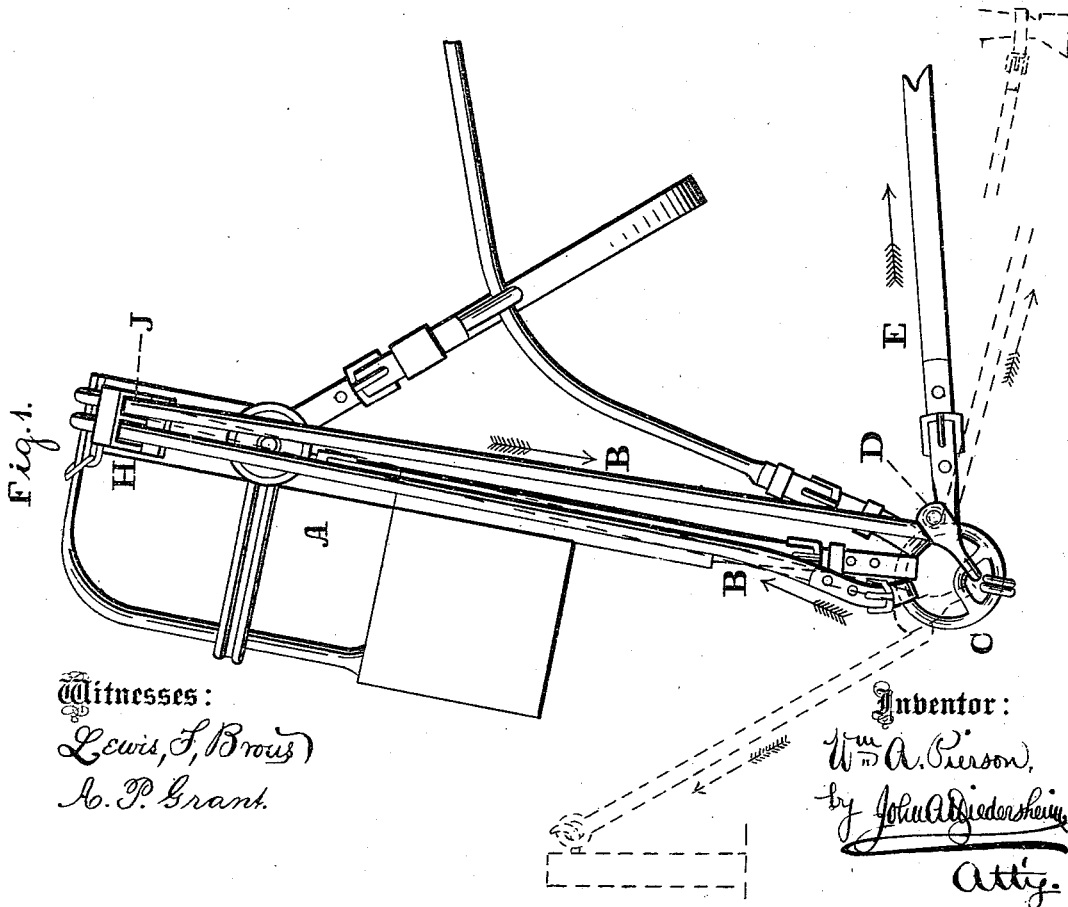
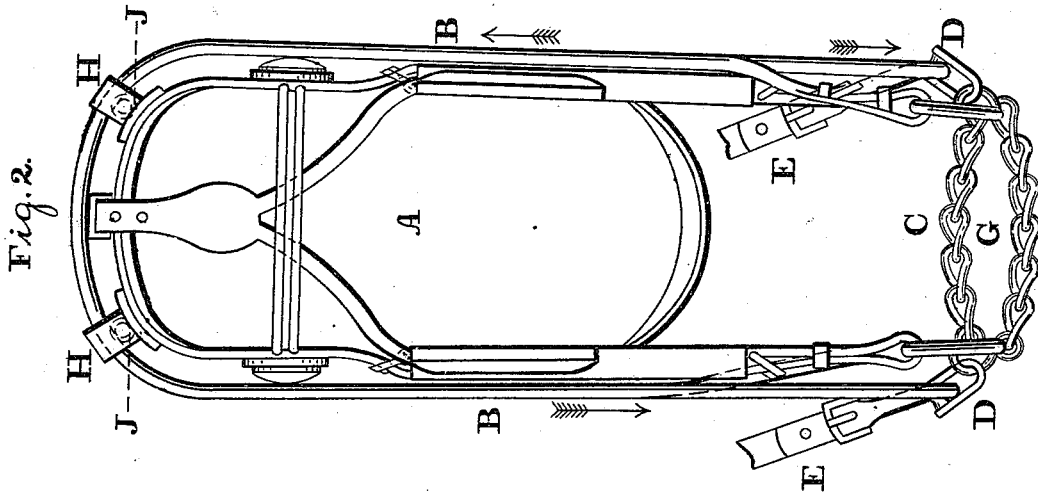


