

(No Model.)

O. & F. ZOELLER.
DRAFT EQUALIZER.

No. 541,198.

Patented June 18, 1895.

Fig 1

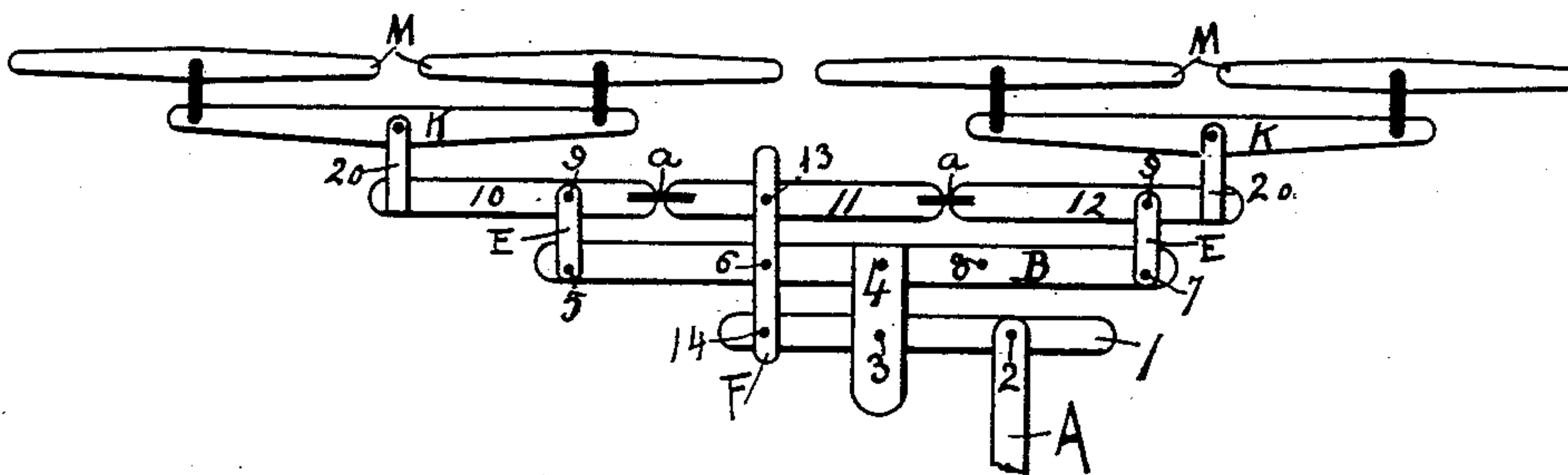


Fig 2

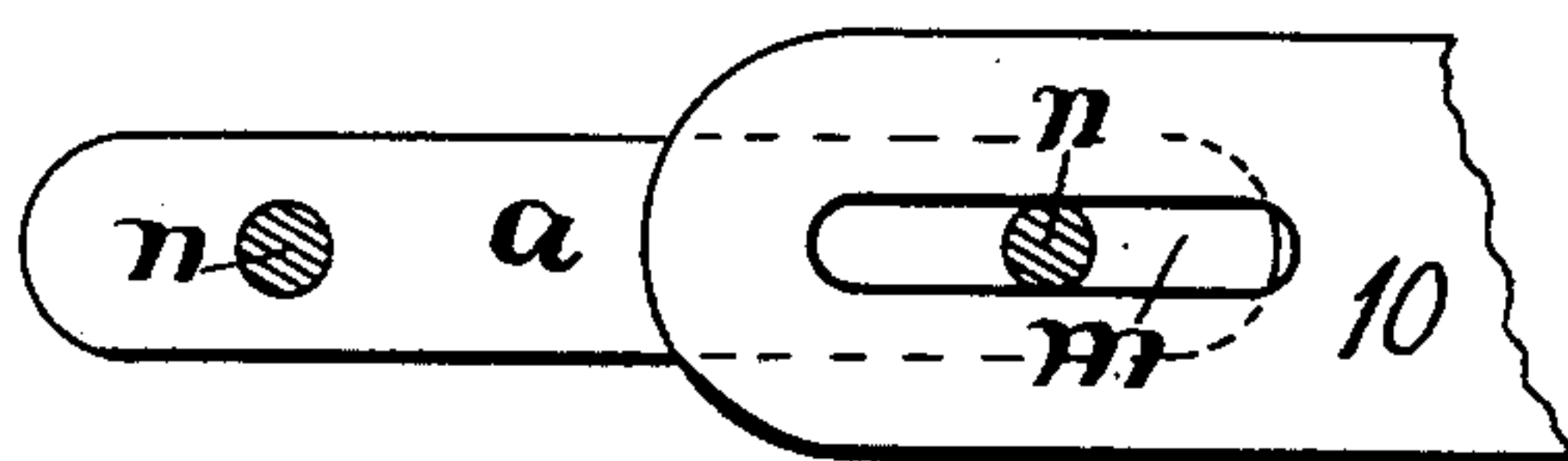
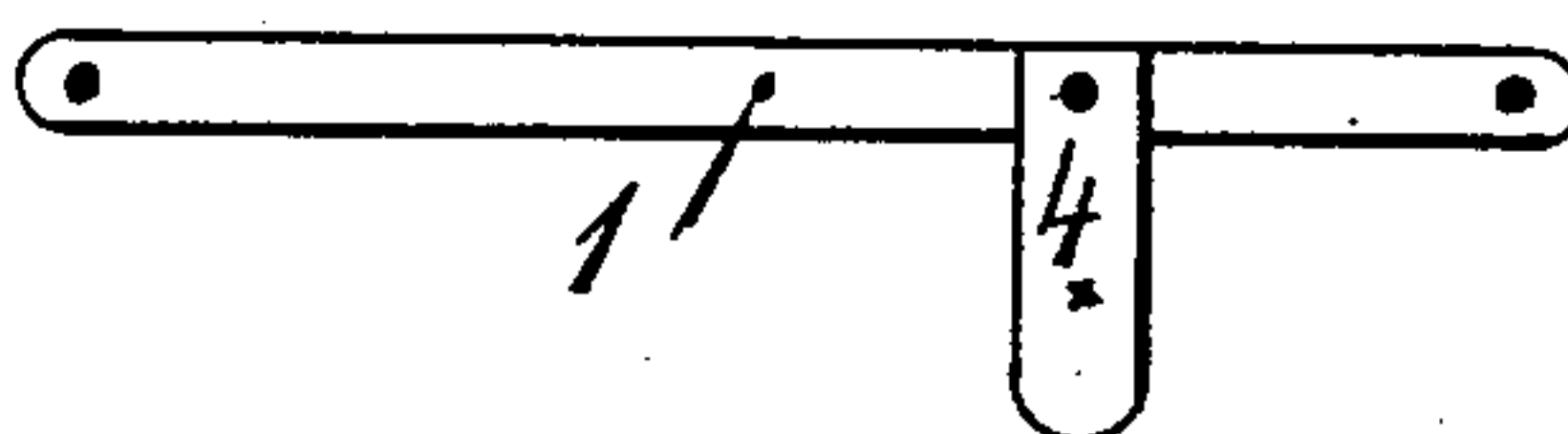


