

No. 616,098.

Patented Dec. 20, 1898.

W. B. FROST.

COMBINED HOLDBACK AND WHIFFLETREE.

(Application filed Dec. 27, 1897.)

2 Sheets—Sheet 1.

(No Model.)

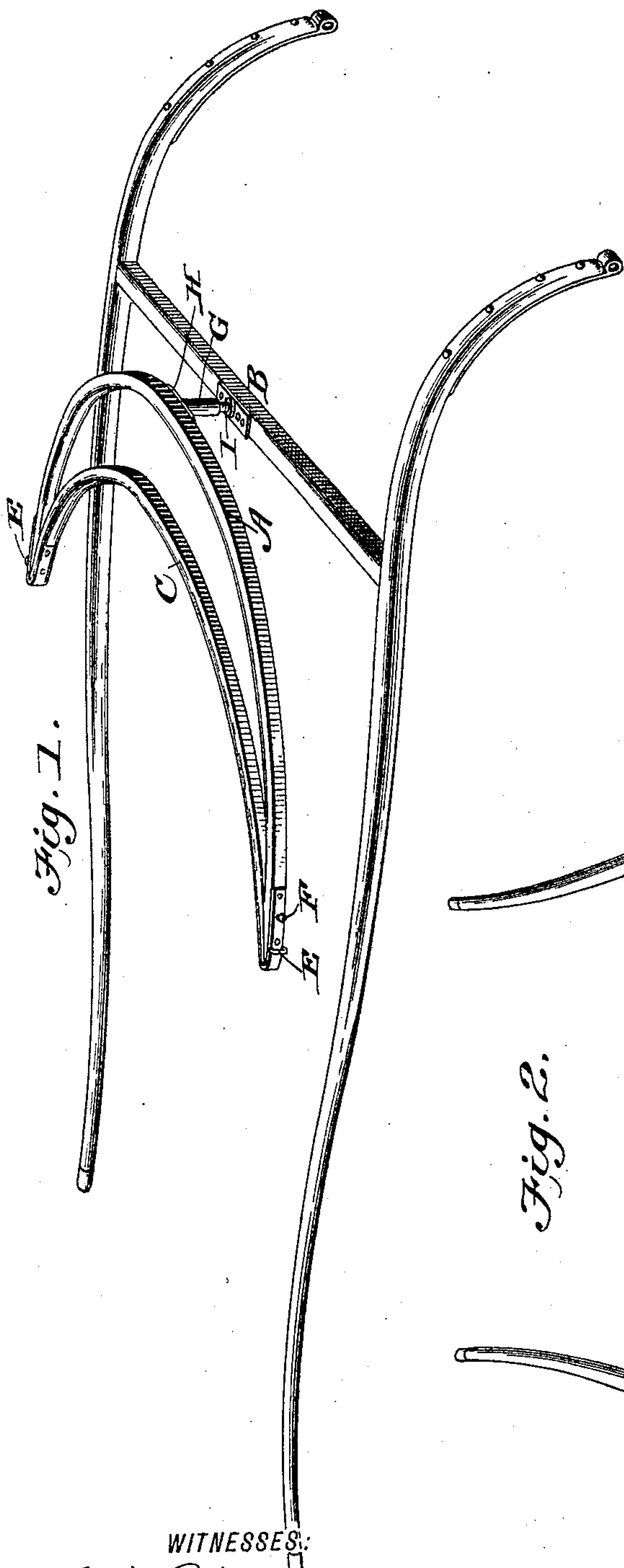


Fig. 1.