W. A. PIERSON.
Bridle-Bit.

No. 165,863.

Patented July 20, 1875.



Witnesses:
Lewis, F. Brown
No. P. Grant.

Inventor:
W. A. Pierson,
by John A. Diederichsen
Atty.

UNITED STATES PATENT OFFICE.

WILLIAM A. PIERSON, OF VALLEY FORGE, PENNSYLVANIA.

IMPROVEMENT IN BRIDLE-BITS.

Specification forming part of Letters Patent No. **165,863**, dated July 20, 1875; application filed June 12, 1875.

To all whom it may concern:

Be it known that I, WILLIAM A. PIERSON, of Valley Forge, in the county of Chester and State of Pennsylvania, have invented a new and useful Improvement in Bridles and Bits; and I do hereby declare the following to be a clear and exact description of the nature thereof, sufficient to enable others skilled in the art to which my invention appertains to fully understand, make, and use the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a side view of the device embodying my invention. Fig. 2 is a front view thereof.

Similar letters of reference indicate corresponding parts in the two figures.

My invention consists in attaching to each side of the bit a strap, which extends over the headstall to the other side, where it passes through a pulley-block secured to the bit, from whence it is connected to the driving-line, to a hitching-strap, or to straps fitted to the legs of the animal, whereby there may be had under perfect control a horse that is disposed to be fractious, or that attempts to break loose or kick.

Referring to the drawings, A represents a headstall, which may be of well-known form and construction. B B represent straps or lines, each of which is secured to the bit C, passes up along one side of the headstall, over the same, and down along the other side thereof, where it is directed through a pulley-block, D, connected to the bit C, and then attached to one of the driving-lines, E.

It will be seen that when the horse becomes fractious or balky, the driver draws the lines E, and thus draws the straps or lines B down one side of the stall and up the other side, thus uniformly raising the bit and shortening the distance between the bit and headstall, so that the mouth of the animal and top of the head are pressed together, thus exerting a power which readily subjects the animal.

If the horse is to be hitched the strap may be connected to one or both of the lines or straps B, and the operation on the bit will be the same as that performed by the lines E.

In the event of a kicking animal I attach to the lines B straps, which are also connected to the hoofs of the animal, so that the improper movements of the latter will operate the lines B and bit D, similar to that above stated.

In order that the bit may be thoroughly effective I employ two chains, G, therefor, one of which is inserted in the mouth, and the other beneath the same, or the lower lip, so that the action of lines B in elevating the bit will cause the lower chain to tighten on the lip, and thus assist to subdue the animal.

The pulley-blocks D will be preferably jointed to cross-bars formed on the rings of the bit.

In order to prevent binding and chafing of the lines B on the headstall, and prevent displacement of said lines, I secure near the upper ends thereof boxes H, in which are fitted or formed pulleys or bearings J, over which the lines move, the boxes confining the lines or retaining them in position.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The straps B, each connected to one side of the bit, extended over the headstall, and passed through a pulley-block on the other side of the bit, substantially as and for the purpose set forth.

2. The combination, with the extended straps B B, of the two chains G, substantially as and for the purpose set forth.

3. The combination, with the extended straps B B, of the boxes H, and bearings J, substantially as and for the purpose set forth.

W. A. PIERSON.

Witnesses:

LEWIS F. BROUS,
JNO. A. BELL.