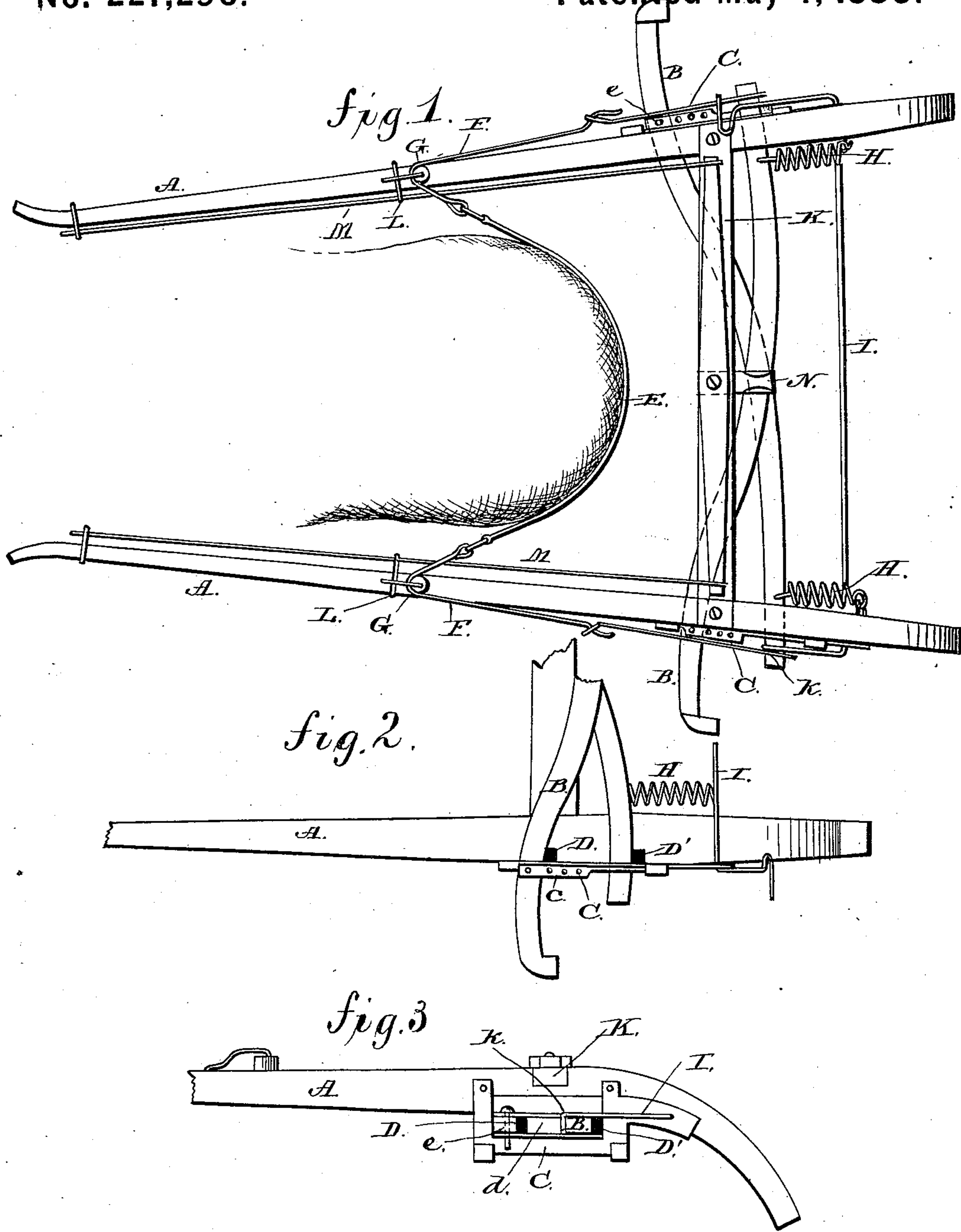


E. W. PRITCHETT.
Vehicle-Brake.

No. 227,296.

Patented May 4, 1880.



Witnesses.

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ENOCH W. PRITCHETT, OF CATARACT, INDIANA.

VEHICLE-BRAKE.

SPECIFICATION forming part of Letters Patent No. 227,296, dated May 4, 1880.

Application filed December 4, 1879.

To all whom it may concern :

Be it known that I, ENOCH W. PRITCHETT, of Cataract, in the county of Owen and State of Indiana, have invented certain new and
5 useful Improvements in Wagon or Vehicle Brakes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and
10 use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to certain improvements in wagon-brakes for which Letters Patent of the United States were granted to me bearing date the 4th day of November, 1879, and numbered 221,252.

The present invention has for its object to
20 provide a means for adjusting the brake-levers so as to adapt the same to wheels of different diameters; also, to provide a means for automatically releasing the brake-levers after they have been applied to the wheels, and to hold
25 said levers in a normal position and prevent any rattling of the same.

The invention further has for its object to prevent the back-strap connected with the brake-levers from being affected by the tug-
30 strap when said strap is subjected to a pulling strain, and also to prevent the levers from springing when applied to the brakes, all as more fully hereinafter specified.

