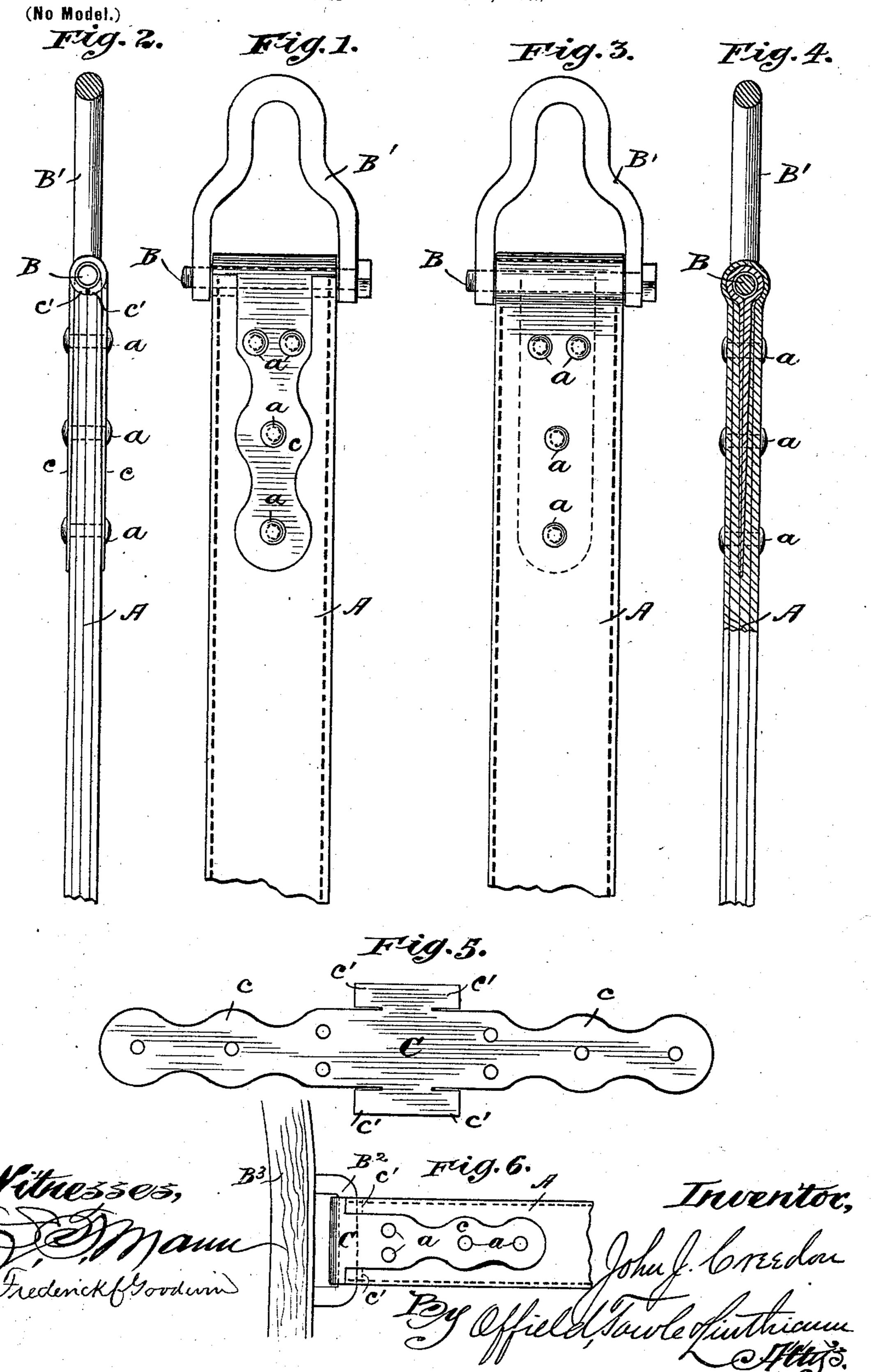
J. J. CREEDON. TRACE CONNECTION.

(Application filed June 18, 1897.)



United States Patent Office.

