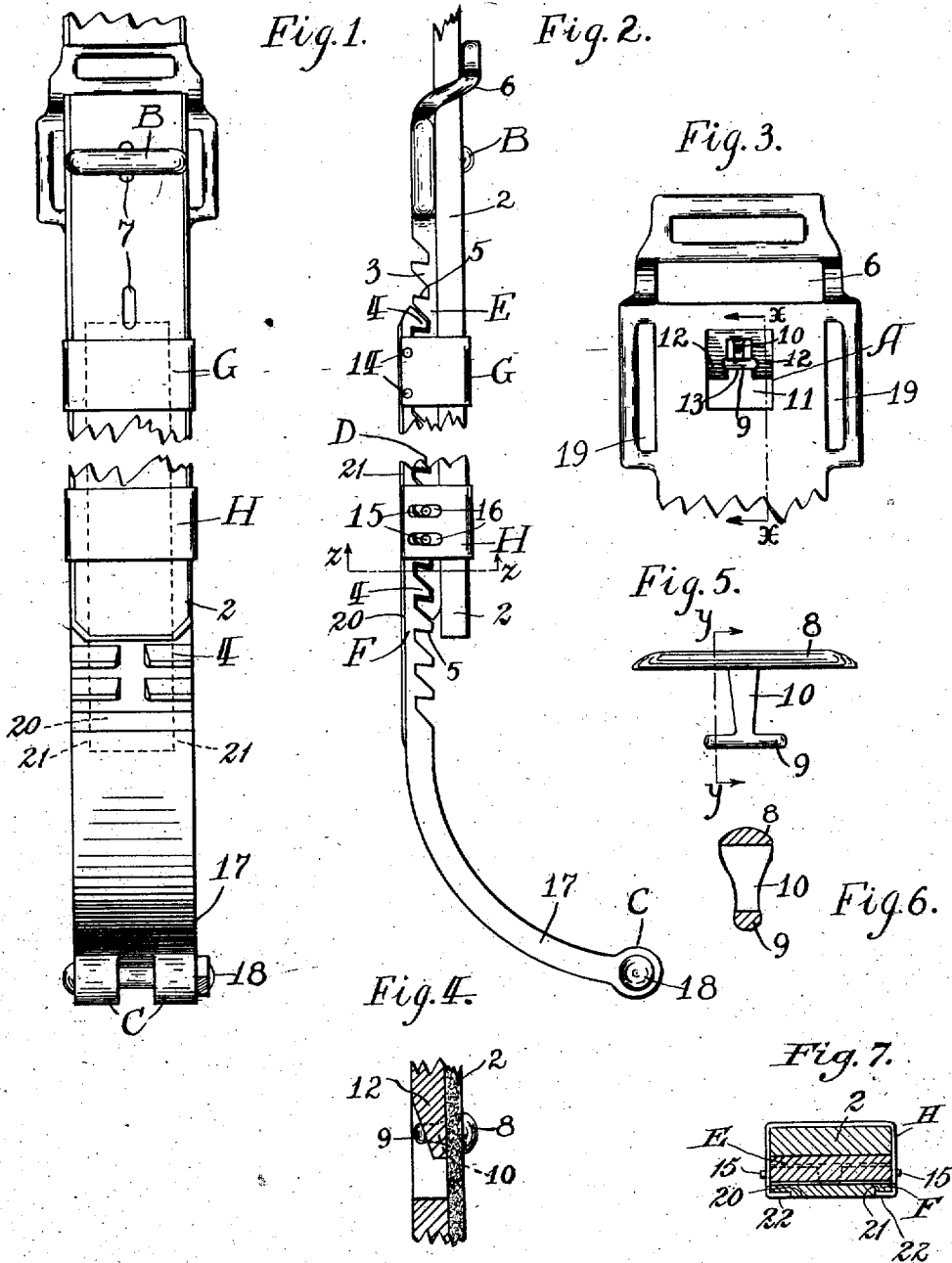


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HAME DRAFT LINK.
APPLICATION FILED DEC. 30, 1907.

973,338.

Patented Oct. 18, 1910.



Witnesses:
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UNITED STATES PATENT OFFICE.

JULIUS D. BRAINARD, OF ST. PAUL, MINNESOTA, ASSIGNOR OF ONE-HALF TO FREDERICK E. STIVERS, OF ST. PAUL, MINNESOTA; FREDERICK G. BRADBURY ADMINISTRATOR OF SAID JULIUS D. BRAINARD, DECEASED.

HAME DRAFT-LINK.

973,338.

Specification of Letters Patent.

Patented Oct. 18, 1910.

Application filed December 30, 1907. Serial No. 408,509.

To all whom it may concern:

Be it known that I, JULIUS D. BRAINARD, a citizen of the United States, residing at St. Paul, in the county of Ramsey and State of Minnesota, have invented a new and useful Improvement in Hame Draft-Links, of which the following is a specification.

