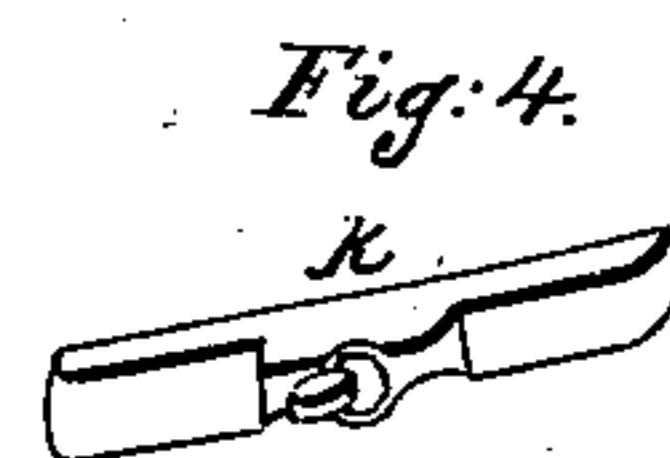
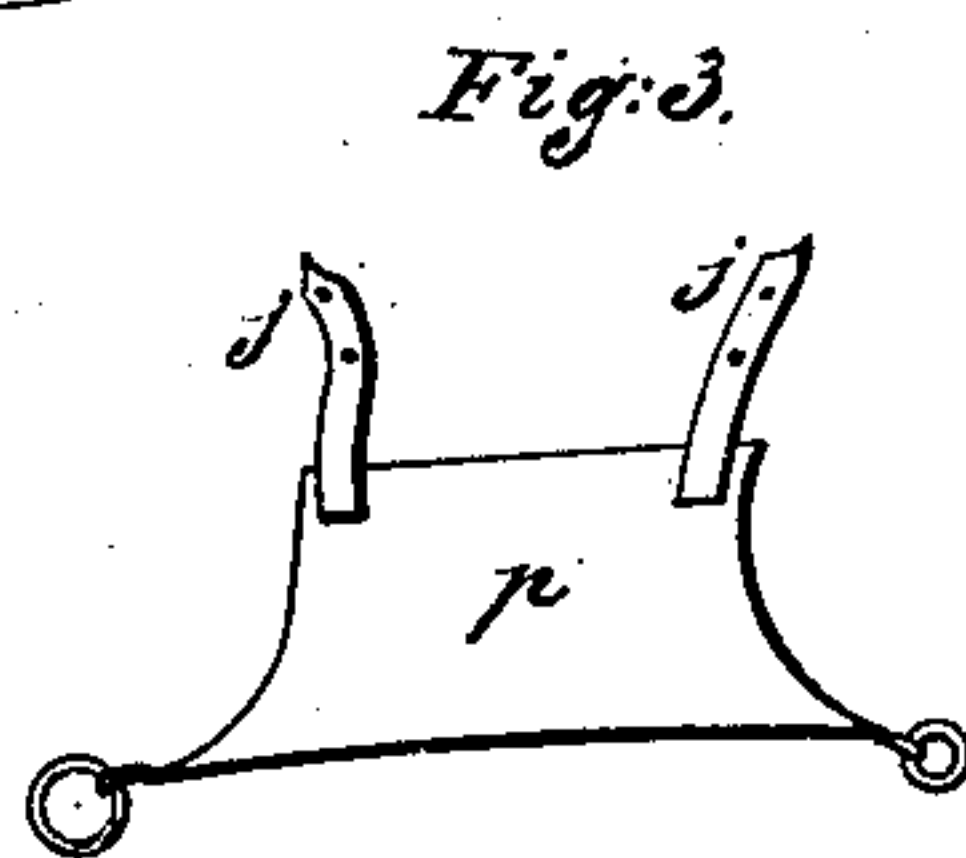
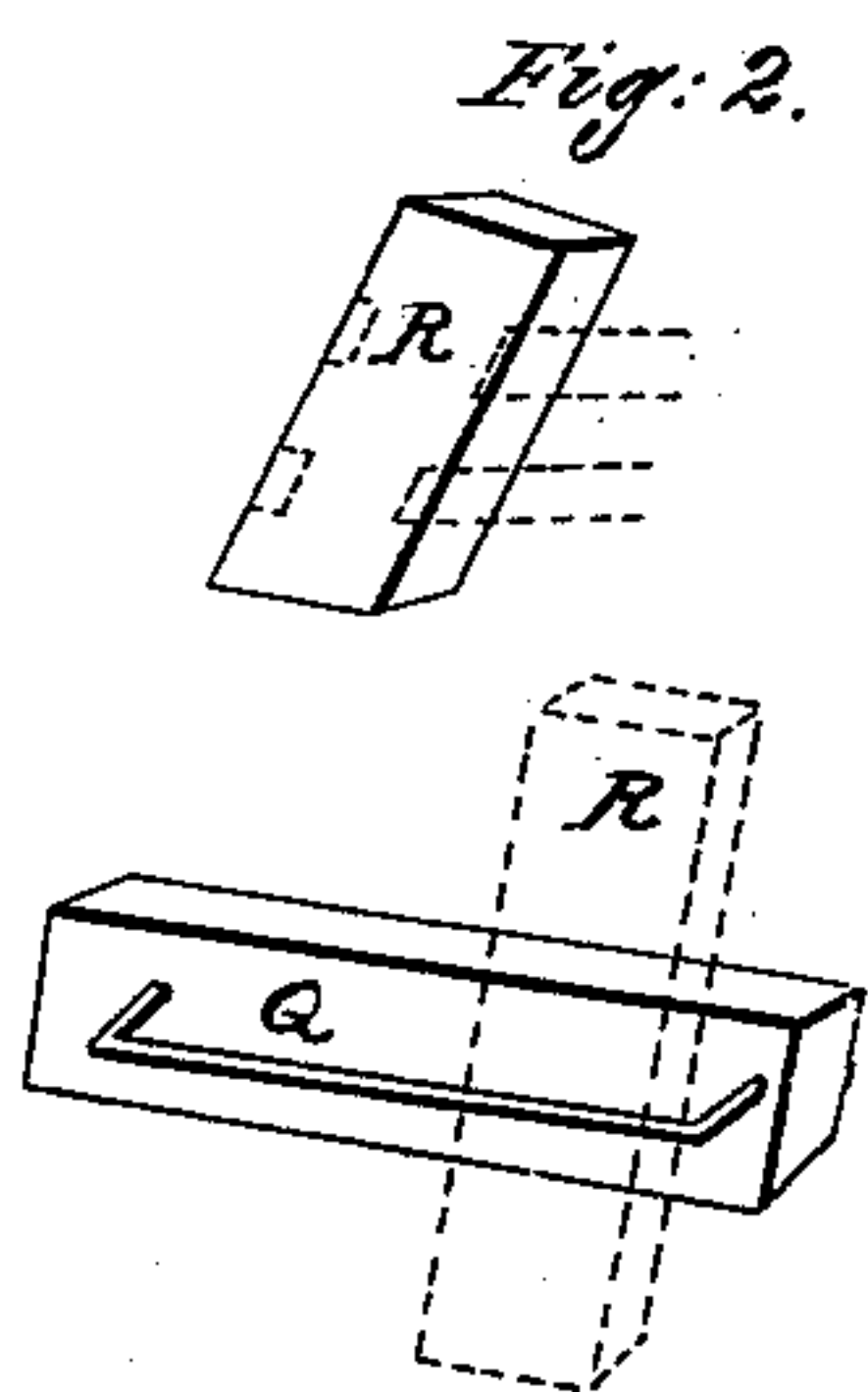