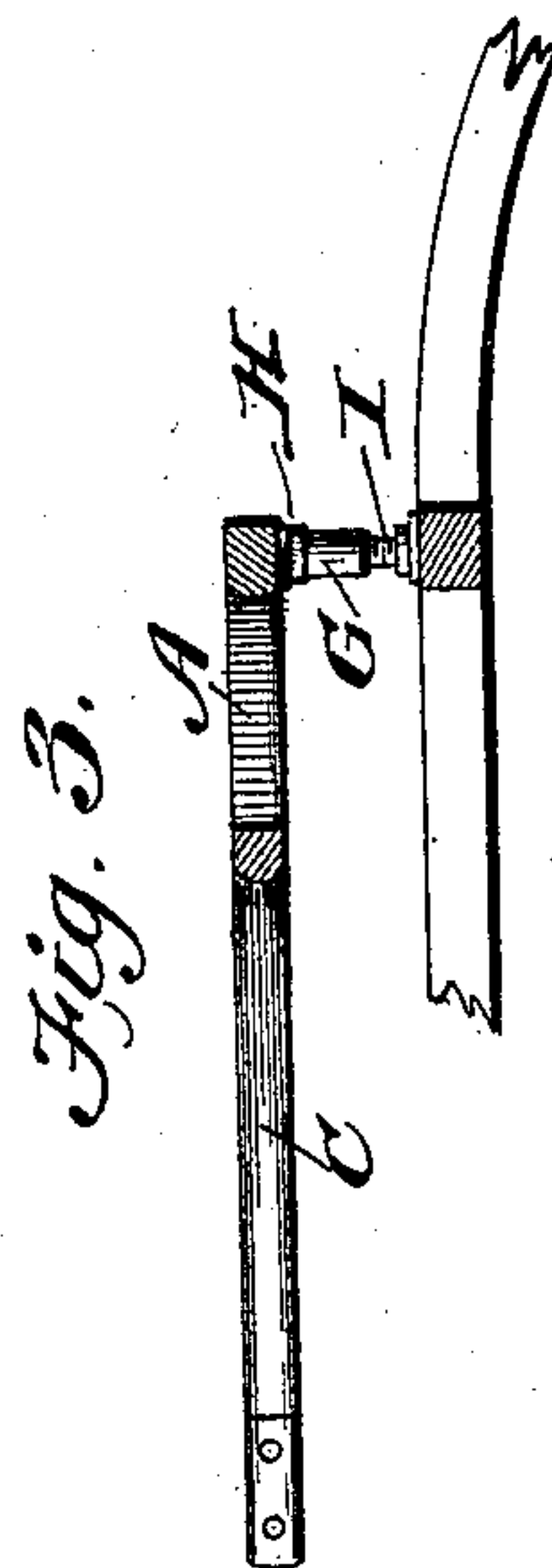


Fig. 3.

