

(No Model.)

W. G. SLATER.  
HAME TUG AND BUCKLE.

No. 296,472.

Patented Apr. 8, 1884.

Fig. 1

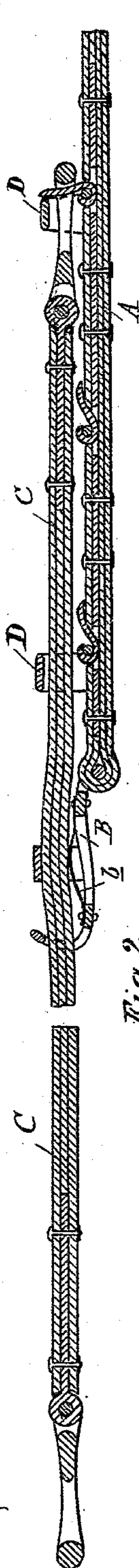


Fig. 2

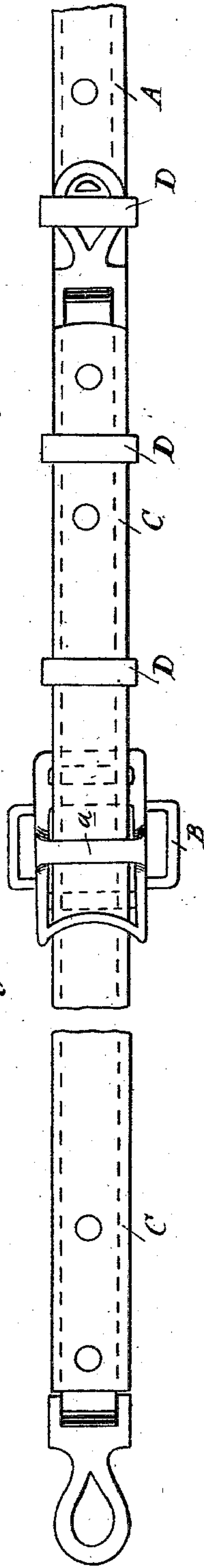
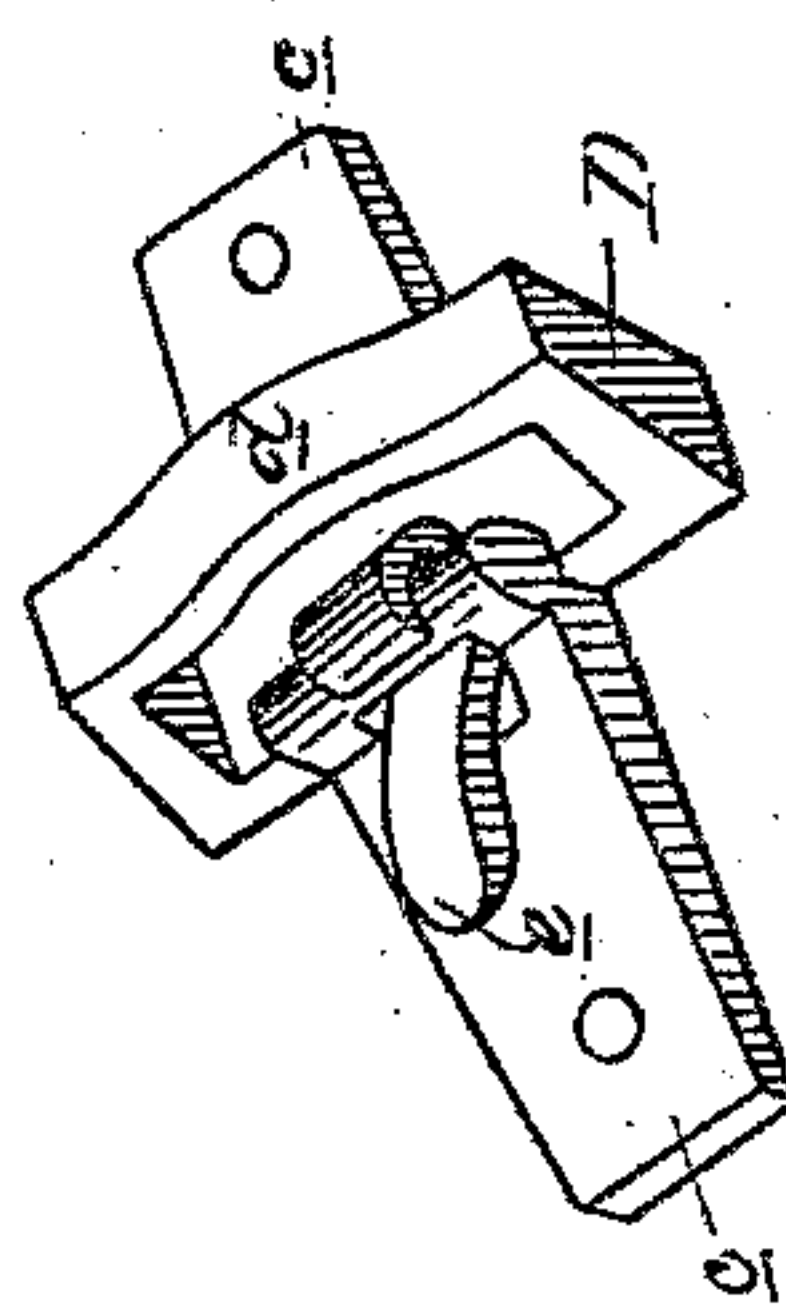


