

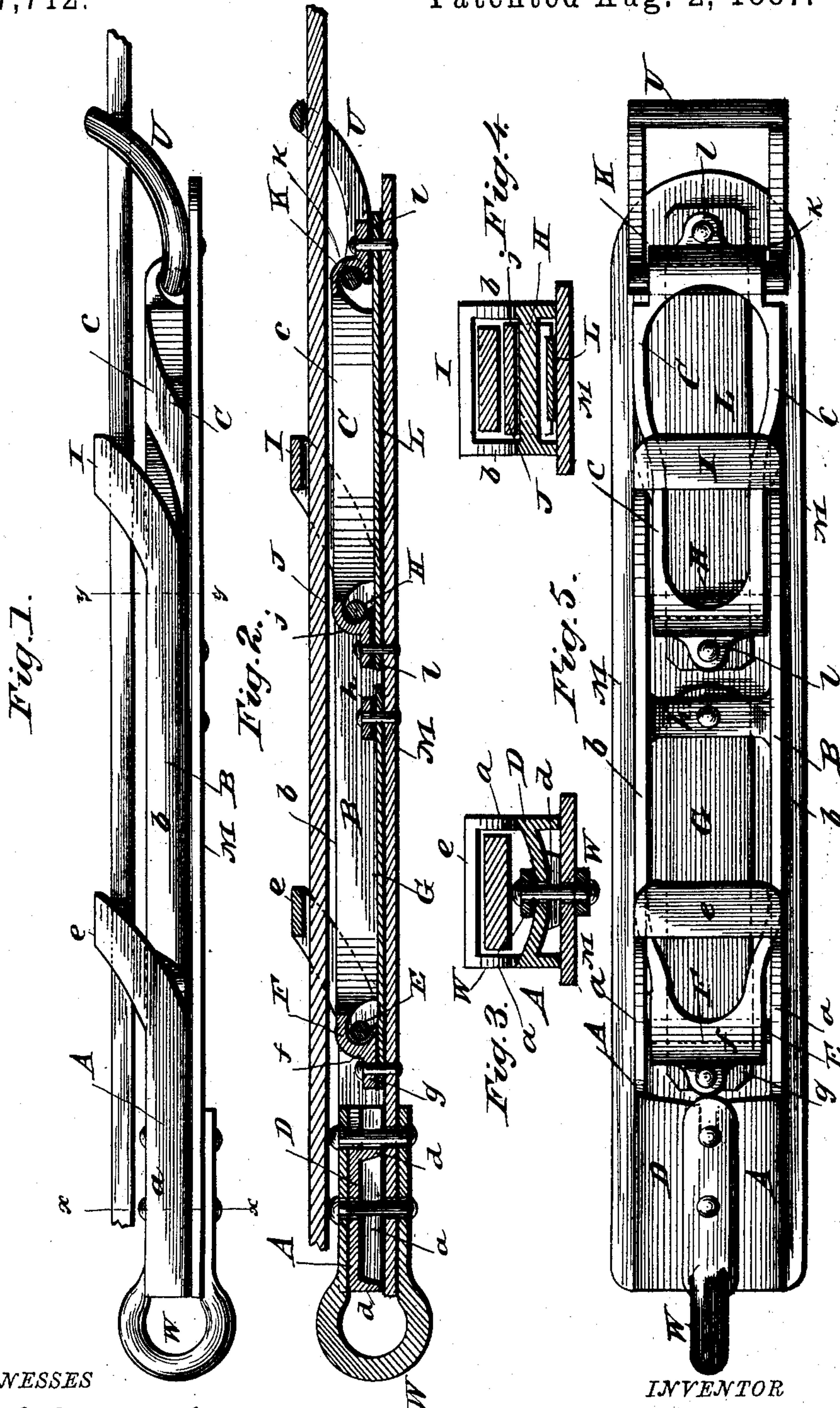
(No Model.)

L. G. GUSTAVEL, Jr.

HAME TUG.

No. 367,712.

Patented Aug. 2, 1887.



WITNESSES

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HAME-TUG.