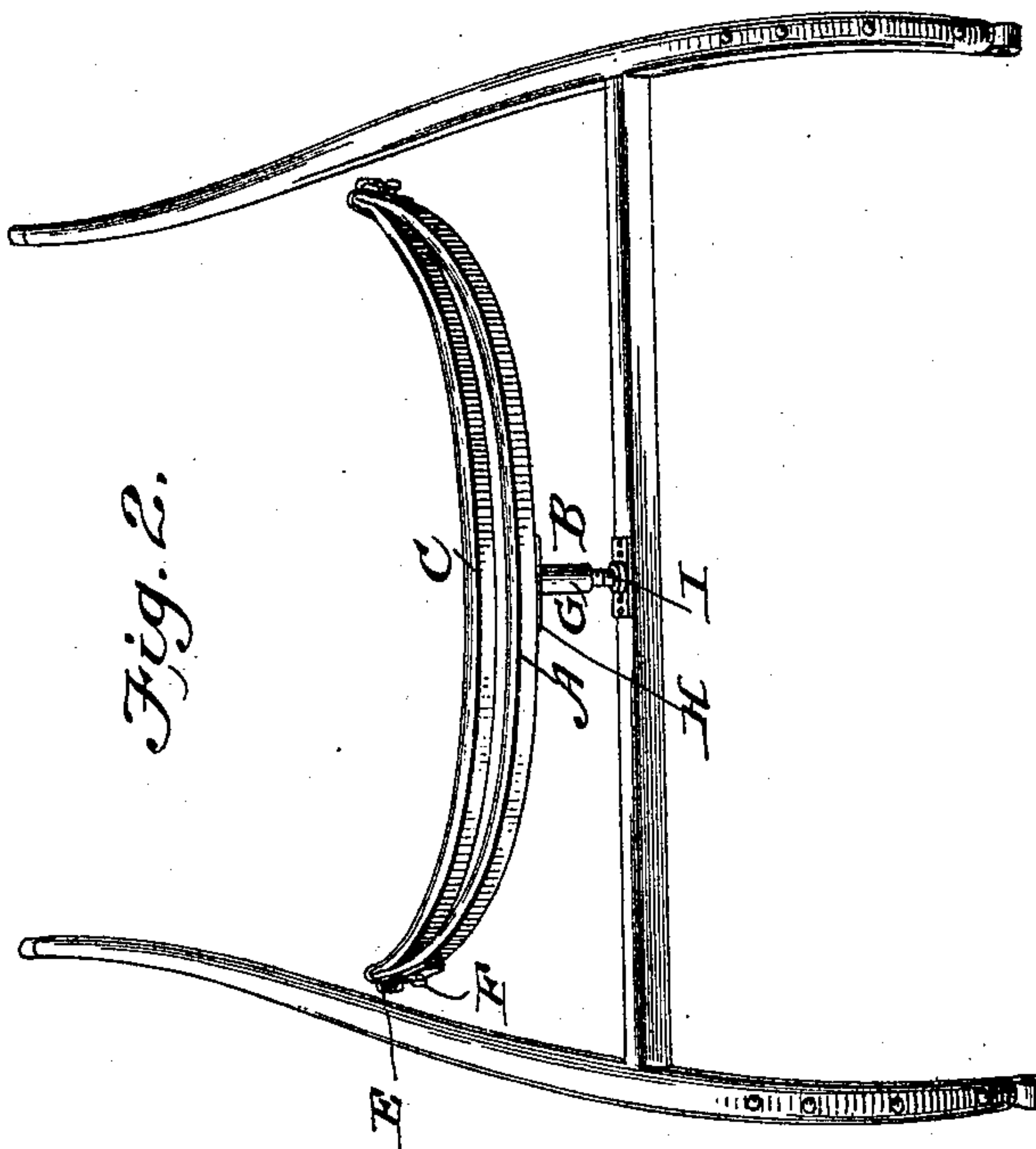


Fig. 2.