Fig. 3



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# UNITED STATES PATENT OFFICE.

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OF SAME PLACE.

## HAME-TUG AND BUCKLE.

SPECIFICATION forming part of Letters Patent No. 296,472, dated April 8, 1884.

Application filed February 2, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, WARREN G. SLATER, of Fremont, in the county of Newaygo and State of Michigan, have invented new and useful  
5 Improvements in Hame-Tugs and Buckles; and I hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification.

10 This invention relates to certain new and useful improvements in hame-tugs and buckles; and the invention consists in the peculiar construction, arrangement, and combinations of the various parts, all as more fully hereinafter  
15 set forth.

Figure 1 is a longitudinal central section through my improved hame-tug and forward end of trace. Fig. 2 is a plan. Fig. 3 is a perspective of one of the buckles removed.

20 In the accompanying drawings, which form a part of this specification, A represents a hame-tug, one end of which is designed to be provided with a hame-hook after engagement with the hame, while the opposite end is pro-  
25 vided with a tug-carrier, B, designed to be secured to the back-strap, as in the ordinary construction of harness; and C represents the forward portion of a trace or tug, which in my construction is provided with a cockeye upon  
30 each end, the one to engage with the whiffletree, while the other is to engage with the tug-buckle, as hereinafter described, and also to be reversed. Beneath the loop *a* of the tug-carrier, and in the longitudinal direction of  
35 said carrier, I secure a leaf-spring, *b*, which, when the trace C is inserted through the carrier, keeps the upper face of the trace in continual frictional contact with such loop.

40 D represents my improved tug-buckle, which consists of the longitudinal bar *c*, provided with the loop *d* and tongue *e*, substantially in the manner shown. I secure two or more of these buckles to the hame-tugs, with their tongues upon the forward side of the loops,

the longitudinal portions of the buckles being 45 secured by rivets, as shown. As the end of the trace passes beneath the loops of the buckles, it can readily be seen that the cockeye can easily be compelled to engage with any one of the series of tongues upon the 50 buckles, and that in this construction I avoid the necessity of punching the trace with a series of holes, thereby lessening its strength, while at the same time in my construction I am enabled to use a stiffer and almost a non- 55 pliable trace, particularly for heavy harness, as it has not got to be bent in order to engage with the tongues of the buckles, while the spring in the tug-carrier prevents the tug from slipping through such carrier accidentally, 60 and thereby causing the cockeye to disengage with the buckle-tongue.

What I claim as my invention is—

1. In combination with a hame-tug, a tug-carrier, B, having loop *a*, and spring *b*, ar- 65 ranged under said loop, substantially as and for the purposes specified.

2. In combination with a hame-tug, a tug-buckle, D, consisting of the longitudinal bar *c*, provided with the loop *d* and tongue *e*, sub- 70 stantially as and for the purposes specified.

3. A hame-tug, A, provided with a series of buckles, D, in combination with a trace provided with a cockeye upon each end, so as to be reversed and arranged to engage with the 75 tongue of one of the series of buckles, substantially as described.

4. The combination, with the tug A and tug-carrier B, the latter provided with a spring, *b*, of a series of buckles, D, secured to 80 said tug, and the trace C, when constructed, arranged, and operating substantially in the manner and for the purposes described.

WARREN G. SLATER.

Witnesses:

NELLIE McCARTY,  
GEO. B. J. RAIDER.