(No Model.)

R. T. LOMBARD.

HORSE COLLAR FASTENING.

No. 376,894. Patented Jan. 24, 1888.

Fig. 1.

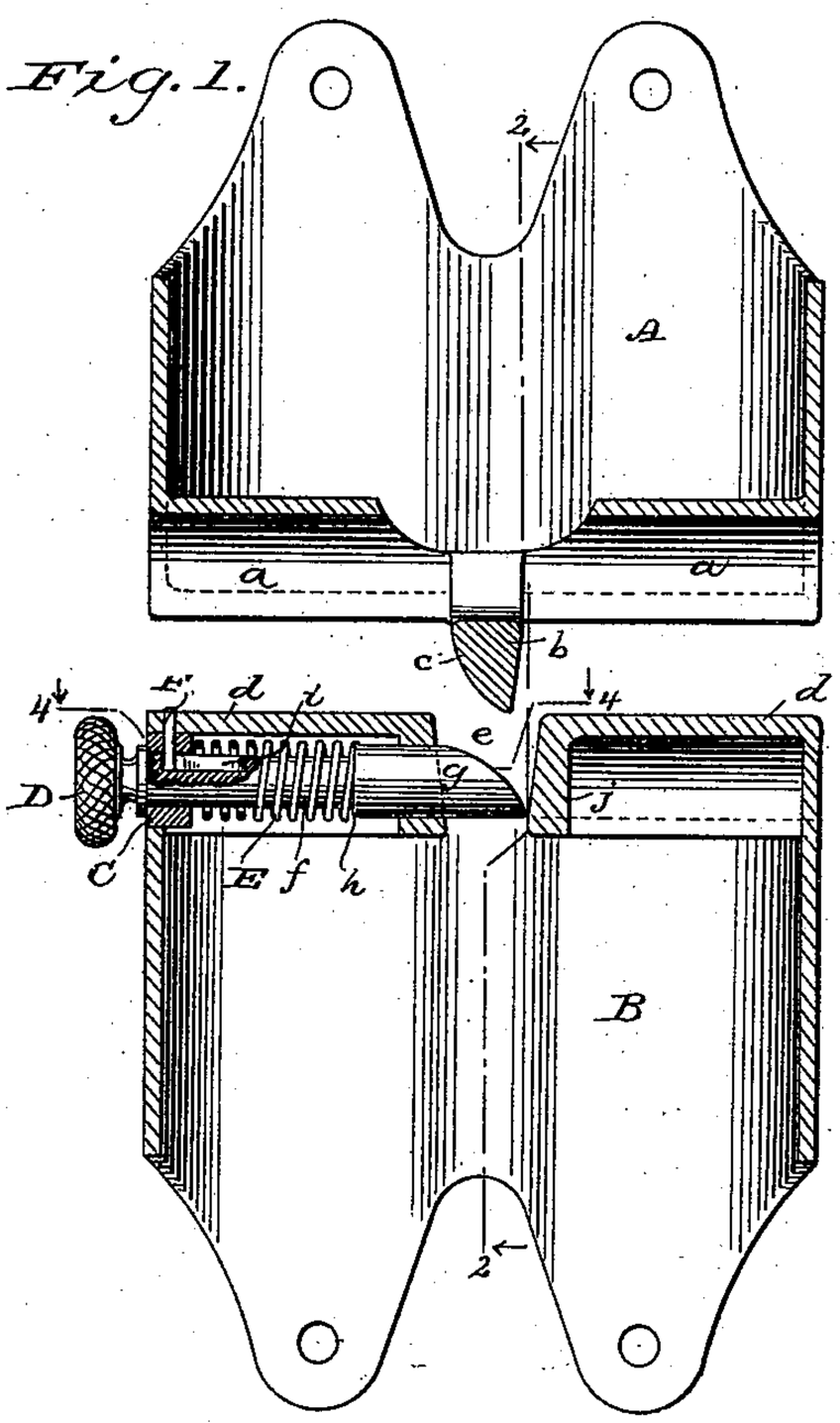

Fig. 2.

