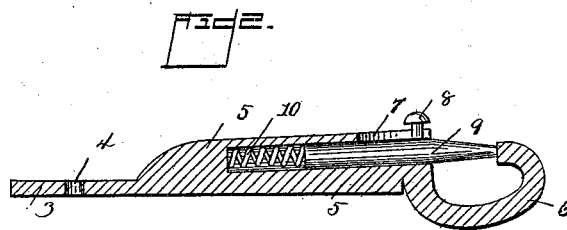
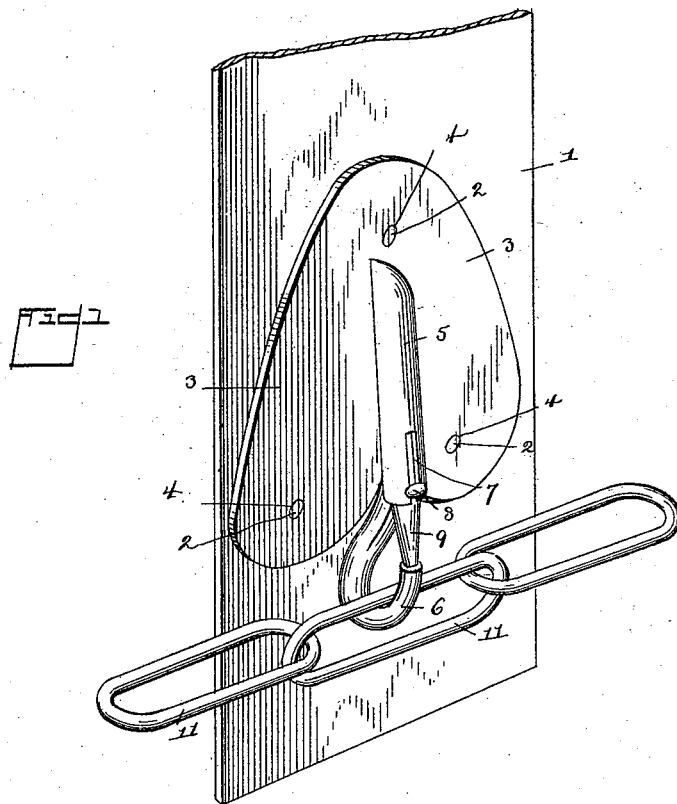


(No Model.)

T. B. & W. F. DORIS.
BACK BAND BUCKLE.

No. 490,643.

Patented Jan. 31, 1893.



Witnesses:

Chas. A. Ford.

W. S. Duval.

By their Attorneys,

C. A. Snow & Co.

Inventors

Thomas B. Doris.

William F. Doris.

UNITED STATES PATENT OFFICE.

THOMAS B. DORIS AND WILLIAM F. DORIS, OF PROVIDENCE, KENTUCKY.

BACK-BAND BUCKLE.

SPECIFICATION forming part of Letters Patent No. 490,643, dated January 31, 1893.

Application filed May 14, 1891. Serial No. 392,737. (No model.)

To all whom it may concern:

Be it known that we, THOMAS B. DORIS and WILLIAM F. DORIS, citizens of the United States, residing at Providence, in the county of Webster and State of Kentucky, have invented a new and useful Improvement in Back-Band Buckles, of which the following is a specification.

This invention relates to improvements in back-band buckles; and the objects in view are to provide a cheap and simple connection for connecting the back-bands of harnesses to the traces, and to so construct said connection as to leave nothing projecting from the same liable to engage with the adjacent trace of the harness of a companion horse.

Other objects and advantages of the invention will appear in the following description, and the novel features thereof will be particularly pointed out in the claims.

Referring to the drawings:—Figure 1 is a perspective of a portion of a back band having a buckle constructed in accordance with our invention, the same being shown in connection with the trace. Fig. 2 is a vertical longitudinal section of the buckle.

Like numerals of reference indicate like parts in all the figures of the drawings.

1 designates the back-band, which is the ordinary construction, and to each end of the same there is secured by rivets 2 in this instance a heart shaped securing-plate 3, perforated as at 4 to receive the rivets. Upon the front face of the plate there is integrally formed a hollow bored rib 5, the lower end of which terminates in a forwardly disposed hook 6. The rib is provided for a portion of its length at its lower end with a slot 7, in which moves the knob or lug 8 of a bolt 9. The lower end of the bolt is adapted to abut against the end of the hook, and in rear of its knob or above the same is pressed upon by a coiled spring 10, which normally presses the bolt against the hook and closes the latter, said spring being located between the upper end of the hollow rib and the upper end of the bolt, as will readily be understood. The rib or enlargement 5 has the bore thereof obliquely arranged and extending outward at its lower end away from the plate and

consequently the bolt 9 is also arranged in a similar manner. This construction is for the purpose of enlarging the hook 6 as much as possible, which would be very small and impracticable if the bolt engaged the same in a straight vertical plane. This arrangement is also necessary in view of the remaining structure of the device.

11 designates an ordinary chain-trace, with which the hook is designed to engage, said engagement being effected by retracting the bolt within the bore of the rib against the tendency of the spring, passing the hook through a convenient length of the chain, and liberating the bolt. It will be obvious that in this manner we provide a most secure connection, one that may be easily and instantly made and unmade, and which is absolutely free from any projections liable to engage with the adjacent trace chain or other portions of a companion harness.

Having described our invention, what we claim is:—

A back band buckle consisting of a flat heart-shaped base plate 3 having a lower central indentation and a central enlargement extending vertically over a portion of the said plate, the said enlargement having an outer inclined surface and provided with an inclined opening extending partially the length thereof in which a spring-actuated bolt is mounted, and a hook 6 extending downwardly from the lower central indentation of the plate and having the free end turned upward to be engaged by the outer end of said bolt, said hook being integral with the stock of the plate and forming a part thereof, being rounded and bent into form and having the greater portion thereof in rear of the vertical plane of the back side of the plate, substantially as described.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in presence of two witnesses.

THOMAS B. DORIS.
WILLIAM F. DORIS.

Witnesses:

GEORGE W. BLACKWELL,
JAMES G. GIST.