

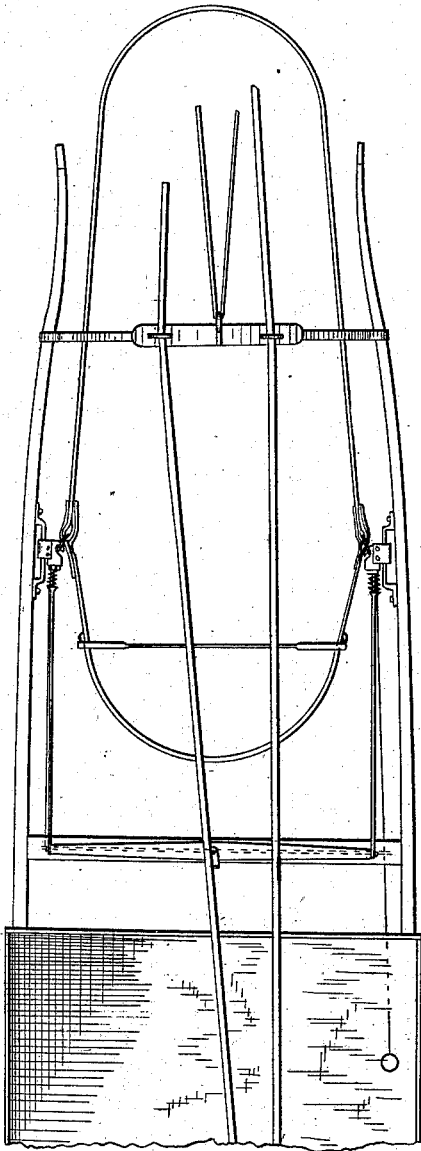
(No Model.)

W. S. MARTIN.  
HORSE DETACHER.

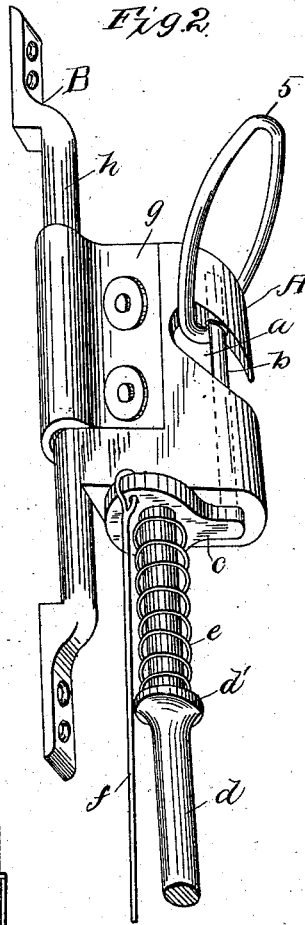
No. 288,464.

Patented Nov. 13, 1883.

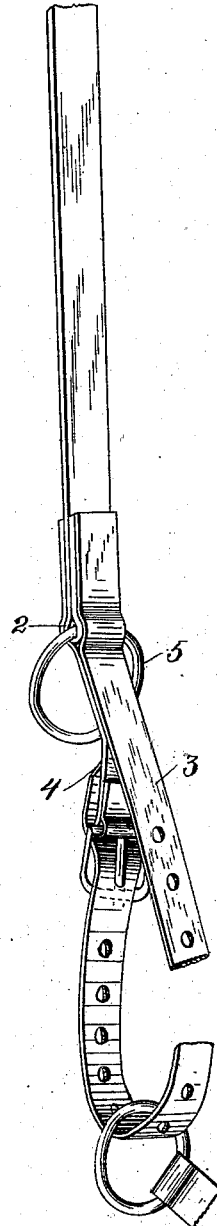
*Fig 1*



*Fig 2*



*Fig 3*



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# UNITED STATES PATENT OFFICE.

W. SMITH MARTIN, OF GEORGETOWN, SOUTH CAROLINA.

## HORSE-DETACHER.

SPECIFICATION forming part of Letters Patent No. 288,464, dated November 13, 1883.

Application filed August 7, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, W. SMITH MARTIN, of Georgetown, in the county of Georgetown and State of South Carolina, have invented certain new and useful Improvements in Attaching and Detaching Devices for Horses; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to an improvement in horse-detaching apparatus, and has for its object to provide a device for detachably connecting the harness to the shafts and whiffletree in such a manner that all the parts necessarily attached can be simultaneously released.

To this end my invention consists of a connected trace and holdback-strap adapted to be used in connection with a metal block having a pin so arranged on the shaft as to receive a ring carried by and fixed to the joint of the trace and holdback-strap, and hold the said trace and holdback-strap until released, and in connecting and operating mechanism, all as hereinafter fully set forth and claimed.