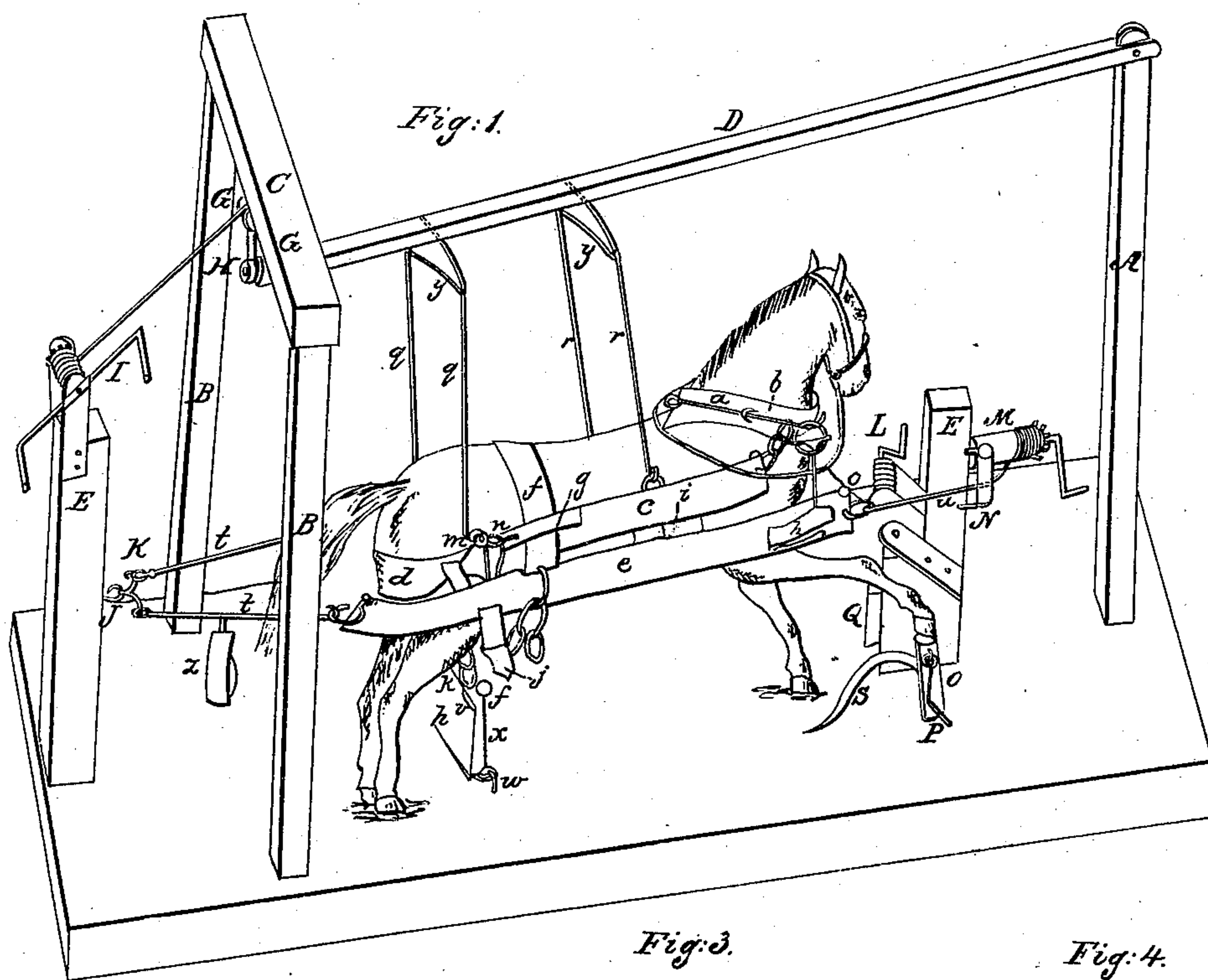


