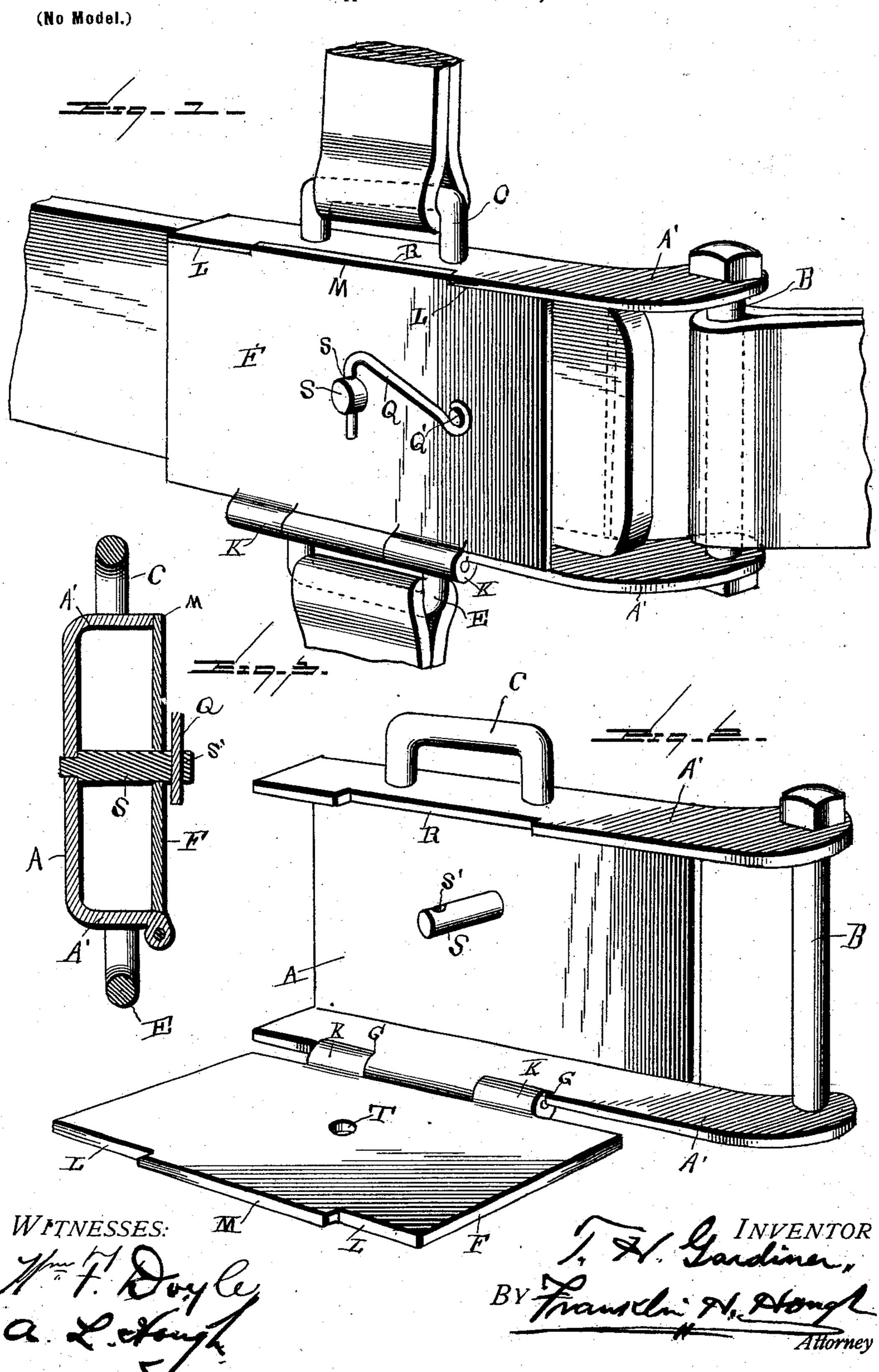
T. H. GARDINER. TUG BUCKLE.

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United States Patent Office.

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TUG-BUCKLE.

SPECIFICATION forming part of Letters Patent No. 712,291, dated October 28, 1902.

Application filed February 6, 1902. Serial No. 92,833. (No model.)

