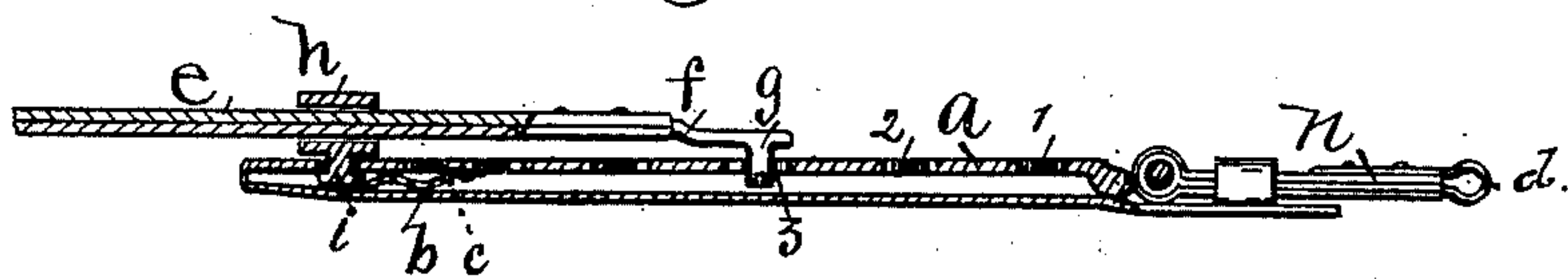


G. HAZLEWOOD, Jr., J. REAGIN & W. S. COLEMAN.  
Hame-Tugs.

No. 223,226.

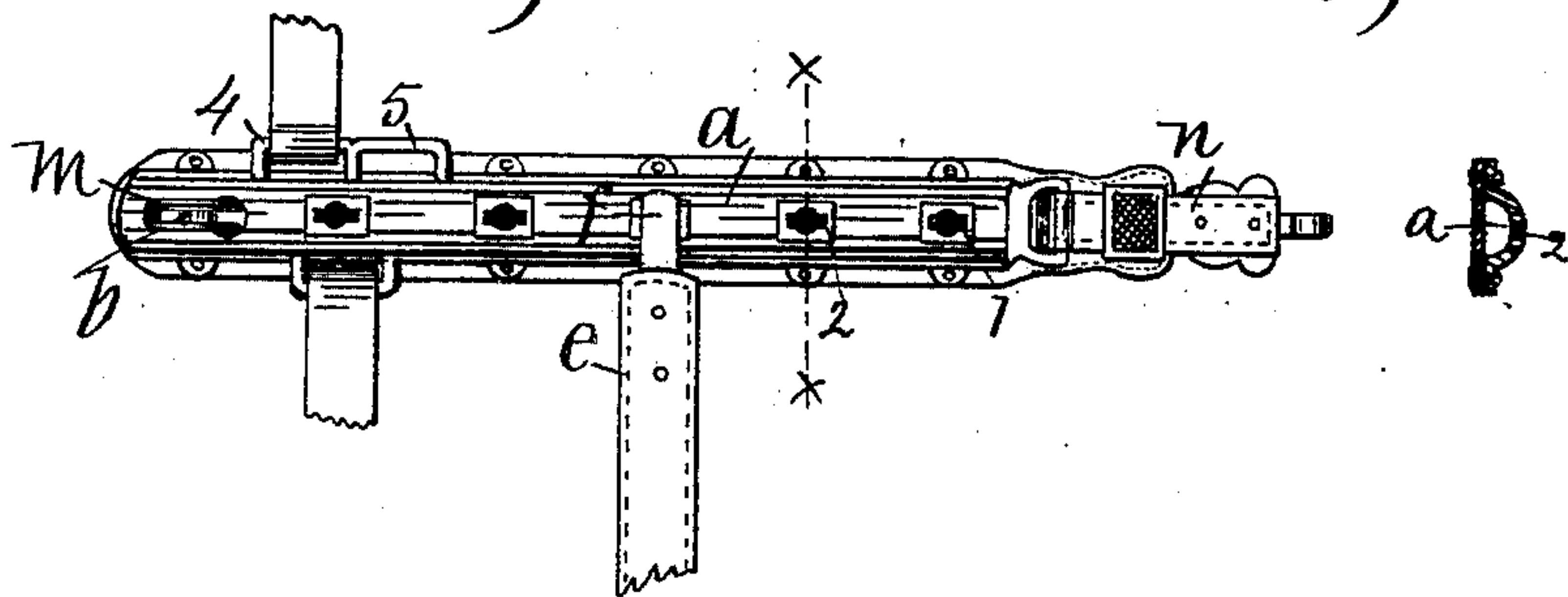
Patented Jan. 6, 1880.