W. P. THOMAS.

Horse Stock.

No. 14,477.

Patented March 18, 1856.



# UNITED STATES PATENT OFFICE.

WILLIAM P. THOMAS, OF HILLSBORO, INDIANA.

## HARNESS FOR SHOEING HORSES.

Specification of Letters Patent No. 14,477, dated March 18, 1856.

*To all whom it may concern:*

Be it known that I, WM. P. THOMAS, of Hillsboro, in the county of Wayne and State of Indiana, have invented a new and useful harness for the purpose of confining horses during the process of shoeing and also to relieve the smith from the labor of sustaining part of the weight of the horse; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1, is a perspective view. Fig. 2, is a view of the bar 2, showing its relation to the wedge R. Fig. 3 is a front elevation of the apron *p*. Fig. 4, is a view of the strap *k*.

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

To enable others skilled in the arts to make and use my invention, I will proceed to describe its construction and operation.

I erect the posts A, B, B, of timber, of sufficient size and strength; or if convenient the framework of the building or shed, may be made to answer in their place. Upon the posts B, B, I place the cap C, provided with the pulleys G, G. To the top of the post A, I adjust the lever D, with a movable joint, of any of the known forms. Said lever D must be sufficiently long to reach the cap C, as shown. Upon the end of this lever is placed the pulley H. The post F, is firmly planted in the ground, or erected in any other sufficiently permanent manner. To its top is fixed the windlass T. At a proper height I drive the hook J for the support of the tail lever K. E is also a post firmly fixed; with a recess for the reception of the windlass L.

I, L, and M, are windlasses constructed in any of the known forms.

N, is a friction pulley, to keep the rope, *w*, off the post E.

G, G, H, are a set of small pulleys, forming a system of pulleys, for the elevation of the end of the lever D. In their place a block and tackle may be used.

O is a movable clenching stake, with a treadle F and strap, S.

Q, is a movable slide, formed as shown in Fig. 2, or retained in its place, by the wedge R. It is used while driving on the front shoes being slid out in front of the

horse's knee, to prevent him from pulling the foot away from the smith.

R, is a key or wedge (Fig. 2) to confine the slide Q, in its proper place.

*a*, is a collar, and, *b*, a hames, constructed in any of the ordinary forms.

*c*, *c*, are broad braces, hooking onto the hames *b*, and running back and connecting with the breeching, *d*, by means of the ropes, *q*, *q*, and the pulleys *m*, *m*, *n*, *n*. It has a loop, *g*, for the retention of the backband, *f*.

*d*, is a plain breeching strap, retained in its place by the peculiar arrangement of the ropes *q*, *q*, and the pulleys *m*, *m*, *n*, *n*. On the right side the strap, *d*, has a loop which embraces a corresponding loop on the inside of the trace, *e*, which admits of a free movement of these parts in relation to each other, as the harness is adjusted, or removed from the horse. On the left side, the breeching, *d*, is connected with the trace, *e*, by means of a short strap, sewed firmly to each.

*e*, *e*, are two traces running the entire length of the horse. The forward end of the right trace, *e*, is connected with the windlass, M, by means of a rope, *u*. But the forward end of the left trace *e*, is connected with the post E, by a link and hook. The traces *e*, *e*, have loops *h*, *h*, near their forward ends for the passage of the ropes *o*, *o*. Near the flank of the horse, the traces *e*, *e*, are connected with the apron *p*, by means of the strap and buckle *j*. At the rear they are connected with the tail lever K by the ropes, *t*, *t*.

*f* is a backband retained in its proper place by the loops *g*, *g*, upon the traces, *c*, *c*; and connected with the breeching *d*, by means of the links and cords, *l*, *l*.

*i*, is a broad belly-band or girth, passing behind the traces, *e*, *e*, and *e*, *e*, and connected with the lever D, by the ropes, *r*, *r*, *k*, (Fig. 4) is a strap passing in front of the horse's thighs, and embracing the cords, *l*, *l*, on each side.

*l*, *l*, are ropes with hooks and links, connected with the backband, *f*, passing down under the pulleys, *v*, *v*, up through the loops of the strap, *k*, behind the traces, *e*, *e*, and connected with the breeching *d*.

*m*, *m*, *n*, *n*, are pulleys for the ropes, *q*, *q*. Their relation to each other and to the other parts is such that the weight of the horse confines the breeching, *d*, to the traces, *c*, *c*.