To all whom it may concern:

Be it known that I, THOMAS H. GARDINER, a citizen of Great Britain, residing at Hoffman, in the county of Park and State of Montana, have invented certain new and useful Improvements in Tug-Buckles; and I do declare the following to be a full, clear, and exact description of the invention, such as 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.

This invention relates to new and useful improvements in tug-buckles, and especially to a buckle to which a hame-strap is designed to be attached at one end and supported by a back-band and held to the body by means of a girth-band, said buckle being provided with an integral lug or pin adapted for engagement with the tug and a hinged plate with aperture therein, through which aperture the end of the pin passes when the tug is adjusted in place, and the provision of a hinged keeper mounted on the plate and provided to lock the plate from being opened by passing the end of said keeper through the aperture in the end of the lug or pin.

o The invention consists, further, of various features of construction and combination of parts, as will be hereinafter more fully described and then specifically defined in the appended claim.

I have clearly illustrated my invention in the accompanying drawings, in which similar letters of reference indicate like parts in the several views, in which—

Figure 1 is a perspective view of the tug-40 plate, showing a tug held thereto. Fig. 2 is a perspective view showing the buckle open. Fig. 3 is a cross-sectional view through the buckle with its hinged part shown in a locked relation.

Reference now being had to the details of the drawings by letter, A designates the casing of the buckle, having flanged longitudinal edges A', the forward ends of said flanged portions being slightly curved and carrying a rod B, to which a strap is designed to be fastened,

which strap connects with the hame. On the upper of said flanges is a loop C, to which one end of a back-band is adapted to be attached, and on the under flange is a loop E, to which one end of the belly-band of a har- 55 ness is designed to be attached. To the edge of one of said flanges, preferably the under one, is hinged a plate F, the edge of said flange to which the plate is hinged being recessed, as at G and G, for the reception of the hinged 60 lugs K of the plate, so that as the plate is closed over the casing the upper edge of said plate and the edges of the flanges will be in the same plane. The free edge of said hinged plate is cut away, as at L, near its ends, and 65 the projecting portion M is designed to be seated in the recessed or cut-away portion R in the edge of the upper flange of the casing.

Rising from the bottom of the casing is a lug or pin S, which is apertured, as at S', near 70 its end, and when said plate, which is hinged to the side of the casing, is closed said pin or lug is adapted to pass through the aperture T in the hinged plate. When the hinged plate is closed, in the position shown in Fig. 75 1 of the drawings, the apertured end of said pin will project through said plate sufficiently to receive the end of the keeper Q, which in the present instance is a pivoted hook mounted on a pivotal pin Q', carried by said hinged 80 plate.

In applying a tug to a harness equipped with a buckle embodying my invention the tug is placed in the casing, with the pin or lug rising from the bottom of the casing, 85 passed through one of the perforations of the tug, after which the hinged plate is closed over the outer face of the tug, the end of said pin with apertured end projecting through the aperture in said plate. As the plate 90 closes over the tug the projecting portion along the longitudinal edge of the plate when the latter is closed seats in the recessed portion of the flange, thus securely holding the plate, as well as the pin, rigidly in place 95 against excessive strain that may be upon the tug. After the plate is closed the end of the keeper is inserted through the aperture at the end of the pin which projects beyond the outer face of the plate, and the hinged 100 plate will be securely held in a locked relation. The tug may be easily and quickly taken up or lengthened out by simply removing the keeper from the end of said pin or lug, thus allowing the hinged plate to be swung open, after which the tug may be removed from the casing.

Having thus described my invention, what I claim to be new, and desire to secure by Let-

ro ters Patent, is—

A tug-buckle comprising a casing having the opposite longitudinal edges turned at right angles to and projecting beyond the end of the bottom portion thereof, and slightly curved, a bolt carried in said curved ends and adapted for attachment to a strap, a hinged plate mounted on one of said longitudinal

edges and having its free longitudinal edge cut away forming a projecting portion, and adapted to seat in a recess in the opposite 20 flanged edge of the casing and prevent the longitudinal play of the free edge of said plate, an integral lug rising from the bottom of the casing, passing through an aperture in said plate, and a hinged keeper carried by 25 the plate and adapted to engage an aperture in said lug, as set forth.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

THOMAS H. GARDINER.

Witnesses:

FRED POITRAS, THOS. POPWORTH.