(No Model.)

O. P. LETCHWORTH.

HORSE COLLAR FASTENER.

No. 453,786. Patented June 9, 1891.

Fig. 1.

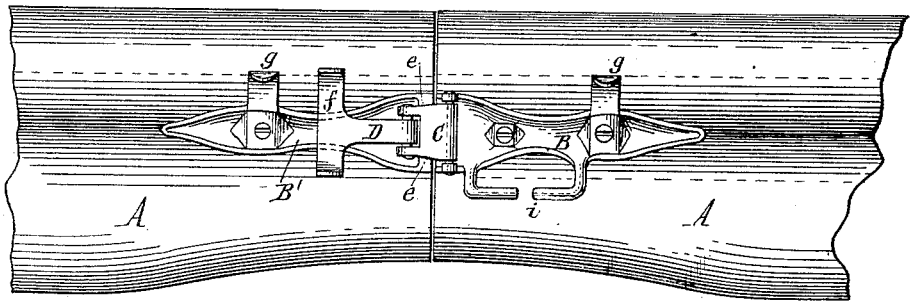


Fig. 2.

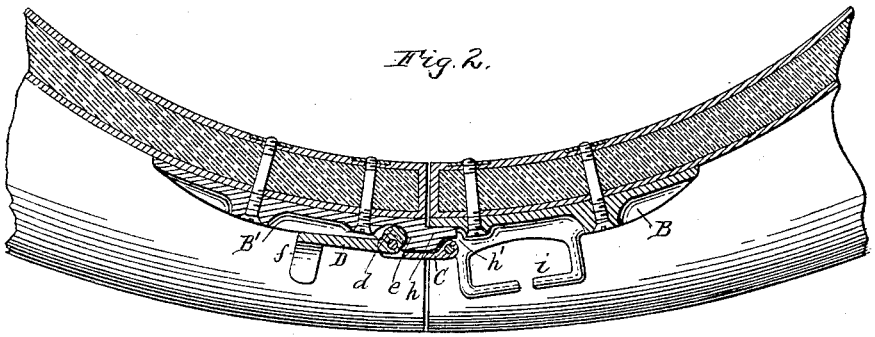


Fig. 4.

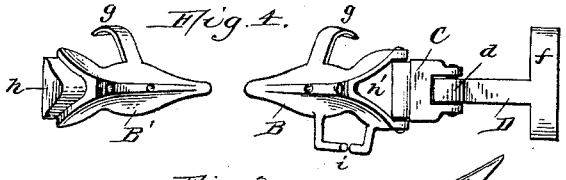
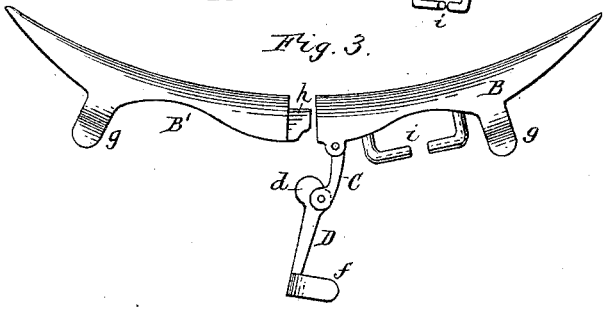


Fig. 3.



Witnesses:
Emil Neuhart.
Theo. L. Popp.

Ogden P. Letchworth, Inventor.
By Wilhelm Bonn & Co.
Attorneys.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

OGDEN P. LETCHWORTH, OF BUFFALO, NEW YORK.

HORSE-COLLAR FASTENER.

SPECIFICATION forming part of Letters Patent No. 453,786, dated June 9, 1891.

Application filed July 1, 1890. Serial No. 357,366. (No model.)

To all whom it may concern:

Be it known that I, OGDEN P. LETCHWORTH, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented a new and useful Improvement in Horse-Collar Fasteners, of which the following is a specification.

My invention relates to the couplings or fastenings which are employed for connecting together the separable ends of divided horse-collars; and the object of the invention is the production of a cheap and simple fastening which permits the ends of the horse-collar to be readily connected and disconnected.

