The present invention relates to the construction of the said forks in separate pieces, which are riveted to the end of the beam instead of being formed solid with it.

Figure 1 is a plan view, and Fig. 2 is a perspective of one of the corners D.

A B are the beams composing the frame of the harrow, which, together with the swivels and the hooks *a* and chain *b*, are fully described in my above-mentioned patent. C is the evener aforesaid, the same being connected at its middle by a link, *c*, to the front hook *a*, and also at its ends by chains *d* to hooks *e*, secured to the middles of the front set of beams A B. This arrangement prevents the harrow from sluing to the extent to which it is liable when the horses are connected only with the hook *a*. The shanks of the hooks *e* are placed at right angles to the beams A B, and are secured beneath said beams by means of bolts passing each side of the beam and through plates e^3, placed across the upper sides of the beams; the hooks *e* themselves are bent at such an angle with their shanks as to be parallel with the line of draft. This construction renders it easier to tilt either side of the harrow than as though the hooks *e* stood at right angles with the beams. The teeth *f* are keyed in place, the key-seats being punched at the same time as the holes for the teeth. The latter are upset at their heads so as not to drop through the holes if the keys become displaced. At the side corners D of the harrow boxes *h* inclose the ends of one of the beams A and one of the beams B, and are riveted to these beams; said boxes having at their outer ends forks *h'*, between which are jointed the extremities of the other beams A B.

The advantage of this construction is that, should the forks *h'* break, the box *h*, in which the fracture occurs, can be removed and another substituted with little loss of time compared with the delay caused by repairing a broken fork that is made in one piece with the beam, as in my original machine.

I claim as my invention—

The combination, with the beams A B, of the forked boxes *h*, as described.

JAMES DAWSON.

Witnesses:

WILLIAM WILSON,

SAMUEL WILSON.