SPECIFICATION forming part of Letters Patent No. 367,712, dated August 2, 1887.

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To all whom it may concern:

Be it known that I, LOUIS G. GUSTAVEL, Jr., of Monticello, in the county of White and State of Indiana, have invented certain new and useful Improvements in Hame-Tugs; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification, in which—

Figure 1 is a side view of my improved hame-tug. Fig. 2 is a vertical central longitudinal section of the same. Fig. 3 is a cross-section on line *x x*, Fig. 1. Fig. 4 is a cross-section on line *y y*, Fig. 1. Fig. 5 is a detail top plan view showing the manner of fastening the joints of the hame-tug, the trace being removed.

This invention relates to improvements in hame-tugs; and its object is to provide a sectional flexible metal-loop tug that can be used either as a long or short tug by the insertion or removal of one or more of the sections thereof, and also to make the tug-loops on said sections so that they can embrace different widths or thicknesses of traces, as will be fully understood from the following description, when taken in connection with the accompanying drawings, and particularly specified in the appended claims.

Referring to the drawings by letters, A, B, and C designate, respectively, the front, central, and rear sections of the tug, all of which are made of metal, and are shaped and united as follows: Part A is of general rectangular form, and is preferably made hollow or scored out on its under surface, as shown, for the purpose of lightness, thus forming the side rails *a a*, which are united rigidly at top by the portion D, which has depending from its inner surface the transverse lugs *d d*. The lower edges of these lugs are flush with the lower edges of side rails *a a*. The said lugs extend nearly across the interior of part A, and serve to brace the same and give a firm hold to the hame-clip link W, which is properly secured to part A at the front end thereof, as shown. The side rails *a a* are extended at the rear beyond the rear edge of top D, and at a suitable distance from said top are united by

a cross bar or rod, E, which forms the journal for connecting part A to part B, as hereinafter shown. From bar E the side rails *a a* bend upward and rearward until they extend a proper distance above the top D, where they are united by a cross-piece, *e*, and form the first trace-loop of the tug. All the described parts of section A are preferably cast integral.

The central section, B, is preferably formed of a rectangular frame shape, having side rails *b b*, which are united at their front ends by a cross-hook portion, F, which is narrowed in width so that it can enter between the side rails of part A. The portion F has a transverse groove in its lower front end, forming a hook, *f*, which embraces bar E of part A, and journals part B thereon, so that said parts are hinged or jointed at *f*, as evident.

G designates a strap, preferably of metal, of proper length and placed beneath or to the inside of part B, its front end being secured to part B by means of a suitable rivet passing through a lug, *g*, standing forward from the hook portion F. When the strap G is thus united to part B, it closes the mouth of hook *f* and prevents bar E of part A escaping therefrom, thus securely uniting the parts, but permitting them to have free play upon each other. The rear ends of rails *b b* are connected by a bar, H, similar to bar E, and the rails extend rearward and upward or outward from this bar, forming a loop, I, similar to the loop *e* of part A. In front of bar H is a flat cross-piece, *h*, uniting the lower edges of rails *b b*, and to which is riveted the other end of strap G, as shown.

The rear section, C, is also preferably made of rectangular frame shape, having side rails *c c*, united at front and rear by cross portions J and K, which are provided with hooks *j* and *k*, respectively, similar in all respects to hook portion F of part B. The rails *c c* of part C, however, are not extended to form a loop, and the front hook, *j*, engages the bar I of part B, being properly narrowed to enter between the side rails thereof, and the rear hook, *k*, embraces the shank of a suitable trace-buckle, U, the hooks being kept from disengaging from said parts by means of a strap, L, similar to strap G, and secured at front and rear to the under surface of part C by means of suitable

rivets passing through lugs or ears *l l*, standing respectively from the hooks *J* and *K*, as shown.

M designates a backing of leather or other suitable flexible material, which forms a shield to prevent galling of the draft-animal, and is secured in position by means of the rivets of the straps *G* and *L*, which are passed through said backing, and also by the rivets of the hame-clip *W*, when the latter is thus secured to the part *A*, as shown.