In the accompanying drawings, Figure 1 is a fragmentary bottom view of a horse-collar provided with my improved fastening. Fig. 2 is a longitudinal section thereof. Fig. 3 is a side view of the parts of the fastening detached from the collar. Fig. 4 is a detached view of the parts of the fastening viewed from the side opposite to that shown in Fig. 1.

Like letters of reference refer to like parts in the several figures.

A A represent the adjacent ends of the horse-collar, and B B′ are the coupling-plates, secured, respectively, to the end portions of the collar. These coupling-plates are preferably V-shaped in cross-section and seated in the cavity between the roll and the body of the collar.

C represents a connecting-link pivoted at its inner end to one of the coupling-plates, near the end thereof, and extending across the joint between the two plates when the same are fastened together. This connecting-link is pivoted to the coupling-plate by a transverse pin or bolt passing through perforated ears formed on the plate and a perforated knuckle formed at the inner end of the link, as shown.

D is a locking-lever pivoted at its inner end between two lugs or ears formed at the outer end of the connecting-link C. This lever is provided at its inner end with a cam *d*, which is adapted to engage behind a projecting rib or lug *e*, arranged at the end of the opposing coupling-plate, as clearly represented in Fig. 2. The inner side of this rib is preferably recesssed or undercut, as shown in said figure, to form a more secure seat for the cam of the locking-lever. The locking-lever is provided at its free end with a curved cross-bar *f*, which rests against the outer face of the coupling-plate when the cam is engaged in the recess of the rib *e*, and the locking-lever is held in this position by the hame-strap connecting the lower ends of the hames. The ends of the cross-bar *f* are bent outwardly to form hooks which embrace the edges of the hames and assist in holding the hames in place upon the collar and prevent it from being drawn over the roll of the collar by a forward pull on the hames. The coupling-plates are preferably provided with similar retaining-hooks *g*. One of the coupling-plates is provided at its outer end with a tenon or projection *h* and the other coupling-plate with a recess or seat *h′*, formed between the face of the plate and the knuckle of the link C, which recess receives said tenon. The two plates are firmly interlocked by the recess and tenon, thereby retaining the ends of the horse-collar in proper alignment.

i is a loop formed on one of the coupling-plates for holding the lower end of the martingale-strap when the ends of the collar are separated. The ends of the collar are united by bringing the same together and interlocking their tenon and recess, swinging the connecting-link across the joint between the coupling-plates by means of the locking-lever, so as to engage the cam of the lever behind the rib of the opposing coupling-plate, and then pressing the lever inwardly against the adjacent coupling-plate. In moving the locking-lever inwardly its cam is caused to draw the coupling-plates toward each other, thereby firmly connecting the plates together. When the hames are secured in place upon the collar, the strap connecting the lower ends of the hames holds the locking-lever in place and prevents the sections of the collar from being separated. The ends of the collar are readily separated by disconnecting the lower hame-straps and swinging the locking-lever with the connecting-link outwardly, as shown in Fig. 3.

I claim as my invention—

1. A horse-collar fastening consisting of a coupling-plate secured to one end of a horse-collar and provided with a transverse rib or projection, a coupling-plate secured to the opposing end of the horse-collar and provided with a connecting-link adapted to extend

across the joint between the plates, and a locking-lever pivoted to the outer end of said link and having a cam adapted to engage behind the transverse rib or projection of the opposing coupling-plate, substantially as set forth.

2. A horse-collar fastening consisting of a coupling-plate secured to one end of a horse-collar and provided with a tenon and a transverse rib or projection, a coupling-plate secured to the opposing end of the horse-collar and provided with a recess for receiving the tenon of the opposite coupling-plate, a link pivoted to the plate and adapted to extend across the joint between the plates, and a locking-lever pivoted to the outer end of said link and having a cam adapted to engage behind the transverse lug of the opposing plate, substantially as set forth.

Witness my hand this 6th day of June, 1890.

OGDEN P. LETCHWORTH.

Witnesses:
EDWIN P. SEARS,
ALBERT F. WIEDRICH.