To this end my invention consists in the
35 combination, with the brake-levers, of mechanism whereby said levers may be adjusted to adapt the brakes to wheels of different diameters.

The invention further consists in the combination, with the brake-levers, of certain
40 springs whereby said levers are automatically operated to release the brakes and held in normal position against a cushion, of rubber or other similar material, to prevent noise or
45 rattling; also, in the combination, with the tug-strap, of a strap secured to the thills, through which the tug-strap is passed, and by means of which it is held away from the back-strap before mentioned; and, finally, in the

combination of a guide with the brake-levers
50 for holding said levers and preventing them from springing when the brakes are applied, all as more fully hereinafter set forth.

In the drawings, Figure 1 represents a plan view of a wagon or other vehicle brake embodying the improvements in my invention.
55 Fig. 2 shows a bottom view of a portion of my improved brake; and Fig. 3, a side elevation, showing my improvements.

Referring to the drawings, the letter A designates the thills of a wagon or other vehicle,
60 and B the brake-levers, adjustably fulcrumed in bearings C C, secured to the thills either on the inside or outside of the same, as may prove most convenient. These bearings are
65 formed by flanges on a metallic frame, which is preferably constructed of cast metal in one piece, but which may be formed of wrought metal in one or more pieces, and the parts secured together in any convenient manner.
70 The brake-levers set in slots *d d* in said frames, and the flanges are provided each with a series of apertures, through which the fulcrum-pins *e e* of the brake-levers may be passed to adjust said levers and adapt the brakes to
75 wheels of different diameters.

The letters D D' indicate cushions, of rubber or other equivalent material, one being attached to the lever and the other secured in the rear end of the slots, for the purpose of
80 preventing any rattling of said levers and the noise consequent upon such rattling. The cushion D' may be formed with a V-shaped or other recess at its front edge, in which the lever may set when in a normal position,
85 in order that it may be better held in place; but such construction is not absolutely necessary to effect the purposes of this part of my invention.

The outer ends of the levers B B are provided with brake-shoes, which, when said levers are operated, come in contact with the tires of the front wheels of the vehicle, and are released by mechanism hereinafter explained.
90

The letter E designates the breech-strap passing around and in contact with the rump of the animal. The said breech-strap is con-
95

5 nected at each end to a back tug-strap, F, which passes forward over a sheave, G, mounted in bearings on the upper side of the thills, and back to the plain ends of the levers B B on the outside of the thills.

10 The letters H H indicate spiral or other springs secured to the respective levers and to the thills in such manner as to hold said levers in a normal position against the cushions D' and prevent rattling, the said springs also serving to return the brake-levers to a normal position and release the brakes automatically after they have been applied.

15 The letter I indicates a crank-shaft placed back of the cross-bar K of the thills, having a hook, k, at each end adapted to engage with and retain the plain ends of the levers B B, or to release them at pleasure.

20 The letter L indicates a strap secured to each thill of the vehicle, through which the tug-straps M are passed, and by which said tug-straps are held away from the back tug-straps, F, so as not to interfere with the same.

25 The letter N indicates a guide secured to the cross-bar K of the thills, and bearing against the brake-levers at the point of intersection of the same, and serving to prevent said levers from springing when the brakes are applied. In order to deaden the sound consequent upon the movement of said brake-levers a buffer, of rubber or other suitable material, may be applied between said guide and the levers; but this is not essential to the practical operation of my invention.

35 The operation of my invention will be readily understood in connection with the above description.

40 When the hooks k k are not engaged with the levers B B the backward motion of the animal or the forward motion of the vehicle exerted upon the breech-strap of the animal

will cause the brake-shoes at the ends of the levers B B to come in contact with the front wheels and brake them when making a descent. The brakes are drawn off the wheels 45 when the animal moves forward by means of the spiral springs, which also serve to hold the brake-levers against the cushions D' and prevent noise. When the crank-shaft is turned down, which may be done either with the 50 foot or the whip-stock, the brakes cannot be operated, as the levers are held by the hooks on the crank-shaft.

Having thus fully described my invention, what I claim, and desire to secure by Letters 55 Patent, is—

1. In combination with the thills A of a wagon or other vehicle, the brake-levers B, adjustably fulcrumed thereto, and connected to the breech-strap E by means of the back- 60 strap F, the whole adapted to operate substantially as and for the purposes specified.

2. In combination with the brake-levers B and mechanism for applying the brakes, the adjustable bearings C C, the buffers located 65 therein, and the spiral springs H H, adapted to hold the brakes against the buffers, substantially as and for the purposes specified.

3. In combination with the brake-levers, the guide attached to the cross-bar K of the vehicle, and bearing against said levers at their 70 intersection, to prevent the springing of said levers when the brakes are applied, substantially as specified.

In testimony that I claim the foregoing I 75 have hereunto set my hand this 4th day of December, 1879.

ENOCH W. PRITCHETT.

Witnesses:

CHAS. L. COOMBS,
H. J. ENNIS.