Fig 3

WITNESSES:

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OSWALD ZOELLER AND FRED ZOELLER, OF OAKLAND, IOWA.

DRAFT-EQUALIZER.

SPECIFICATION forming part of Letters Patent No. 541,198, dated June 18, 1895.

Application filed March 26, 1894. Serial No. 505,169. (No model.)

To all whom it may concern:

Be it known that we, OSWALD ZOELLER and FRED ZOELLER, of Oakland, in the county of Pottawattamie and State of Iowa, have invented certain useful Improvements in Interchangeable Draft-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 has relation to a new and novel interchangeable draft equalizer, the object being to provide a draft equalizer that may be used for either three or four horses.

In the accompanying drawings, Figure 1 shows our equalizer arranged as a four-horse equalizer. Fig. 2 shows a detail of the equalizer with the four-horse equalizer as removed, while Fig. 3 shows a detail of a broken end view of the connected bars as used in our device.

A, represents the tree of any suitable plow to which our four horse equalizer is secured. This equalizer comprises, first, the bar, 1, of a suitable size and material, which is provided with an opening, through which the clevis pin, 2, of the plow is adapted to pass. A suitable distance from the pin opening, we have provided a fixed transverse bar, B. The bar, B, is provided with four openings, adapted to accommodate the pins, 5, 6, and 7, and further being provided with the opening, 8.

Extending from the bar, B, are preferably two metallic strap bars, E, E, secured by means of the pins, 5 and 7, and being attached by means of the pins, 9, to the lever bars, 10, 11 and 12. These bars are of an equal length and are removably secured by means of the metallic straps, a, a.

To the central bar, 11, is secured the bar, F, which is further secured by means of the pins 13, 6 and 14, to the bars, 11, B and 1, respectively the bar F being permitted pivotal motion. To the bars, 10 and 12, are finally secured the double-trees, K, by means of the connections, 20, 20, and the double-trees in turn are provided with the suitable single-trees, M, M.

When all the instrumentalities have been properly arranged the operation of our device would be as follows: The horses drawing the plow, A, would first strain the lever bars 10, 11, 12, but these bars being pivotally

secured to the arms, E, E, would readily accommodate themselves into their forced position, and from these bars the strain would be carried to the main bar, 1, by means of the bars B, and the connecting bars, F and 4. The bar 4 and plow, A, are pivotally connected to the bars B and 1. To insure an easy movement of the lever bars, 10, 11, 12, we have provided these bars, at their connected ends, with the slot, m, as shown in Fig. 3, and the strap bars, a, with the transverse pins, n, so that as these bars move the pins, n, n, slide within the slots, m, and so permit an easy working of these lever bars, 10, 11 and 12.

When the device is to be used as a three horse equalizer, we simply shift the bar, 4, toward one end, one third the distance of the main bar, 1, then secure the double-trees and single-trees to the ends of this bar B. When the equalizer is to be used with three horses it is simply necessary to attach a double tree provided with two single trees to the longer stem of the bar, as shown in Fig. 2, while one single tree is secured to the shorter end of this bar. This would permit three horses to draw the device, though, of course, the balancing and nice equalization of the four horse arrangement would be lost, as the similar bars, marked 10, 11 and 12, are eliminated.

The device is noticeable because of its extreme simplicity, and,

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

In an interchangeable four horse draft equalizer, the combination with the bar, 1, of the bar, B, provided with the extension, F, secured to said bar, 1, the connecting straps, E, E, secured to the lever bars, 10 and 12; the intermediate lever bar, 11, secured to the bars, 1 and B, by means of the bar, F, said lever bars, 10, 11 and 12, being provided with the connecting straps, a, a, provided with the transverse pins, n, n, adapted to work within the suitable slots, m, m; and the connections, 20, 20, adapted to secure the double-trees, K, K, all being arranged to operate substantially as and for the purpose set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

OSWALD ZOELLER.
FRED ZOELLER.

Witnesses:

A. COLEMAN,
H. H. SPATES.