

No. 705,189.

Patented July 22, 1902.

O. & F. ZOELLER.
FOUR HORSE EQUALIZER.

(Application filed Jan. 21, 1902.)

(No Model.)

Fig 1

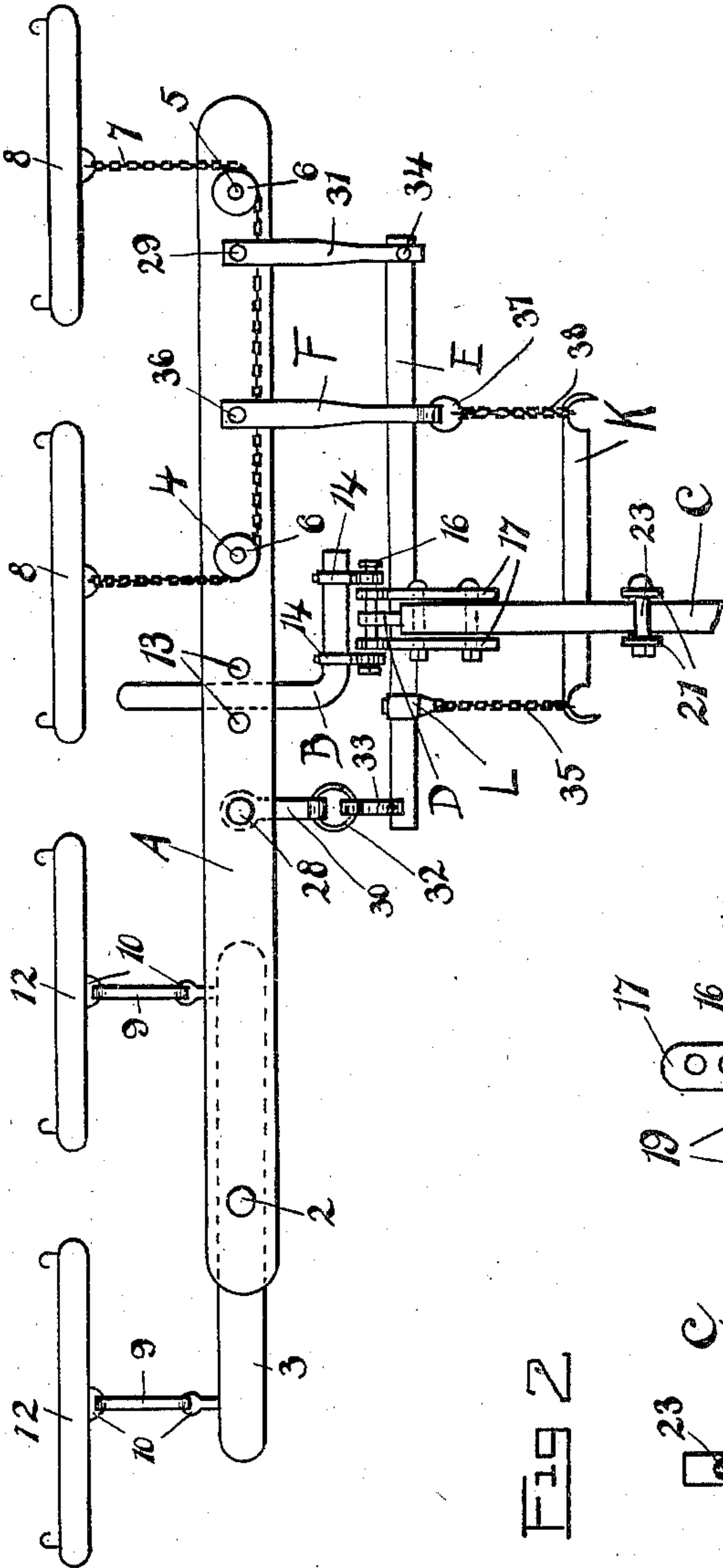