*Fig. 1*

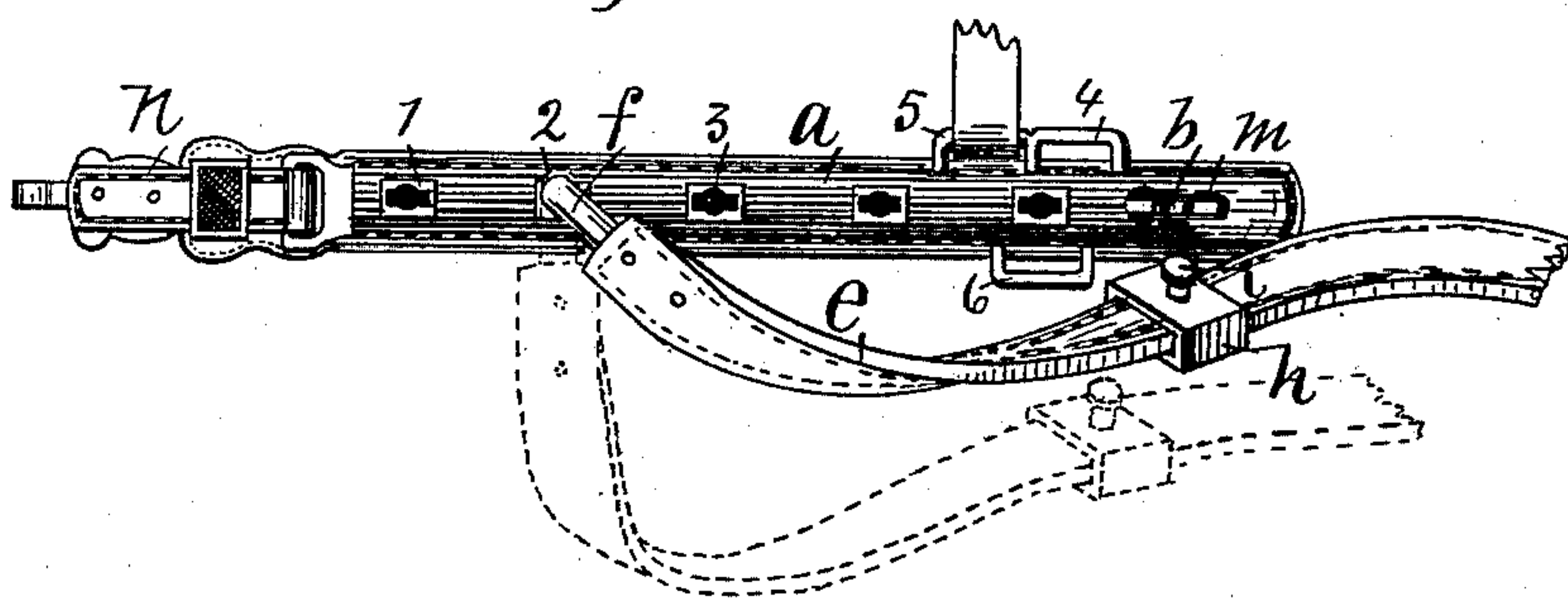


*Fig. 2*

*Fig. 3*



*Fig. 4*



Witnesses:  
A. C. Kenyon,  
Frank W. Heers.

Inventors: { Greenville Hazelwood Jr.  
James Reagin,  
William S. Coleman.

By Thomas G. Orwig, Atty.

# UNITED STATES PATENT OFFICE.

GREENVILLE HAZLEWOOD, JR., AND JAMES REAGIN, OF BLOOMFIELD, IOWA,  
AND WILLIAM S. COLEMAN, OF SALISBURY, MISSOURI.

## HAME-TUG.

SPECIFICATION forming part of Letters Patent No. 223,226, dated January 6, 1880.

Application filed April 22, 1879.

*To all whom it may concern:*

Be it known that we, GREENVILLE HAZLEWOOD, Jr., and JAMES REAGIN, of Bloomfield, Davis county, Iowa, and WILLIAM S. COLEMAN, of Salisbury, Chariton county, Missouri, joint inventors, have invented certain Improvements in Hame-Tug and Trace Couplings, of which the following is a specification.

Our invention is an improvement on the trace and hame-tug coupling patented May 28, 1878, No. 204,324.

It consists in making the metal strap-form base of the hame-tug concavo-convex in place of flat, in forming a button at the rear end of the same strap to receive a button carried by a loop sliding on the trace, and in fixing a spring to the same strap to engage the button carried by the loop.