5 *o, o*, are two ropes connecting with the hames, *b*, by the ties and rings. They pass down through the loops, *h, h*, on traces, *e, e*, thence under these traces and forward; they connect with each other, and are coiled upon the windlass *L*, as one rope. The design of this arrangement is to prevent the horse from moving backward.

10 *p*, is an apron of heavy leather, retained in a horizontal position transversely, under the horse's flank by the straps and buckles *j, j*, which connect it with, *e, e*, on each side of the horse, and by staples, *w, w*, which are firmly driven in the floor.

15 *q, q, r, r*, are a set of ropes, running over the lever *D*, and connected with the harness, as already shown. By means of their combination with the harness, the lever *D*, the pulleys, *G, G, H*, the rope *U*, and the windlass *I*, the horse is lifted as much as desirable.

20 *S*, is a strap which in combination with the treadle *P*, is used for confining the horse's foot to the movable stake *O*, during the process of clenching.

*t, t*, are rope tugs or braces which connect the traces, *e, e*, with the tail lever or singletree *K*.

30 *u*, is a rope connecting the trace *e*, on the right side, with the windlass *M*.

*v, v*, are pulleys for the passage of the rope parts of *l, l*; they are retained by the rope *x* running to the staple, *w*. The nature of the combination of the parts *f, l, l, v, v, k*, is such, that as the horse attempts to raise his hind parts, the breeching *d*, is drawn down by the tension of the parts, *l, l*, under pulleys *v, v*, occasioned by raising the backband, *f*. This contrivance prevents the 40 breeching *d*, from rising up under the horse's tail from the struggling of the animal, as it otherwise would.

45 *y, y*, are two spreaders, to keep the ropes *q, q*, and *r, r* at proper distances apart. *z*, is a swing for the feet, to be used while driving on the shoes.

The harness is adjusted in the following manner. The horse is brought as nearly to the position shown in the drawing as convenient, the left trace, *e*, being already secured to the post, *E*, in the manner hereto-

fore shown. The right trace, *e*, is now brought around upon the right side of the horse. The rope, *u*, can now be attached to the windlass, *M*, and by a few turns of said 55 windlass the horse is brought *volens volens* to his proper place. The ropes, *o, o*, must now be connected with the hames, *b*, and brought to a proper tension by the windlass, *L*. The horse is now secure and the remainder of the harness can be adjusted without difficulty. 60

It may be observed that this harness not only sustains a part, or all of the weight of the horse when desirable, but it also confines him in such a manner by the counteraction of its parts, that he is unable to struggle, or cause any serious inconvenience to the shoer. 65

What I claim as my invention and desire 70 to secure by Letters Patent, is—

1. The combination of windlass *M*, with the braces, *e, e*, the tugs, *t, t*, and tail lever or singletree, *k*, these, or their equivalents, by means of which the horse is brought to 75 his place, and secured from lateral motion, substantially as set forth.

2. I claim the combination of the windlass *L*, with the ropes, *o, o*, and the hames, *b*, these or equivalents, by means of which 80 the horse is prevented from rearing, or moving backward, in substance as set forth.

3. I claim the combination of the cords *q, q*, with the pulleys, *m, m, n, n*, the breeching, *d*, and the braces, *c, c* such an arrangement of the parts, that the breeching, *d*, is 85 firmly held in its place by the weight of the horse, substantially as indicated.

4. I claim the combination of the backband, *f*, with the part, *l*, the pulley, *v*, the 90 rope, *x*, and the breeching, *d*, these or equivalents, by means of which, the horse is prevented from raising his hinder parts, and the breeching, *d*, is prevented from rising up.

5. I also claim the sliding bar, 2, by which 95 the horse is prevented from pulling his foot away while the front shoes are being driven on, substantially as represented.

WILLIAM P. THOMAS.

Signed in presence of—

JOHN FINLEY,

GEO. TAYLOR.