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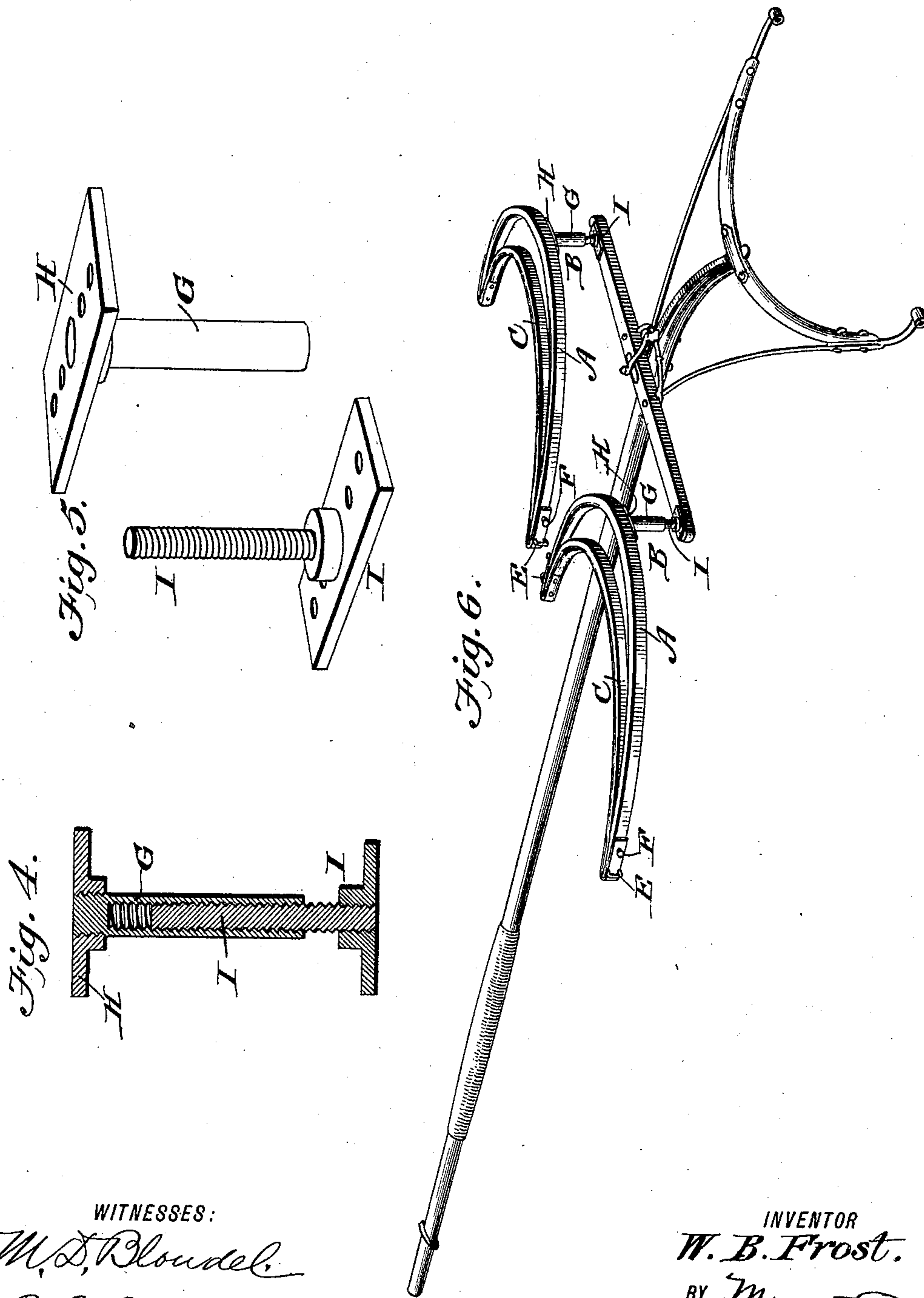
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WILLIAM B. FROST, OF MAUMEE, OHIO.

COMBINED HOLDBACK AND WHIFFLETREE.

SPECIFICATION forming part of Letters Patent No. 616,098, dated December 20, 1898.

Application filed December 27, 1897. Serial No. 663,643. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM B. FROST, a citizen of the United States, residing at Maumee, in the county of Lucas and State of Ohio, have invented certain new and useful Improvements in a Combined Holdback and Whiffletree, of which the following is a full, clear, and exact description.

My invention is a combined holdback and singletree constructed and arranged to receive the draft strain exerted in pulling the vehicle and also to receive the back pressure in stopping or in backing, furnishing in one device means for receiving the power exerted for both such purposes.

The invention consists in certain novel constructions and combinations of parts, as will be hereinafter described, and pointed out in the claims.

In the drawings, Figure 1 is a perspective view of my improvement. Fig. 2 is a rear perspective view thereof. Fig. 3 is a longitudinal section. Figs. 4 and 5 illustrate the adjustable supporting devices in detail, and Fig. 6 shows the improvement applied to a pole.

The improvement may be used either in single or double harness, being applied in both instances to a cross-bar or support, which in double teams is the doubletree and in single teams is the usual cross-bar connecting the thills.

My improved device is in the construction shown formed with the arched singletree A, which is pivoted between its ends at B and has its extremities carried forward and united with the ends of the breeching-piece C, which is arched to receive back pressure when the horse is backed or is holding back, as in descending a grade, or stopping the vehicle, the pivoting of the combined device at B permitting the proper application of the back pressure for the purpose desired. This breeching-piece is rounded in cross-section on its front side to adapt it for use in receiving the back pressure and may be of wood or other suitable material or may be lined or finished to suit the taste of the purchaser or the particular kind of work for which it may be intended. In this connection it may be stated that the improvement is capable of use in light-draft vehicles, as well as for heavier use,

and may be manufactured in different styles to suit the demands of the trade.

