(No Model.)

C. W. HUDGENS.

HAME TUG.

No. 458,848. Patented Sept. 1, 1891.

Fig. 1.

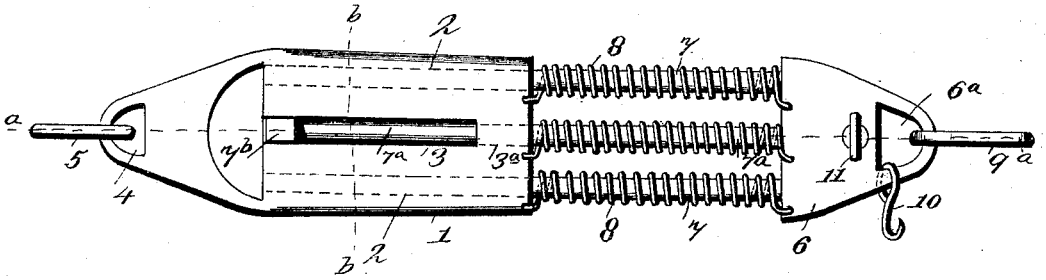


Fig. 2.

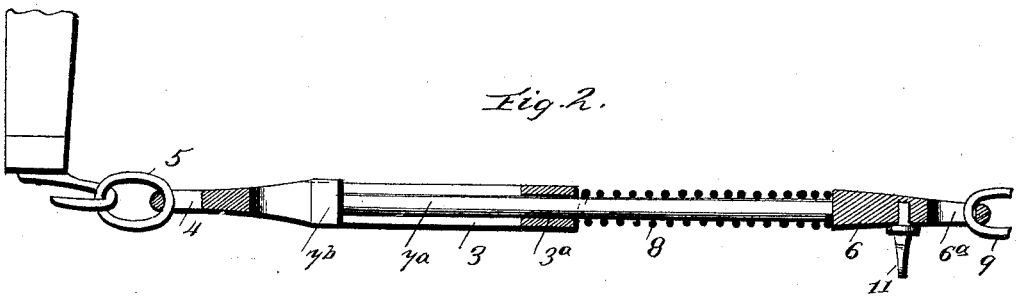
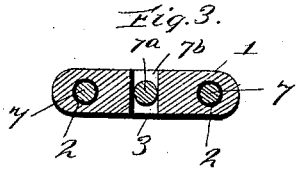


Fig. 3.



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UNITED STATES PATENT OFFICE.

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HAME-TUG.

SPECIFICATION forming part of Letters Patent No. 458,848, dated September 1, 1891.

Application filed May 6, 1891. Serial No. 391,788. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. HUDGENS, a citizen of the United States, residing at Elizabeth, in the county of Fulton and State of Arkansas, have invented certain new and useful Improvements in Tug Attachments; and I do hereby 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.

The invention consists in a new and improved tug attachment for harness, which will be hereinafter fully described and claimed.

Referring to the accompanying drawings, Figure 1 is a plan view of the entire attachment. Fig. 2 is a sectional view taken on line *a a* of Fig. 1. Fig. 3 is a sectional view taken on a plane indicated by line *b b*, Fig. 1.

The same numerals of reference indicate corresponding parts in the several figures.

Referring to the several parts by letter, the attachment is formed with the flat body 1, which is formed with two longitudinal bores or openings 2 2, and with the central longitudinal slot 3, extending from a point near the solid inner end of the body. The tapering outer end of the body is formed with an opening 4, and a ring 5 is usually mounted in this opening.

6 indicates the head-block, which is secured to or formed integral with the outer ends of three parallel rods 7 7^a, the tapering outer end of the head-block having the opening 6^a formed in it. The two outer rods 7 slide in the longitudinal openings 2 of the body 1, while the central rod 7^a passes through a central opening 3^a in the inner end of the body into the longitudinal slot 3. Around each of the rods is coiled a spiral spring 8 of suitable size and strength, the ends of the three springs being secured, respectively, to the inner end of the body 1 and the inner end of the head-block 6.

In operation the outer end of the body 1 is secured to the end of the singletree, as shown in Fig. 2, and the other end of the device is connected to the hame or plow-chain, whichever may be used. Where a hame is employed the hook on its rear end is caught in a ring 9, which is placed in the opening 6^a, and a hook 10 is mounted in the opening 6^a to enable the plow-chain to be connected with the device. The head-block 6 is provided on one side with the retaining-button 11, so that when the end of a full leather hame provided with the usual slot or opening is used it can be readily engaged on this button to connect the hame with the device. It will now be seen that with this device in use when the first pull or strain is given, as in starting a team, the coiled spring 8 will yield or stretch and immediately recover itself, thus preventing any sudden jar or jerk, which is unavoidable with a rigid connection. The inner end of the rod 7^a is formed with a stop or head 7^b, which slides in the slot 3, which serves to prevent the two parts of the device from being pulled apart on any unusually severe strain.

From the foregoing description, taken in connection with the accompanying drawings, the construction, operation, and advantages of the invention will be readily understood without requiring further description.

It will be seen that the device will effectually prevent all sudden strain or jerk in starting, thus preventing injury to the harness, the vehicle, and to the horse itself.

The device can also be used to a great extent as a draft-equalizer, as it will prevent a large or powerful horse from gaining or holding the advantage of a small or weak one.

By using the device on the harness while plowing it prevents many breaks in plow and harness occasioned by the plow striking against roots, rocks, and other solid obstructions.

The device can be detached from one part or kind of harness in an instant and as readily attached to another.

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

1. The combination of the body 1, formed with the longitudinal openings 2 3^a 2 and the slot 3, the head-piece 6, having the rods 7 connected thereto at their outer ends, the central rod 7^a, having the stop 7^b at its inner end, and the spiral springs 8, encircling the said rods and secured at their ends to the parts 1 and 6, substantially as set forth.

2. The combination of the body 1, formed

with the longitudinal openings and having the apertured outer end, the head-piece 6, the rods connected thereto and sliding in the openings of the body 1, the retaining-button 11, and the spiral spring 8, encircling the rods and secured at their ends to the parts 1 and 6, respectively, substantially as set forth.

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

CHARLES W. HUDGENS.

Witnesses:
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Z. J. CARGIL.