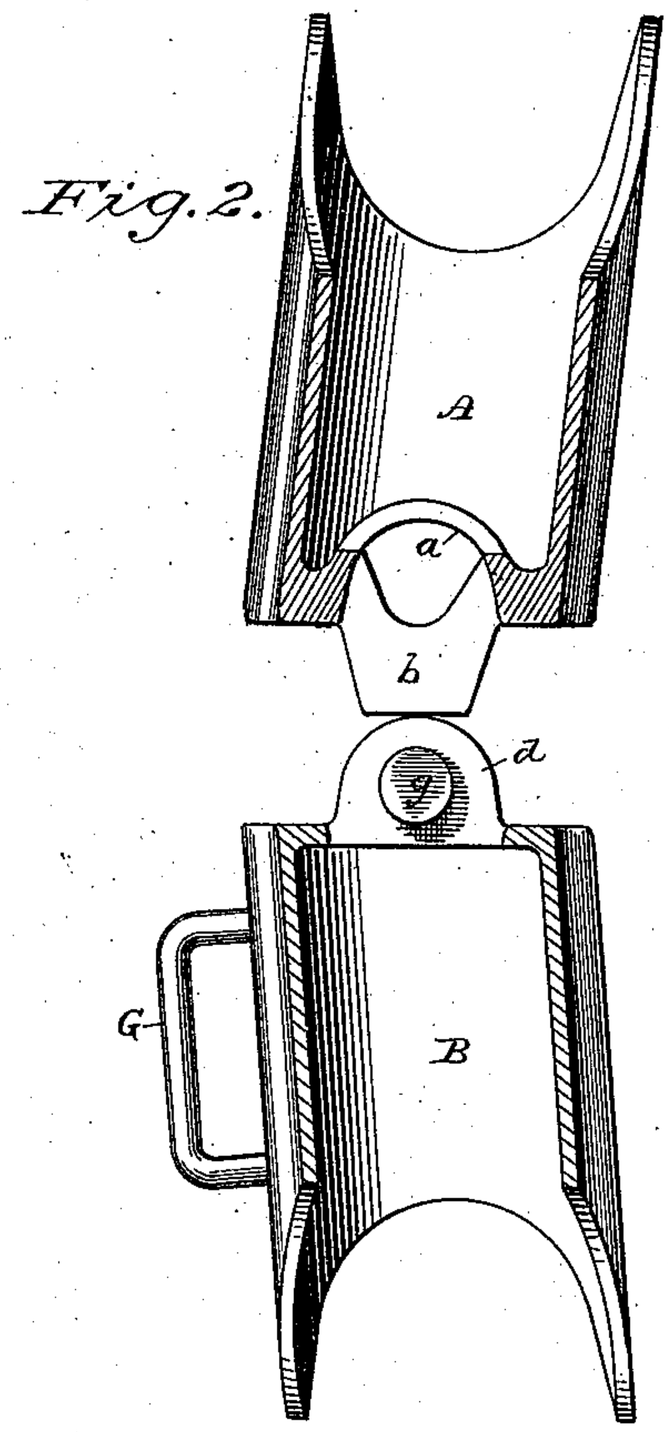

Fig. 3.

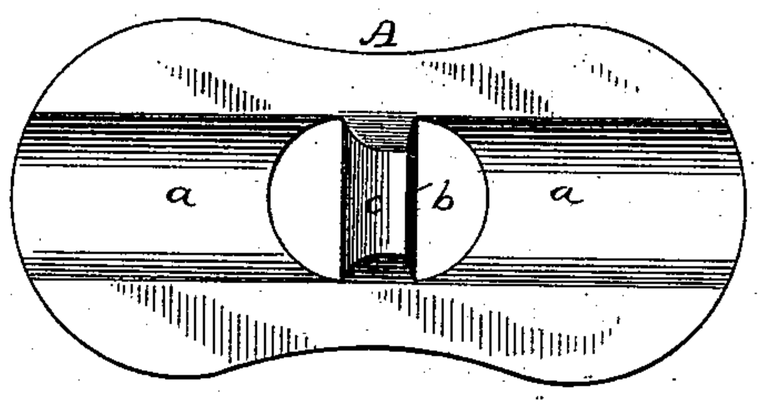

Fig. 4.

Witnesses
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UNITED STATES PATENT OFFICE.

ROBERT T. LOMBARD, OF RACINE, WISCONSIN.

HORSE-COLLAR FASTENING.