At its forward ends, which curve and extend forward, as shown, the combined holdback and singletree is provided with means for the connection of the traces, which may be the loops E and the buttons F or may be of other suitable construction desired.

In pivoting the singletree it is preferred to accomplish it by means which permit the ready detachment of the singletree from its support and also the adjustment of the improved device higher or lower to adapt it to the horse being driven. As shown and as preferred, this is effected by means of a socket-tube G, threaded into a base-plate H, secured to the singletree, such tube G being threaded internally and receiving a threaded stem I on a base-plate I' upon the cross-bar. This construction permits the singletree to swing from side to side and also the vertical adjustment of said singletree for any desired purpose. For extreme difference in height different socket-tubes may be interchangeably used as desired.

My invention possesses numerous advantages, among which may be mentioned the saving of time in hitching and unhitching, as there are no holdback-straps to fasten or unfasten or to break, nor are there any shaft-loops required. The invention also saves twenty-eight inches in length of each trace in double or single harness and does away with the necessity of the breeching, hip, and holdback straps. The improved device is much more comfortable to the horse, for it does not touch him only when necessary, as in stopping, holding back, or backing up, while the ordinary breeching strikes the horse at every move he makes. Furthermore, the hind quarters are not drawn together, as is the case with the breeching, which in many instances causes the horse to interfere. As the holdback or breeching piece is not in contact with the horse except when necessary, all chafing is avoided, and by stopping or backing in the manner described it is also easier on the girth-strap and horse, as all the strain in holding back or stopping comes at the cross-bar instead of two-thirds the way up the shaft. Consequently there is less uplift and strain. The improvement is also

more durable than the usual breeching and is consequently much cheaper to the consumer, also saving a great deal of harness-cleaning of the dirtiest part of the harness. When
 5 used on doubletrees, all the strain in holding back is taken off the end of the pole and applied directly to the doubletree, the strain being thereby relieved from the neck-yoke and breast-strap and making it much easier
 10 on the horse's neck; also, in the use of the improvement with double teams turning is more easily accomplished, as my improved holdback-singletree will take the outside horse on the quarter in the swing, and the
 15 vehicle will be turned easier than when such operation is effected almost entirely by the neck-yoke, thereby saving the springing and breaking of poles. The forward curving or arching of the doubletree not only results in
 20 a saving in the length of the traces, but also will not strike the wheel in turning or when one horse starts ahead of the other.

While the special construction as shown is preferred, it will be obvious that I do not
 25 desire to be limited specifically thereto in the broad features of my invention.

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

30 1. A combined holdback and singletree having an arched or a concave front side to receive the back pressure of the horse and provided at its ends with means for the connection of the traces, substantially as described.

2. A combined holdback and singletree pivoted between its ends whereby it can resist back pressure and can swing laterally and having an arched or concave breeching-piece substantially as described.

3. A combined holdback and singletree consisting of the arched singletree pivoted between its ends and the arched breeching-piece secured at its ends to the singletree and provided at its ends with means for the connection of the traces substantially as shown
 45 and described.

4. A combined holdback and singletree comprising the arched singletree and the arched breeching-piece united at their ends and arranged and adapted for operation substantially as shown and described.

5. The combination of the cross-bar or support, the threaded stem mounted thereon and threaded externally, the singletree having an attached breeching-piece and the threaded
 55 socket-tube depending from the singletree and threaded onto the threaded stem substantially as described.

6. A combined holdback and singletree consisting of the singletree and the holdback attached to and made the front part of the singletree whereby the parts will brace each other substantially as shown and described.

WILLIAM B. FROST.

Witnesses:

JAMES KERR,
 WM. S. SWAN.