

J. P. BECKENBAUGH.

Draft-Equalizers.

No. 144,052.

Patented Oct. 28, 1873.

Fig. 1.

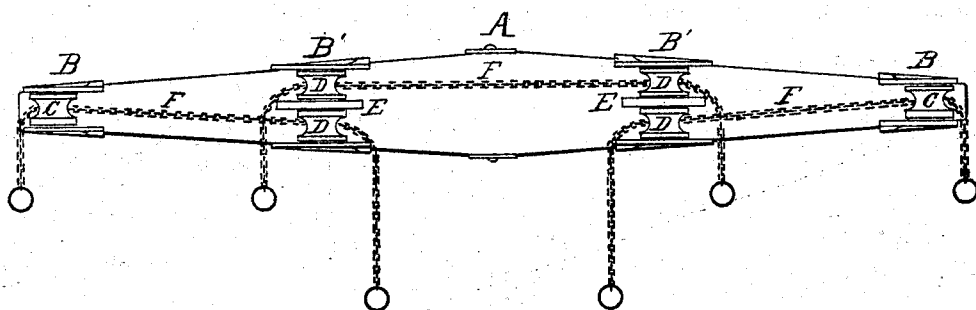
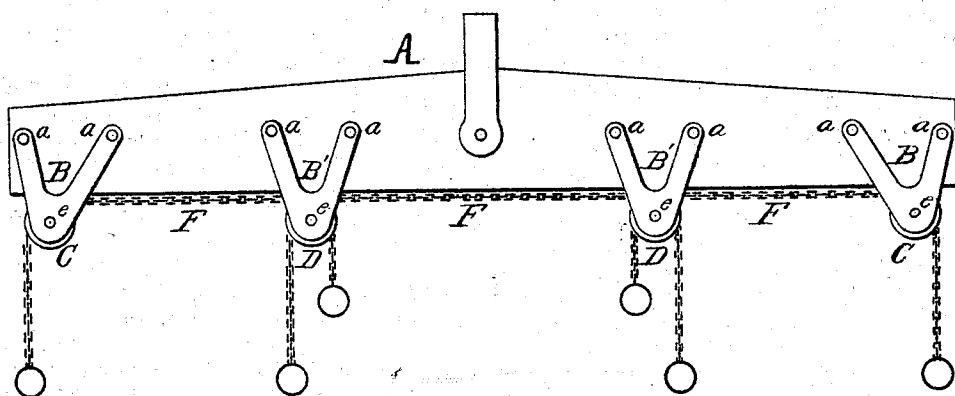


Fig. 2.



Witnesses.
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IMPROVEMENT IN DRAFT-EQUALIZERS.

Specification forming part of Letters Patent No. **144,052**, dated October 23, 1873; application filed May 26, 1873.

To all whom it may concern:

Be it known that I, JOHN P. BECKENBAUGH, of Springfield, in the county of Sangamon and State of Illinois, have invented a new and valuable Improvement in Three-Horse Equalizers; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a front view of my device. Fig. 2 is a top view of the same.

This invention has relation to three-horse equalizing attachments; and it consists in the construction and novel arrangement of the angle-plates to which the pulley-journals are fixed, and the partition-plate between each set of middle pulleys, one above the other, in connection with the whiffletree and attachment-chains, as hereinafter more fully described.

In the accompanying drawings, the letter A designates the whiffletree, tapered on each side toward each end, so that it will be thickest in its middle portion. The front face of the whiffletree is plane, preferably, so that the angle-plates will not require to be extended therefrom to any considerable distance to bring the pulleys in line with each other. B B' indicate the angle-plates, which are attached, by their rear arms *a*, to the upper and lower surfaces of the whiffletree, there being four of these plates for each surface, arranged at equal distances apart horizontally. The corresponding plates B, at each end of the whiffletree, constitute a support for the end pulleys C, the inner arm of each plate being slightly twisted or bent to correspond with the taper of the tree, and to bring those portions of the plates which are in contact with the pulley parallel with each other, so that the chain will not be liable to be caught between the pulley and plate. Vertical pivot-pins *e* connect these plates. The corresponding plates B', in the middle portion of the whiffletree, where it is thickest, are far enough apart for the reception of two pulleys, D, one above the other, on the same axial pin *e*, but separated from each other by a division-plate, E, secured by inserting its rear end into a horizontal recess in the middle line of the

plane front wall of the whiffletree. F indicates the attachment-chains, by which the trace-tugs are connected with the whiffletree. These attachment-chains are three in number, and are rove about the pulleys in the following manner, the chains and horses being, respectively, numbered 1, 2, and 3 from the left: Chain No. 1 is passed around the end pulley C at the left and one of the next inner set of pulleys D. Chain No. 2 is carried around the other pulley D of this set and the corresponding pulley D of the next set. Chain No. 3 is passed around the other pulley D of this set and the end pulley C at the right. In gearing up, horse No. 1 is attached, by the draft-tugs, to the left ends of chains Nos. 1 and 2; horse No. 2 to the right and left ends, respectively, of chains Nos. 1 and 3; and horse No. 3 to the right ends of chains Nos. 2 and 3.

The angle-plates, being attached by the oblique branches to the whiffletree, are not apt to become loose by the lateral pulling of the horses, as, whether they pull to the right or left, the direction of the strain will be mainly in line with the opposite branch of the plate.

The partition-plate E extends from the whiffletree outward, and is perforated for the passage of the pulley-journals. It is not apt to get out of place or obstruct in any way the working of the chains.

I am aware a three-horse equalizer with single end pulleys, sets of superposed inner pulleys, and attachment-chains, are not new, and therefore I do not claim such invention, broadly; but

What I claim as new, and desire to secure by Letters Patent, is—

In a three-horse equalizer, the angle-plates B B', having oblique branches attached to the whiffletree in the direction of lateral strain on each side, the chain-pulleys and the journal-pins *e* passing through the angular portion of the plates B B', with or without the division-plates E, said part being constructed, combined, and arranged as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOHN P. BECKENBAUGH.

Witnesses:

W. J. CONKLING,
F. S. MATHER.