JOHN J. CREEDON, OF MOLINE, ILLINOIS, ASSIGNOR OF ONE-HALF TO HERBERT W. COOPER, OF SAME PLACE.

TRACE CONNECTION.

SPECIFICATION forming part of Letters Patent No. 617,499, dated January 10, 1899.

Application filed June 18, 1897. Serial No. 641,255. (No model.)

To all whom it may concern:

Be it known that I, JOHN J. CREEDON, of Moline, Illinois, have invented a certain new and useful Improvement in Traces and Simi-5 lar Connections, of which the following is a

specification.

This invention relates to hame-tug sections and similar connections, and has for its object to produce a simple and inexpensive con-10 struction whereby the wear upon the leather of the tug and the metal parts of the connection may be reduced and largely obviated; and to this end the invention consists in certain novel features, which I will now proceed 15 to describe and will then particularly point out in the claims.

In the accompanying drawings, Figure 1 is a plan view of a structure embodying my invention. Fig. 2 is an edge view of the same, 20 partly in section. Fig. 3 is a view similar to Fig. 1, showing a modified form of the device. Fig. 4 is a sectional view taken on the line 44 of Fig. 3. Fig. 5 is a plan view of the blank from which the clip is formed. Fig. 6 25 is a view showing the device employed in connection with a long-staple hame.

In the said drawings, A represents the tug, and B the bolt or cross-bar to which the tug is to be connected. In Figs. 1 to 4 I have 30 shown this part as the bolt of a shackle B', while in Fig. 6 it is shown as the cross-bar of a staple B² of a hame B³. The device is equally adapted for use in connection with a

bolt-hame.

35 C represents a clip formed from a blank such as is shown in Fig. 5 and having a body or central portion of greater width than the arms or jaws c. These enlarged portions are partly separated from the body by means of 40 cuts in line with the edges of the jaws, thereby forming wings or lugs c', four in number, located in pairs at the top and bottom of the bow or central portion of the clip. The clip is cut or stamped out of sheet-steel of uniform thickness, whereby it is rendered light and yet very strong.

In assembling the device the clip, being bent into U shape to bring its jaws or arms

into parallelism, is placed around the part B, and the wings or lugs c' are then bent or 50 closed around the said bolt or bar B by blows of a hammer or by other suitable means, so as to close behind the same in the manner shown more particularly in Fig. 2. The tug A is then inserted between the jaws c of the 55 clip C and there secured by rivets a or other suitable means. It will be seen that the lugs c' are when bent into their final position located between the end of the leather tug and the bolt or bar B and form abutments for the 60 tug, which prevent contact between the same and the bolt or bar and obviate the chafing and wearing of the tug and its consequent destruction. The clip also gives a longer bearing on the bolt by reason of the exten- 65 sion or increased width of the body at the bow or central portion of the clip and prevents the rocking of the clip on the bolt or bar and the consequent cutting of this latter and undue wear of the clip.

In the construction shown in Figs. 1, 2, and 6 the leather of the tug is embraced between the jaws of the clip, the clip being outside of the tug and exposed; but, if preferred, I may cover the clip with the leather, and such a 75 construction is shown in Figs. 3 and 4 and will be readily understood without detailed

description.

While I have described my invention as chiefly applicable to hame-tug sections, it is 80 obvious that the same may be used in other connections—as, for example, at the other end of the tug, where it is connected with the singletree.

I claim—

1. A hame-tug clip formed of a sheet-metal blank adapted to be doubled or folded upon itself to provide arms to embrace the tug and a loop to receive the bolt or staple, the central part of the blank being wider than the 90 extremities, and the marginal portions of said central part being partially severed from the body by incisions and forming free wings or lugs which are bent to embrace the bolt or staple above and below the body of the clip, 95 substantially as described.

2. The combination, with the tug and the bolt or staple to which it is connected, of a sheet-metal clip bent upon itself and having arms which embrace the tug and a loop to receive the bolt or staple, the central part of said clip being wider than the arms, and the marginal portions of said central part being partially severed from the blank and the free por-

tions or wings thus formed being bent around the bolt or staple above and below the body ro of the clip, substantially as described.

JOHN J. CREEDON.

Witnesses:
EVA STANTON,
SARAH T. STODDARD.