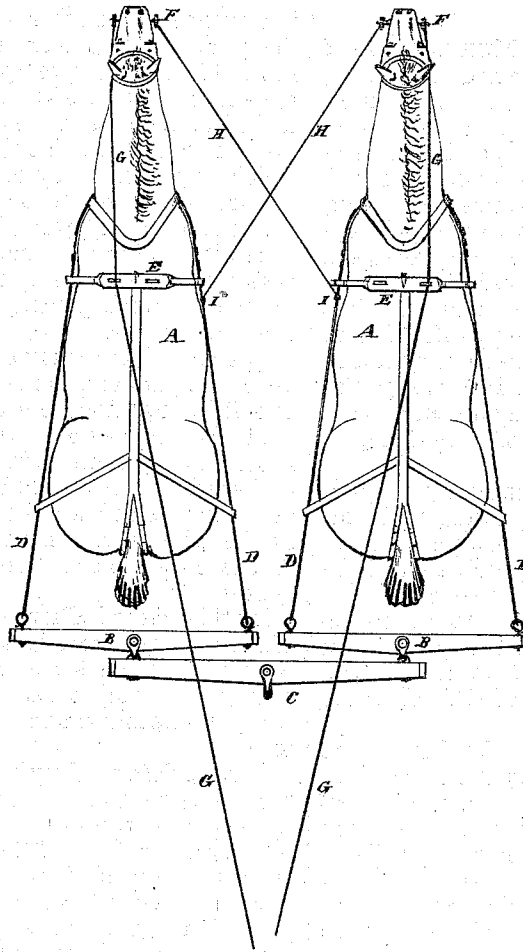


JOHN MURRAY, Jr.

Mode of Harnessing Horses.

No. 125,752.

Patented April 16, 1872.



Witnesses

A. E. Price,
Charles Burleigh

Inventor

John Murray Jr.

UNITED STATES PATENT OFFICE.

JOHN MURRAY, JR., OF WORCESTER, MASSACHUSETTS.

IMPROVEMENT IN THE MODE OF HARNESSING HORSES.

Specification forming part of Letters Patent No. 125,752, dated April 16, 1872.

To all whom it may concern:

Be it known that I, JOHN MURRAY, Jr., of the city and county of Worcester and Commonwealth of Massachusetts, have invented certain new and useful Improvements in the Method of Harnessing Horses; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing, which represents a plan view of a pair of horses harnessed in accordance with my improved method.

The object of my invention is to provide a method of harnessing whereby, when two or more horses are harnessed abreast, they can be easily governed and caused to draw easily with each other; and to this end my invention consists in the peculiar method of harnessing as hereinafter described.

This invention is more especially adapted for use with teams used for plowing or similar purposes, where the horses are hitched to an implement without a guiding-pole, but may be used in other cases with good result.

In the drawing, the parts marked A represent the horses. B B indicate the whiffletrees; C, the evener-bar; D D D D, the traces; E E, the saddles; F F, the bits; and G G H H, the reins.

In my improved method the horses are hitched to the whiffletrees by the traces D in the ordinary manner, and the reins G G from the outer ends of the bits F are extended back to the driver, while the inner reins H H, instead of being connected with the outer rein in the usual manner, are carried back to and fastened to the inner trace D of the opposite horse, near the saddle, as indicated at I, the rein from the right-hand horse being fastened to the right trace of the left-hand horse, and vice versa. By this arrangement of reins the horses are kept near to each other laterally, and either horse is prevented from traveling

in advance of the other without any action on the part of the driver, for the reason that, should either horse attempt to move faster than the other, he is drawn back by the rein attached to the trace of the opposite horse. The result is that, with an ordinary pair of horses, which, if harnessed by the old method, would require one person to drive and a second to hold the plow, can, when harnessed in accordance with my improved method, be driven with ease and convenience by the person who holds the plow, thus dispensing with the services of a separate driver.

The long lines G may be hitched to the handle of the plow and the team be governed with but little attention from the driver.

The horses may be worked abreast and harnessed by my method, in which case the reins of the center horse would be joined to the traces of the horses at his right and left, respectively, the driving-reins extending from the driver to the outer end of the bits of the outside horses.

By this method of harnessing, nervous horses can be driven steadily and with ease, while they are, at the same time, caused to pull evenly with each other, which is a matter of considerable importance, as all farmers understand.

Having described my invention, what I claim therein as new, and desire to have secured by Letters Patent, is—

The arrangement of the lines G G and H H, when the lines H H extend, one from the bit of each horse, to the trace-strap at I of the opposite horse, substantially as and for the purposes shown and set forth.

JOHN MURRAY, JR.

Witnesses:

A. E. PEIRCE,
CHAS. H. BURLEIGH.