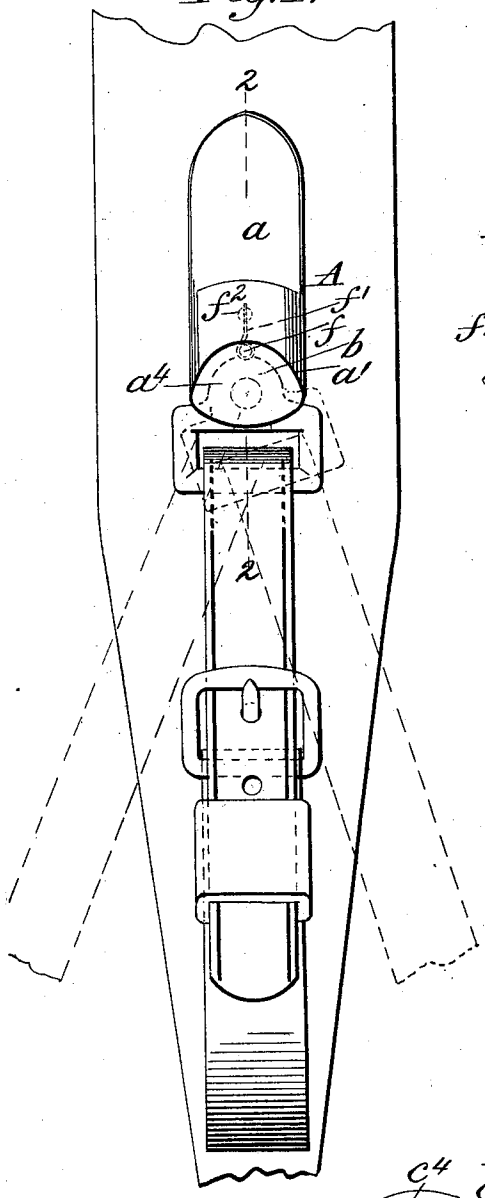
(No Model.)

A. F. DIETZ.

HARNESS TUG SUPPORT.

No. 588,406. Patented Aug. 17, 1897.

Fig. 1.



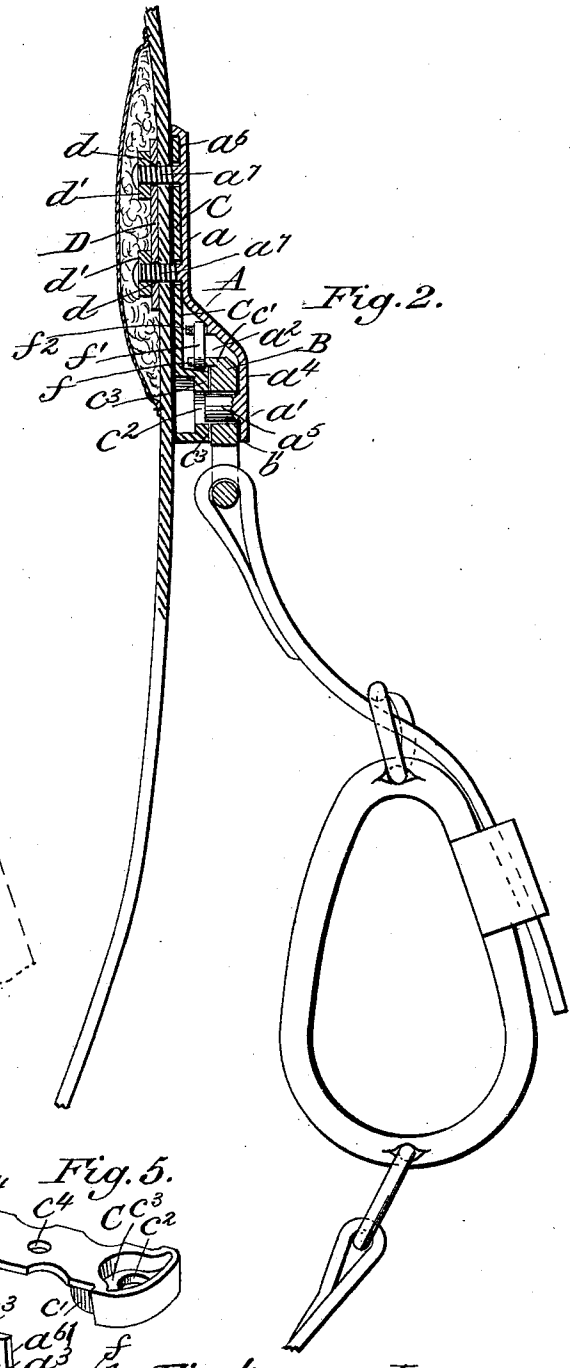


Fig. 2.

Fig. 5.

Fig. 3.

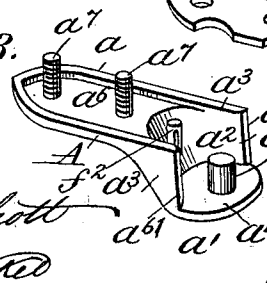


Fig. 4.

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UNITED STATES PATENT OFFICE.

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HARNESS-TUG SUPPORT.

SPECIFICATION forming part of Letters Patent No. 588,406, dated August 17, 1897.

