(No Model.)

## F. E. DAVIS.

DRAFT EQUALIZER.

No. 377,018.

Patented Jan. 31, 1888.

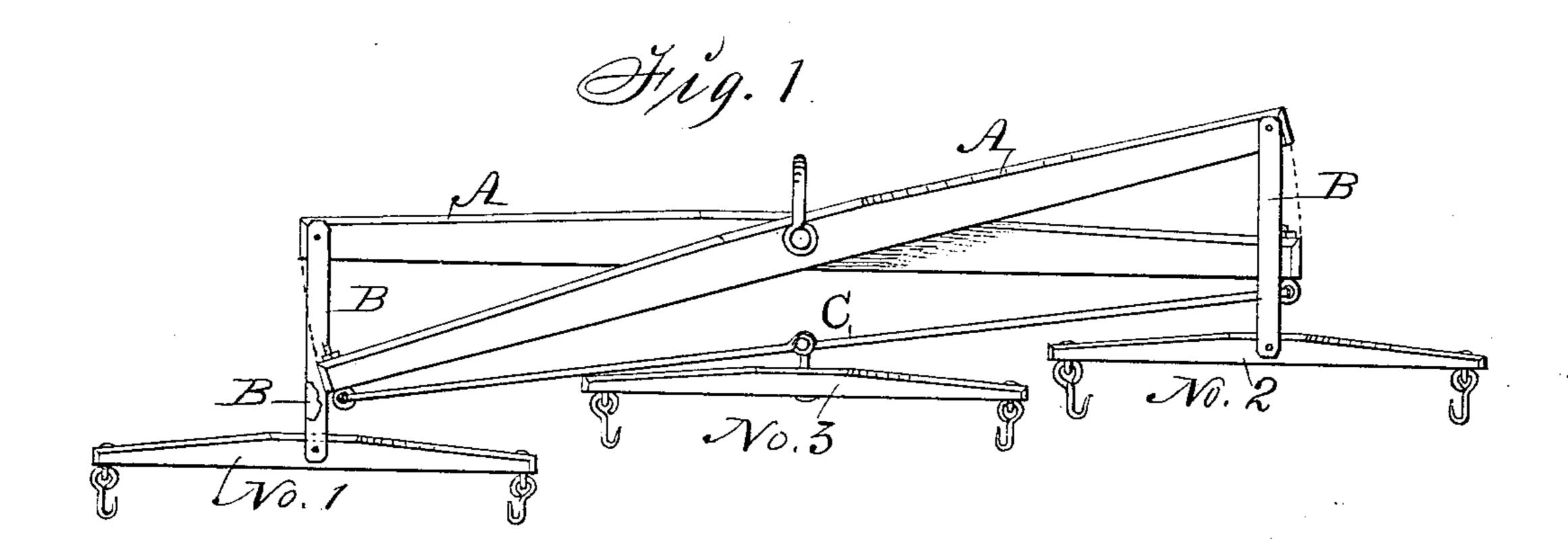
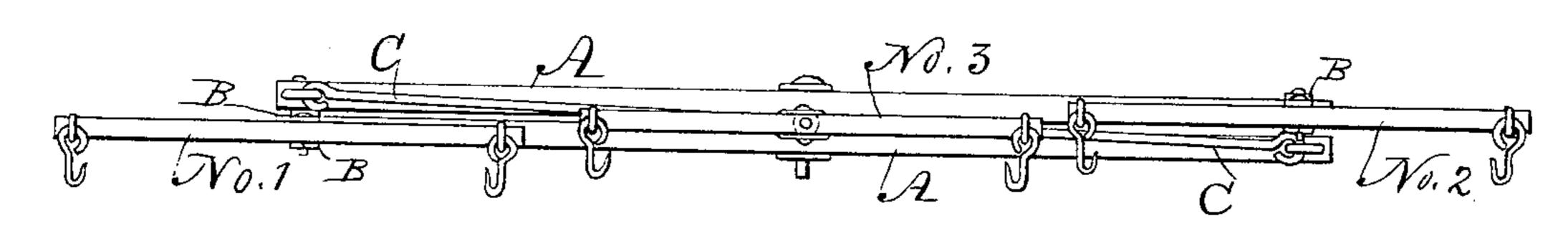


Fig. 2



Mitnesses: M. H. Pease,

M. P. Smith.

Inventor: Frederick E. Davis,

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## United States Patent Office.

FREDERICK E. DAVIS, OF GLADBROOK, IOWA.

## DRAFT-EQUALIZER.

SPECIFICATION forming part of Letters Patent Nc. 377,018, dated January 31, 1888.

Application filed August 30, 1887. Serial No. 248,303. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK E. DAVIS, a citizen of the United States of America, and a resident of Gladbrook, in the county of Tama 5 and State of Iowa, have invented a Duplex Doubletree and Three-Horse Equalizer, of which the following is a specification.

My invention consists in the combination of two bars of uniform length, three singletrees, to two rigid links, two equalizing-rods, and a clevis, as hereinafter set forth, pointed out in my claims, and illustrated in the accompanying drawings, in which—

Figure 1 is a top view, and Fig. 2 a front

15 face view, of my complete device.

A A are rigid bars or doubletrees of equal dimensions, pivoted together at their centers by means of a clevis and pin in such a manner that they will be flat upon the top of each 20 other and free to vibrate horizontally in opposite directions at the same time.

Nos. 1 and 2 are singletrees connected with the opposite ends of the doubletrees A by means of rigid links B in such a manner that 25 the singletrees and also the doubletrees can vibrate horizontally and independently relative to each other. The links may be made of two uniform metal bars, as shown, or complete in one piece, and pivoted to the singletrees 30 and doubletrees by means of common bolts, or in any suitable way.

No. 3 is a singletree pivoted at its center to I

a jointed rod, C, and the outer ends of the rod are flexibly connected with the ends of the duplex doubletree in such a manner that one end 35 of the rod will be fast to the top bar A and the other end to the under bar A, the complete device being a lazy-tong lever that will keep the draft of the horses hitched to the singletrees equalized.

I claim as my invention—

1. A three-horse equalizer composed of two straight overlapping bars pivoted together at their centers by means of a clevis, a jointed rod flexibly connected with one end of each 45 of said straight bars, a singletree connected with one end of each of said bars by means of short bars or rigid links, and a singletree connected with the center of the jointed rod, to operate in the manner set forth.

2. The two straight bars A, connected at their centers by means of a clevis, singletrees Nos. 1 and 2, connected with the ends of the bars A by means of links B, a jointed rod, C, connected with the ends of the bars A, and a 55 singletree, No. 3, connected with the center of the jointed rod, arranged and combined substantially as shown and described, for the purposes stated.

FREDERICK E. DAVIS.

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Witnesses:

J. M. BOEHMLER, James D. Ellwood.