My invention relates to the construction of a hame draft link which is particularly adapted for use for connecting a tug to the hame of harness.

The particular advantage by the employment of my invention is strength and durability.

Among its objects is a device of its kind which is simple and adjustable in length, the parts being so fastened that they will not loosen and separate when used.

Still another object is a durable connection for fastening the tug to the link.

In the accompanying drawings forming part of this specification, Figure 1 is a plan view of my invention, a portion between its ends being broken away; Fig. 2 is a side elevation of the portions illustrated in Fig. 1; Fig. 3 is an enlarged detail plan view of one end of the link looking at the side opposite that which appears in Fig. 1; Fig. 4 is a detail sectional view taken on the line X—X of Fig. 3; Fig. 5 is a side view of the stud, Fig. 6 is a sectional view taken on the line Y—Y of Fig. 5, and Fig. 7 is a section taken on the line Z—Z of Fig. 2.

My invention preferably is made out of metal, although it can be made out of any suitable material and in a general way consists of a buckle A to which the tug 2 is attached by means of the stud B, a hame attachment C and a shank D between said buckle and hame attachment. The shank D may be of any suitable construction and as shown is adjustable in length and made in two parts E and F in the form of racks, the former being carried by the buckle and the latter by the hame attachment. These racks have intermeshing teeth 3 and 4 which draw together, the biting edges 5 of which slant inwardly so as to prevent the racks separating when in engagement except by moving them endwise slightly toward each other and then spreading them. The teeth extend across the racks in a transverse direction.

The buckle A on the rack E is provided with a loop 6 through which the tug passes

lengthwise over the face of the shank. This tug has a series of longitudinally disposed elongated openings 7 through which the stud is passed into engagement with the buckle. The buckle is also provided with eyes 19 to which the straps of the back pad and belly band can be attached.

The stud is provided with a head 8, a lock bar 9 and a shank 10 between said parts. The buckle has an opening 11 and a pair of inclined shoulders 12 on the sides of said opening and between said shoulders is a slot 13. To fasten the tug to the buckle the lock bar 9 is passed longitudinally through one of the openings 7 in the tug and through the slot 13 and opening 11 in the buckle. It is then given a quarter turn and the tug pulled back until the lock bar on the stud impinges upon the shoulders 12 against which it is tightly drawn. This form of connection produces a strong and durable fastener between the link and the tug which is not easily separated and subject to wear.

The racks E and F are provided with a pair of clips G and H which pass around the rack F and the free end of the tug 2 and serve to hold the parts tightly together. The clip G is rigidly secured upon the rack F by means of rivets 14. The slots 16 and pins 15 movably secure the clip H to the rack E so that when the racks F and E are extended in length the clip H follows the latter. The back of the rack F has a reinforcing raised surface 20 leaving a pair of longitudinal oppositely disposed receiving ways 21 for flanges 22 which are formed on the sides of the clip H. These flanges rest in the receiving ways substantially flush with the raised surface 20 thus presenting a substantially smooth face on the back of the rack F and reducing the hazard of said flanges catching and doing damage and the clip from being torn from the device. The clip H being secured to the rack F as stated, prevents the parts E and F from being separated when the tug 2 is removed.

The attachment C to the hame may be of any suitable construction, that shown being in the form of a hinge, the curved end 17 being one leaf and the bolt 18 the pintle. The curve of the leaf may be varied as desired.

In operation the racks E and F are placed in engagement when properly adjusted ac-

cording to the length of the tug with which
 the hame link is used, and the bolt B passed
 through the opening 7 in the tug nearest ap-
 proaching the opening 11 in the buckle.
 5 After the bolt is inserted it is given a quarter
 turn and the tug drawn back, causing the
 lock bar 9 to impinge against the shoul-
 ders 12.

In accordance with the patent statutes, I
 10 have described the principle of operation of
 my invention, together with the apparatus
 which I now consider to represent the best
 embodiment thereof, but I desire to have it
 understood that the apparatus shown is only
 15 illustrative and that the invention can be
 carried out by other means and applied to
 uses other than those above set forth, with-
 in the scope of the following claims.

Having described my invention, what I
 20 claim as new and desire to protect by Let-
 ters Patent, is:—

1. A device of the class set forth, com-

prising, a buckle provided with a rack, a
 hame attachment also provided with a rack
 the teeth of which are adapted to engage 25
 with the teeth on said buckle and a pair of
 clips passing closely over a tug one of said
 clips being rigidly secured to the hame rack
 and the other loosely secured to the buckle
 rack.

2. A device of the class set forth, com-
 prising a buckle, having a rack, a hame at-
 tachment also having a rack, said racks hav-
 ing intermeshing teeth, and a clip loosely
 attached to said buckle rack, for the pur- 35
 poses specified.

In testimony whereof, I have signed my
 name to this specification, in the presence of
 two subscribing witnesses.

JULIUS D. BRAINARD.

Witnesses:

R. A. FISCHER,

M. G. LICHTSCHEIDL.