Heretofore series of slots or button-holes of various forms have been made in hame-tugs to receive a hook or a button fixed to the front end of a trace, and loops of various forms have been used to connect the rear end of the hame-tug with the trace in such a manner as to allow the trace to be adjusted on the hame-tug to be lengthened and shortened. Our improvement reverses the order, and places a loop on the trace to connect the rear end of the hame-tug with the trace in such a manner that it can be readily adjusted relative to the fastening device at the front end of the trace and the fastening device at the rear end of the hame-tug.

Figure 1 of our drawings is a longitudinal central section of our improved hame-tug and trace coupling. Fig. 2 is a perspective view, showing the end of the trace in position as required preparatory to adjusting it longitudinally on the hame-tug. Fig. 3 is a transverse section through the line *xx* of Fig. 2. Fig. 4 is a perspective view, illustrating the manner of connecting the two parts at two different points. Jointly considered, they clearly illustrate the construction and operation of our complete invention.

*a* is the body of the metal strap and base of the hame-tug. It is made convex on its top or outside, and concave on the opposite side, for the purpose of stiffening and strengthen-

ing it, and to adapt it for the reception of a buttoning-stud fixed to the front end of the trace. 1 2 3 represent a series of button-holes in its longitudinal center. *b* is an elongated button-hole at its rear end. *c* is a spring fixed to the under side of the plate *a*, to extend partly over the button-hole and to clasp the button that enters the hole. *d* is a loop at its front end. 4 5 6 are loops formed integral with or attached to the metal strap *a*, to receive the leather straps that are required to pass over and under the horse. *e* represents a trace. *f* is a metal plate secured to the front end of the trace by means of rivets. *g* is a buttoning-stud projecting at right angles from the under side and front end of the plate *f*. It conforms in size and shape with the button-holes 1 2 3 in the plate *a*. *h* is a metal loop designed to slide upon the trace. It has a buttoning-stud, *i*, formed integral therewith, to extend at right angles from the center of its under side. *n* is a section of the hame-tug hinged to the front end of the plate *a*.

In the construction of our hame-tug the metal strap *a* may be readily riveted upon a leather strap of corresponding size, as illustrated by Fig. 2, and its convex surface left uncovered; or the convex surface may be plated with nickel, silver, or other suitable finishing material; or it may be covered with leather, as shown in Fig. 4.

In the practical use of our invention the front end of the trace must be turned at right angles to the hame-tug to insert or withdraw the button *g* from any of the series of button-holes 1 2 3 in the plate *a*; and in order to do so it must be disconnected from the rear end of the hame-tug; and to facilitate freeing the trace from the rear end of the hame-tug we have provided the sliding loop *h*, having a button, *i*, and the hame-tug with a button-hole adapted to receive the button *i*. All that is, therefore, necessary to connect and disconnect the trace from the rear end of the hame-tug is to insert or withdraw the button *i* from the button-hole *b*. It is therefore obvious that the length of our combined tug and trace can be readily increased or diminished, and that the two overlapping parts can be securely buttoned together at two points by simply chang-



ing the button on the front end of the trace from one of the series of button-holes 1 2 3 in the hame-tug to another and sliding the loop a corresponding distance on the trace.

5 The button-hole *b* has an enlargement at its front end to admit the head of the button *i*, and after it is admitted the loop *h* is moved rearward on the trace to bring the neck of the button to the rear and narrow portion of the  
10 button-hole, where it will be retained by the force of the spring *c*. A reverse movement of the loop will overcome the force of the spring and allow the button to escape through the enlargement at the front end of the button-hole.

15 We claim—

1. The spring *c*, in combination with a hame-tug having a button-hole, *b*, at its rear end and a series of uniform button-holes, 1 2 3, in its body *a*, substantially as shown and de-  
20 scribed, for the purposes specified.

2. The metal hame-tug *a*, having a series of button-holes, 1 2 3, in its body, an elongated button-hole, *b*, in its rear end, and a spring, *c*, extending over the inside thereof, in combination with a trace having a fixed buttoning de- 25 vice, *h i*, on its body, substantially as shown and described, and adapted to be operated in the manner set forth, for the purposes specified.

GREENVILLE HAZLEWOOD, JR. 30  
JAMES REAGIN.  
WILLIAM S. COLEMAN.

Witnesses to Greenville Hazlewood, Jr., and James Reagin:

I. S. WILSON,  
M. B. HORN.

Witnesses to William S. Coleman:

B. F. MASON, Jr.,  
W. H. PORSLEY.