Application filed March 26, 1897. Serial No. 629,433. (No model.)

To all whom it may concern:

Be it known that I, ALANSON F. DIETZ, a citizen of the United States, and a resident of Altamont, in the county of Albany and State of New York, have invented certain new and useful Improvements in Harness-Tugs, of which the following is a full, clear, and exact description, such as will enable those skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

The invention relates to improvements in harness-tugs, and more particularly to that class which are used in securing thill-loops to saddles or back-bands.

It has for its object the provision of a device whereby a thill-loop can be secured directly to a saddle or back-band without the use of the supporting-straps ordinarily employed for the purpose. The use of these straps, which generally lead from the top of the saddle, is objectionable, owing to the excessive play they allow the thill-loops. By reason of this excessive play the saddle is often injured by the constant chafing of the thill-loops against the same. Furthermore, the straps do not keep their proper positions relatively to the saddle and carry the thill-loops on one side or the other and not directly against the saddle, as they should do under ordinary circumstances.

It is the purpose of the invention in the present instance to provide a tug for securing the thill-loop directly to the saddle or back-band, as the case may be, which will prevent the loop from chafing the saddle to a considerable extent and at the same time allow sufficient play to accommodate the movement of the thill, and which will also carry the thill-loop against the saddle under ordinary circumstances.

The invention in the present instance consists in the novel construction, combination, and arrangement of parts, such as will be hereinafter fully described, pointed out in the appended claims, and illustrated in the accompanying drawings.

In the accompanying drawings, in which similar letters of reference designate corresponding parts, Figure 1 is a side elevation of a section of harness embodying the invention. Fig. 2 is a sectional view on the line 2 2 of Fig. 1. Fig. 3 is a detail perspective view showing the casing of the tug. Fig. 4 is a similar view showing the strap-plate. Fig. 5 is a similar view showing the retaining-plate.

Referring to the drawings by letter, A designates the casing of the tug, B the strap-plate, and C the retaining-plate.

The casing A consists of the plate a and the cap a', integrally made. The preferred form for the exterior of the casing is that shown in the drawings. In the inner face of the cap a' a recess or socket a^2 is formed by the sides a^3 and the top plate a^4. The top plate a^4 of the cap is substantially circular in form and has projecting from the center of its inner face the pintle a^5.

The strap-plate B has a rounded portion b, adapted to enter the socket formed by the sides a^3 and the plate a^4 in the casing A. In this rounded portion an opening b' is formed, with which the pintle a^5 registers and thereby forms a hinged connection between the strap-plate and the casing. The edges a^6 of the casing are cut away to allow the strap-plate to move on its pivot.

The several parts of the device are secured in place by the retaining-plate C. The latter has projecting from its inner face the boss c', adapted to fit in the recess formed by the sides a^3 of the casing. This boss has an opening c^2, adapted to fit over the pintle a^5, and thereby holds the strap-plate in place, the latter moving between the surface c^3 of the boss and the top plate a^4 of the casing.

The plate a of the casing has a shallow recess a^6 formed in its inner face, in which is seated the retaining-plate. The latter is held in place by the screw-threaded bolts a^7 a^7, projecting from the inner face of the casing through the openings c^4 c^4 in the plate C.

The leather to which the tug is attached is clamped between the retaining-plate C and the plate D, provided with opening d d for the reception of the bolts a^7 a^7. The plates, casing, and leather are held together by the nuts d' d', turned on the bolts a^7 a^7. To prevent accidental displacement of the nuts, the ends of the bolts are cut off and they are headed down.

Suitable protection in the way of padding

is provided for preventing the nuts or bolt ends from injuring the side of the horse. This padding may be of any construction suitable in the premises.

A means is provided for preventing the rattling of the strap-plate in the casing. From the strap-plate a lug f projects and has wound thereon the end of the spring f'. The other end of the spring engages with a slotted pin f^2, projecting from the casing into the socket.

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

1. In a harness-tug, the combination of a casing having a socket formed therein, a pintle projecting from said casing into said socket, a strap-plate pivoted on said pintle, and a means for holding said plate and casing together.

2. In a harness-tug, the combination of a casing having a socket formed therein, a pintle projecting from said casing into said socket, a strap-plate pivoted on said pintle, and a retaining-plate covering said socket and holding said plate in place.

3. In a harness-tug, the combination of a casing formed of a plate and cap, said plate and cap having recesses formed therein, a pintle projecting from the top of said cap into the recess formed in the said cap, a strap-plate having a rounded portion adapted to fit in the recess formed in said cap and pivoted on said pintle, and a retaining-plate adapted to cover the said recesses and to hold said strap-plate in place.

4. In a harness-tug, the combination of a casing formed of a plate and cap, said plate and cap having recesses formed therein, a pintle projecting from the top of said cap into the recess formed in the said cap, a strap-plate having a rounded portion adapted to fit in the recess formed in the cap and pivoted on said pintle, and a retaining-plate adapted to cover said recesses and having a boss adapted to register with the recess formed in said cap and having an aperture therein adapted to engage with said pintle.

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

ALANSON F. DIETZ.

Witnesses:
JESSE P. LIVINGSTON,
DAVID M. STEINER.