SPECIFICATION forming part of Letters Patent No. 376,894, dated January 24, 1888.

Application filed August 13, 1887. Serial No. 246,826. (No model.)

To all whom it may concern:

Be it known that I, ROBERT T. LOMBARD, of Racine, in the county of Racine, and in the State of Wisconsin, have invented certain new and useful Improvements in Horse-Collar Fasteners; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to horse-collar-fasteners; and it consists in certain peculiarities of construction and combination of parts, to be hereinafter described with reference to the accompanying drawings, and subsequently claimed.

In the drawings, Figure 1 represents a horizontal section of a horse-collar fastener constructed according to my invention; Fig. 2, a section taken on line 2 2, Fig. 1; Fig. 3, a face view of one of the fastener-sections; and Fig. 4, a section taken on line 4 4, Fig. 1.

Referring by letter to the drawings, A B represent two metallic sections that are designed to be secured in any suitable manner to the lower ends of horse-collar sections.

The section A of my fastener has its face provided with a longitudinal concave depression, *a*, and a central transverse eye-piece, *b*, that projects outward and has one of its sides beveled, as best illustrated at *c*, Figs. 1 and 3.

The other section, B, of my fastener has its face provided with convex elevations *d*, that are designed to fit in the concave depression *a* in the face of the section A, and between these elevations is left an open space, *e*, to permit the passage of the eye-piece *b*, belonging to said section A.

The outer convex elevation, *d*, on the face of the fastener-section B has its ends perforated, and one of these perforations has a bushing, C, inserted therein, said bushing serving as a bearing for the reduced portion *f* of a bolt, D, that has its enlarged inner end, *g*, beveled in opposition to the bevel *c* on the eye-piece *b* of the fastener-section A. Arranged on the reduced portion *f* of the bolt D, between its annular shoulder *h* and the bushing D, is a spiral spring, E, and said bolt is also provided with a groove, *i*, that engages a stop-pin, F, the latter being passed through the adjacent outer elevation, *d*, and said bushing.

The spring E serves to keep the bolt D normally against the closed end *j* of opposing elevation *d* on the face of the fastener-section B, and the stop-pin F acts to limit the movement of said bolt in either direction.

As shown in the drawings, the fastener-section B is provided with a staple, G, for a martingale-strap, and, if found desirable, I may secure another such staple to the section A.

In the operation of my invention, when the fastener-sections are brought together the eye-piece *b* on the section A will enter the space *e* between the convex elevations *d* on the section B and automatically force back the bolt D against the resistance of the spring E, and the latter will in turn cause the bolt to shoot forward and engage the eye-piece after the bevels *c g* on said bolt and eye-piece have passed each other.

To disconnect the fastener-sections, the bolt D is drawn back as far as the stop-pin F will permit and said sections simply moved apart.

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

1. In a horse-collar fastener, the combination of two opposing sections, one of which has a longitudinal concave depression in its face and a central transverse eye-piece outwardly projecting therefrom, the other section provided upon its face with convex elevations that fit said concave depression, and an open space between these depressions for the passage of the eye-piece, and a suitable bolt arranged in the latter section to engage said eye-piece, substantially as set forth.

2. In a horse-collar fastener, the combination of two opposing sections, one of which has a longitudinal concave depression in its face and a central transverse eye-piece outwardly projecting therefrom and beveled upon one of its sides, the other section provided upon its face with convex elevations that fit said concave depression, and an open space between these elevations for the passage of the eye-piece, and a suitable bolt beveled upon its inner end in opposition to the bevel on said eye-piece and arranged to engage the latter, substantially as set forth.

3. In a horse-collar fastener, the combination of the section A, having the concave depression *a* and eye-piece *b*, the section B, provided with the convex elevations *d* and open

space *e*, the grooved bolt D, spring E, and stop-pin F, substantially as set forth.

4. In a horse-collar fastener, the combination of the section A, having the concave depression *a* and eye-piece *b*, the section B, provided with the convex elevations *d* and open space *e*, the bushing C, grooved bolt D, spring E, and stop-pin F, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand, at Kalamazoo, in the county of Kalamazoo and State of Michigan, in the presence of two witnesses.

ROBERT T. LOMBARD.

Witnesses:

FRED H. BRITTON,

F. F. GIDDINGS.