In the accompanying drawings, Figure 1 represents a plan view of my invention as applied. Fig. 2 shows the metal block having the pin for holding the trace and holdback and operating devices. Fig. 3 shows my improved holdback and trace.

In the drawings, A represents metal blocks, one of which is placed on the inside of each shaft, about the middle thereof. The block is formed, as shown in the drawings, with a sunken part for the reception of the connection between it and the shaft, and with the notch *a*, across which is the pin *b*. The notch in this block is made slanting backwardly, so as to bring the strain of the pull on the block instead of on the pin, as it would otherwise be. The pin *b* is inserted through holes provided therefor—one on each side of the notch in the block A—and extends across such notch, as shown. Integrally cast with this pin is a projection, *c*, at right angles thereto, which extends inwardly along

the back end of block A, to where it is held in place by the rod *d*, on which it slides. The rods *d* extend from the blocks A back to the ends of the whiffletree, where they are secured by screws, which pass through them and into the wood a suitable distance. The rod has, a short distance from the block A, a shoulder, *d'*, against which bears a spring, *e*, the other end of which bears on the right-angle projection *c*, and thus holds the pin *b* in place.

Connected to the projection *c* at any convenient point is a wire rod, *f*, for the purpose of drawing back the pin *b* from the vehicle. This wire rod extends back to any convenient point for grasping, and is provided with a ring, operating-lever, or the like.

B is a bracket, made preferably in the form shown—that is, with a round central portion and with flattened ends—through which are holes for the reception of screws or other holding devices, by which it is secured to the inside of the shaft. One of these is placed on the inside of each shaft. The form of the bracket is such as to bring the central round portion, *h*, up off the shaft sufficiently to accommodate the connection *g*. This connection is made preferably of leather, for the reason that it is noiseless in sliding back and forth on the bracket B, and because leather wears longer than a metal connection. The connection is riveted to the block A, and is of a thickness to fit into the sunken part provided therefor in the block, so that the top of the leather is flush with the face of the block.

When the horse is in motion, the block slides back and forth with the alternate moving of the front legs of the animal, and thus is obviated the jar to the shoulders of the horse that would result from a rigid connection.

In Fig. 3 of the drawings is shown my improved combined trace and holdback. The trace 1 is made as ordinarily, except that it is just half the usual length, the rod *d* forming the other half. Connected to the back end of the trace, at the point 2, are the straps 3 and 4, one of which is provided with a buckle for holding the end of its fellow. By this means the usual connection is made with the ring in the breeching provided to receive the holdback-strap. At the joint of the trace and hold-

back is secured a ring, 5, for insertion into the notch *a*, and which is held therein by the spring *e*.

In order to detach a running horse from a vehicle, the pin is drawn back by means of the wire *f*, thus leaving the notch open, after which sufficient strength is exerted on the reins to pull the vehicle close up to the horse. This will cause a pull on the holdback sufficient to remove the ring from the notch and leave the harness entirely free. If, however, the vehicle be too heavy to be pulled forward by the reins, simply pulling out the pins will in most cases effect a release; as the motion of the horse is sufficient to shake the ring from the open notch.

Having thus described my invention, what I claim is—

1. In a horse-detaching apparatus, the combination of blocks secured to the shafts by noiseless connections in such a way as to admit of their sliding back and forth with the motion of the horse, and provided with notches in which are adapted to be detachably secured combined traces and holdbacks, and rigid rods for connecting the said blocks and the whiffletree, substantially as described.

2. In a horse-detaching apparatus, the combination of blocks secured to the inside of shafts by noiseless connections in such a way as to permit of their sliding back and forth with the motion of the horse, and provided

with a slanting notch, across which is a sliding pin, adapted for the reception of a combined trace and holdback, rigid bars for connecting the blocks to the whiffletree, and means for withdrawing the pins from the vehicle.

3. In a horse-detaching apparatus, the combination of the brackets B, blocks A, having slanting notches, for the purpose described, connections *g*, rods *d*, pin *b*, and combined traces and holdbacks, substantially as described.

4. In a horse-detaching apparatus, the combination of a shaft, bracket B, block A, notched as described, leather connection *g*, rod *d*, pin *b*, having projection *c*, wire *f*, spring *e*, and combined trace and holdback, all as set forth.

5. In a horse-detaching apparatus, the combination of a shaft, bracket B, block A, notched as described, leather connections *g*, rod *d*, having collar *d'*, for the purpose set forth, pin *b*, having projection *c*, adapted for the reception of the wire *f*, and a combined trace and holdback, substantially as described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

W. SMITH MARTIN.

Witnesses:

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DAVID H. MEAD.