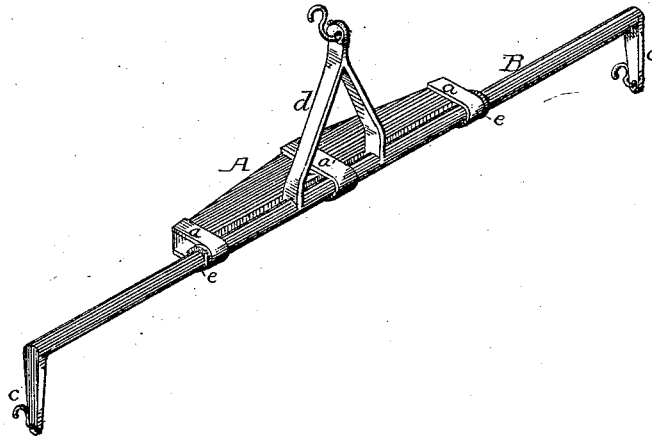


J. PRATT, Jr.
THREE HORSE EQUALIZER.

No. 190,364.

Patented May 1, 1877



Witnesses:
George Thomas
Fred Benjamin

Jonah Pratt Jr
By Chas. E. Foster
his atty.

UNITED STATES PATENT OFFICE.

JONAH PRATT, JR., OF PRINCEVILLE, ILLINOIS, ASSIGNOR OF TWO-THIRDS
HIS RIGHT TO JAMES A. PRATT AND OLIVER S. PRATT.

IMPROVEMENT IN THREE-HORSE EQUALIZERS.

Specification forming part of Letters Patent No. **190,364**, dated May 1, 1877; application filed
February 16, 1877.

To all whom it may concern:

Be it known that I, JONAH PRATT, JR., of Princeville, Peoria county, Illinois, have invented certain Improvements in Three-Horse Equalizers, of which the following is the specification:

The object of my invention is a three-horse equalizer, adapted to vehicles without poles or tongues, or to vehicles with poles where the center of draft is on one side of the pole, as described hereafter.

The drawing is a perspective view of my improved device.

A is a tree or bar, secured to the vehicle in any suitable manner, and B is a metallic shaft, extending in rear of the bar, and confined thereto by metal straps *a a'*, which clasp the bar, extend round the rod, holding the same in its proper place, and permitting it to turn freely. A shoulder or washer, *e*, adjacent to each strap *a*, prevents any longitudinal movement of the bar. From the ends of the bar at right angles extend short arms *c c*, and from the center extends a longer arm, *d*.

The single-trees are connected by hooks or links to the ends of the arms *c c d*, so that the pull of two horses will be on the arms *c c*, tending to turn the shaft in one direction, while the pull of the central horse will bear on the arm *d*, tending to turn the shaft in the opposite direction; but as the latter arm is twice the length of the former, the single horse will exert as much power to turn the shaft as the two outer horses, and the draft will be equalized.

It will be seen that this device is extremely simple in construction, strong, and durable,

that it is cheap, and can easily be made by an ordinary blacksmith, the bands or straps *a a'* constituting simple, strong, and cheap supports.

It will also be seen that, by placing the shaft B at the rear of the bar A, all tendency to draw upon the straps *a* is avoided. The said straps may, therefore, be lighter in weight, and less firmly attached, than would otherwise be necessary.

I am aware that a bar having but two arms at the ends, and unequal in length, has been used in combination with a long tree, eccentrically pivoted, and carrying two of the single-trees, and I make no broad claim to a bar having arms of unequal length; but

I claim—

1. A draft-equalizer, consisting of a shaft, B, turning in supports on a bar, A, and provided with short end arms *c c* and long central arm *d*, extending in opposite directions, as set forth.

2. The combination of the shaft B, its arms *c c d*, and the bar A, with its straps *a a'* supporting the shaft at the rear of the bar, as described.

3. The shaft B, provided with arms *d c c*, and turning in supports at the rear of the bar A, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JONAH PRATT, JR.

Witnesses:

WILLIAM MURDOCK,
C. N. PRATT.