It is obvious from the foregoing description that I have a flexible hame-tug easily put together, and in which any section can be removed or replaced for repairing the tug. The joints of the several sections being in front of the loops, by bending the section at that joint the loop is elevated or opened and the end of the trace can be easily passed therethrough, the bending of the joints being repeated at each loop where the trace is to be passed through. Then when the tug is straightened out the loops are necessarily closed, compressing or firmly binding the trace to the tug, and presenting a very neat appearance. By this arrangement any thickness of trace can be held by the loops.

The hame-tug as shown is a short tug; but it is obvious that it can be easily converted into a long tug by the insertion of one or more additional central sections, *B*. All of the joints of the tug being similar, or duplicates, renders this lengthening of the tug easy and simple. It will be observed that when in use the tug has sufficient flexibility to adjust itself to the animal without unduly bearing upon and galling the shoulder of the same.

In some cases the central section, *B*, may be dispensed with, and the sections *A* *C* only employed. This would be sufficient where only a very short tug is necessary.

I am aware that flexible or jointed tugs have been before used having separate interchangeable sections. In my tug, however, it will be observed that I have a flexible tug the sections of which are provided with loops which can embrace and bind varying sizes of traces.

Having described my invention, I claim—

1. A hame-tug composed of a front section, *A*, having a hame-clip at its front end and a bar and loop at its rear end, a central section, *B*, having a hook at its front end engaging the bar of section *A*, and having a loop and cross-bar at its rear end, and a rear section, *C*, having hooks at its ends for engaging the bar of part *B* and the shank of a suitable trace-buckle, substantially as and for the purpose described.

2. In a hame-tug, the combination of the section *A*, having a hame-clip at its front end and a cross-bar, *E*, and loop *e* at its rear end,

with the sections *B* and *C*, the former having a hook, *F*, engaging the bar *E* of part *A*, and having a cross-bar, *H*, and loop *I* at its rear end, and the part *C* having hooks *j* and *k* engaging respectively the bar *H* of part *B* and the shank of a suitable trace-buckle, and means, substantially as described, for preventing the disengagement of the sections and buckle, all constructed and arranged substantially as and for the purpose specified.

3. The combination, with the parts *A*, *B*, and *C*, constructed and jointed substantially as described, of the retaining-straps *G* and *L* and their connections for preventing disengagement of the sections, and the leather shield *M*, substantially as described.

4. In a hame-tug, the combination, with the parts *C* and *B*, constructed and united substantially as described, of the front part, *A*, having its side rails, *a a*, elongated at rear to form a trace-loop and connected by a bar, *E*, whereby it is journaled on part *B*, the top portion, *D*, uniting the side rails, *a a*, and transverse lugs *d d*, depending from portion *D*, all constructed substantially as and for the purpose described.

5. The combination of part *A*, constructed substantially as described, the part *B*, journaled by a hook, *F*, at its front end upon part *A*, and part *C*, journaled at its front end upon part *B* by a hook, *j*, and at its rear to the shank of a trace-buckle by a hook, *k*, with straps *G* and *L* closing the mouths of the hooks, the straps *G* being riveted at one end to a lug, *g*, of hook *F*, and at its outer end to a cross-bar of part *B*, and the strap *L* being pivoted at its opposite ends to lugs standing from hooks *j* and *k*, the rivets of said straps passing through and securing to the tug a suitable shield, *M*, to prevent injury to the animal, all constructed substantially as and for the purpose described.

6. The combination, in a hame-tug, of the part *A*, having side rails *a a*, top portion, *D*, lugs *d d*, and loop *e*, substantially as described, the parts *B*, having side rails, *b b*, hook *F*, bars *H* and *h*, and loop *I*, substantially as described, and the parts *C*, having hooks *j* and *k*, with the retaining-straps *G* and *L*, flexible shield *M*, and clip *W*, and buckle *U*, all constructed substantially as and for the purpose described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

LOUIS G. GUSTAVEL, JR.

Witnesses:

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L. W. WATT.