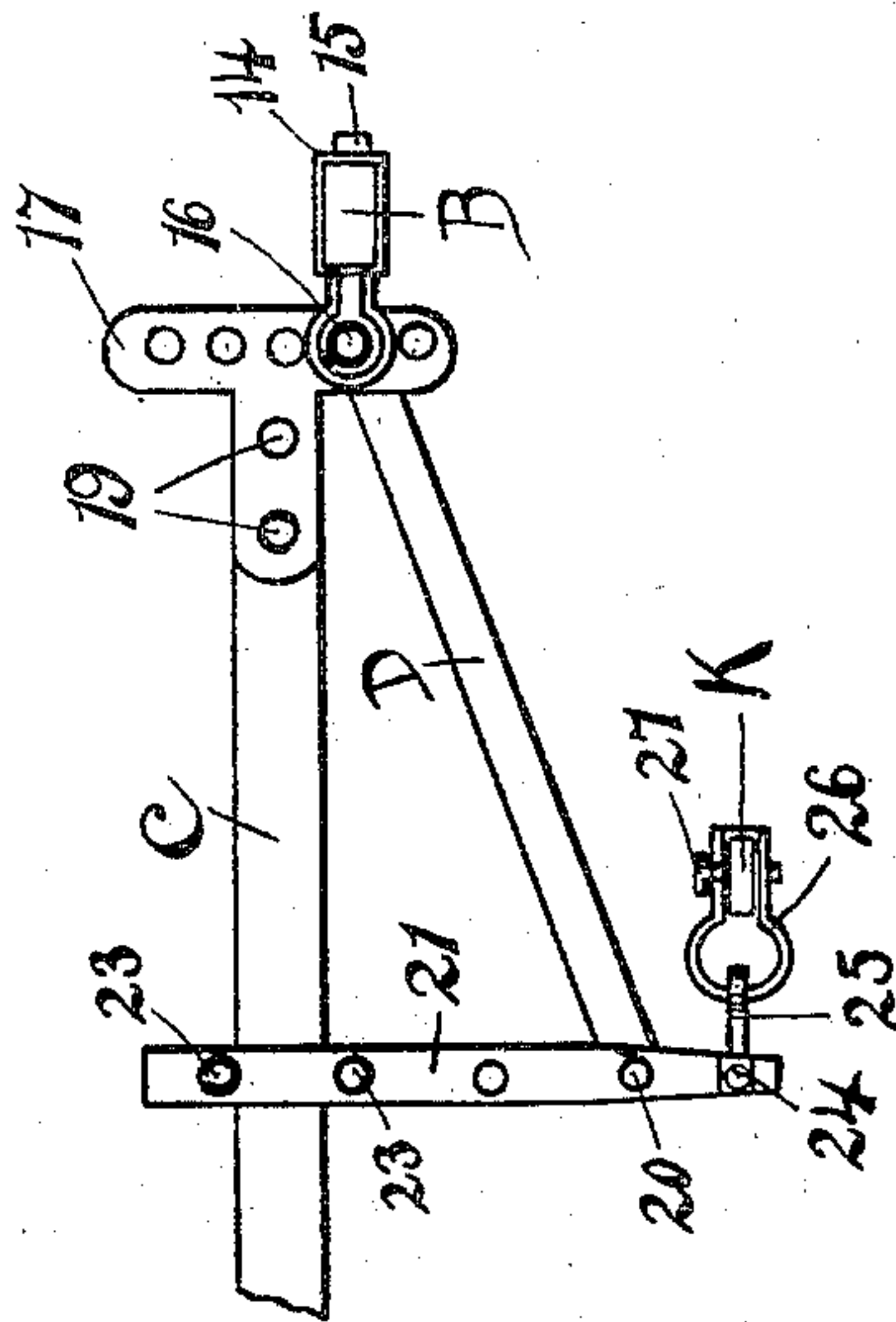


Fig 2



WITNESSES:

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OSWALD ZOELLER AND FREDERICK ZOELLER, OF OAKLAND, IOWA.

FOUR-HORSE EQUALIZER.

SPECIFICATION forming part of Letters Patent No. 705,189, dated July 22, 1902.

Application filed January 21, 1902. Serial No. 90,646. (No model.)

To all whom it may concern:

Be it known that we, OSWALD ZOELLER and FREDERICK ZOELLER, residing at Oakland, in the county of Pottawattamie and State of Iowa, have invented certain new and useful Improvements in Four-Horse Equalizers; and we do hereby declare that the following is a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to a new and novel improvement in four-horse equalizers.

The object of our invention is to provide a four-horse equalizer so constructed as to prevent a side draft, and our invention embodies certain other features described more fully hereinafter.

In the accompanying drawings we have shown in Figure 1 a top view of a four-horse equalizer embodying our invention, while Fig. 2 shows a side view of the method of attaching the same.

Our invention embodies, essentially, a main tree A, provided with the pin 2 to support the doubletree 3 and the pins 4 and 5, which support the rollers 6 6, over which rollers passes the chain 7, secured to the singletrees 8 8.

Secured to the doubletree 3 are the singletrees 12 12, which, by means of the eyelets 10 and link 9, are secured to the doubletree 3, as is shown in Fig. 1.

At a suitable point the main tree A is provided with the two pins 13, between which works one end of the angle-bar B. To one end of the angle-iron B are secured the ears 14 14, which are fastened by means of the set-screw 15, and through these ears 14 extends a bolt 16, by means of which this angle-iron is secured to the clevis 17, which in turn is secured to the plow-beam C. Extending from between the clevis 17 and secured to the pin 16 is a push-bar D, which in turn is secured, by means of a pin 20, to the two bars 21, which, by means of a bolt 23, are clamped to the plow-beam C. Secured to the lower end of these bars 21 is the bolt 24, which in turn holds the link 25, which link is secured to a clevis 26, provided with a pin 27, to secure this link to a lever K, as shown. Secured to the pins are the clevis 30 and the strap 31. To the clevis 30

is secured a ring 32, and from this extends a clevis 33, which in turn is secured to the intermediate lever E, which lever is provided with a pin 34, so that said lever E is secured to the strap 31, as shown. Slidably held upon this lever E is a collar L, from which extends a chain 35, which is secured to the hook end of the lever K, while a clevis F, secured, by means of the pin 36, to the main tree A, is provided with a ring 37 and chain 38, also secured in turn to the lever K.

The vertical bars 21 are adjustably secured to the plow-beams C by means of the bolts 23, the clevis-iron 17 being secured to the plow-beams by means of suitable bolts 19.

The device is simple and the parts are readily accessible, and in the combination it is found that the so-called "side draft" is overcome, and

Having thus described our said invention, what we claim as new, and desire to secure by United States Letters Patent, is—

A four-horse equalizer comprising the combination of the following instrumentalities to wit, a main bar, a doubletree secured to said tree, singletrees secured to said doubletree, pulleys secured to said main tree, a chain passing over said pulleys, singletrees secured to the ends of said chain, an intermediate lever, links securing said intermediate lever to said main tree, guiding-pins secured to said main tree, a slidable collar upon said intermediate lever, a chain extending to said intermediate lever, a lever, said chain being secured to said lever, a chain connection extending from the remaining end of said lever and secured to said main tree, a vertical clamping-bar adapted to be secured to a plow-beam, said lever being secured to said vertical bar, an angle-iron one end passing between said guiding-pins, the remaining end passing through suitable holders adapted to be secured to the clevis of a suitable plow-beam and a push-bar extending from said vertical bar and secured to said holders securing said angle-iron, all arranged substantially as and for the purpose set forth.

Signed in the presence of two witnesses.

OSWALD ZOELLER.

FREDERICK ZOELLER.

Witnesses:

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