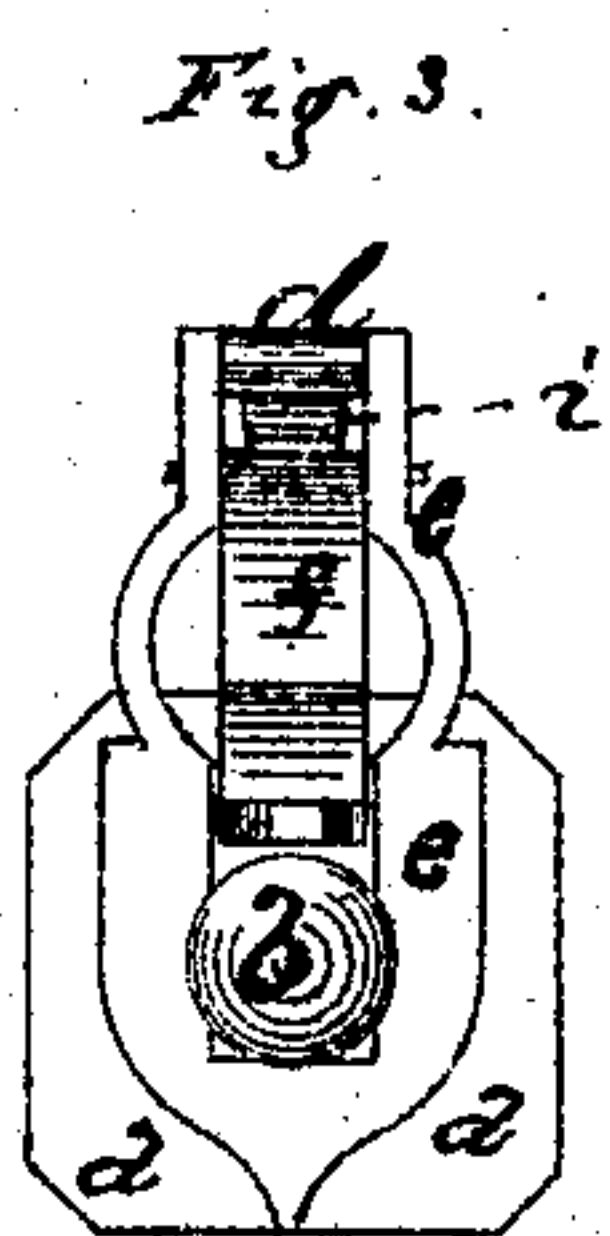
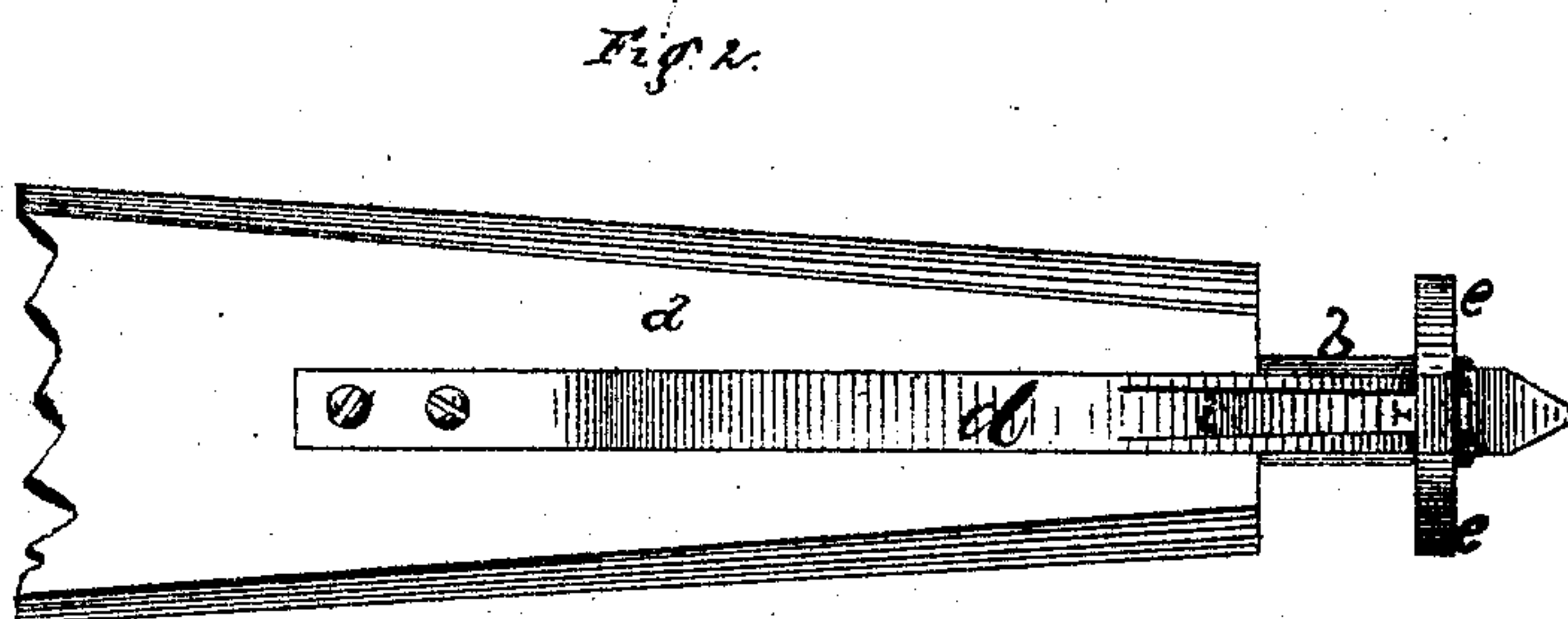
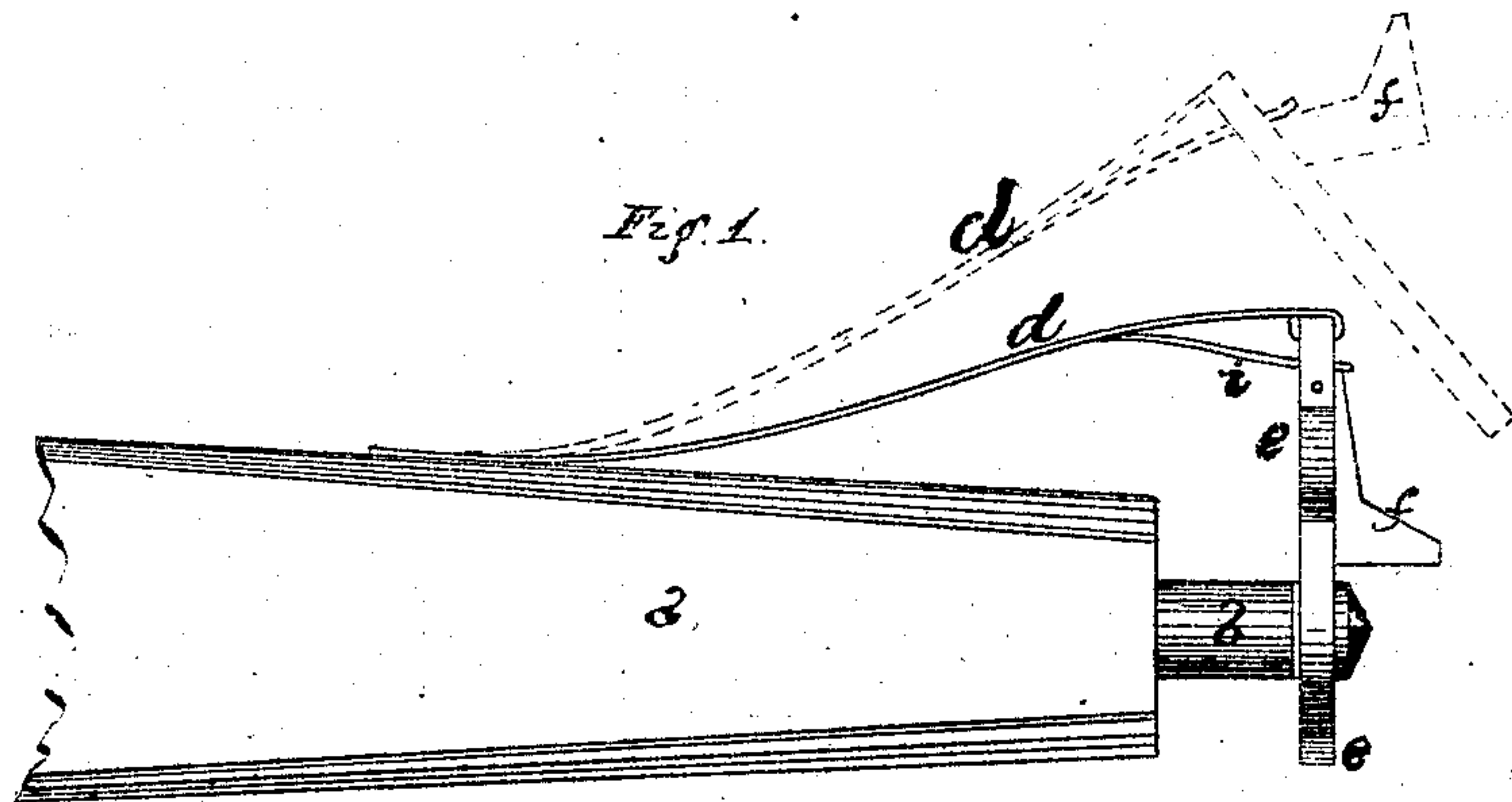


G. L. HART.

Trace Locks.

No. 116,052.

Patented June 20, 1871.



Witnesses.

L. H. Appleton.

George G. Sell.

Inventor.

George L. Hart

by W. E. Simonds

UNITED STATES PATENT OFFICE.

GEORGE L. HART, OF NEW BRITAIN, CONNECTICUT.

IMPROVEMENT IN TRACE-LOCKS.

Specification forming part of Letters Patent No. 116,052, dated June 20, 1871.

To all whom it may concern:

Be it known that I, GEORGE L. HART, of New Britain, in the county of Hartford and State of Connecticut, have invented an Improved Trace-Lock, of which the following is a specification:

Nature and Objects of the Invention.

My improvement is a device for permanent attachment to two ends of whiffletrees used on vehicles drawn by horses, &c. Its purpose is to quickly and securely lock the end of the trace or tug to the end of the whiffletree, while it is susceptible of being as readily unlocked for the purpose of unhitching the trace.

Description of the Accompanying Drawing.

Figure 1 is a front view of one end of a whiffletree with my invention attached, the dotted lines representing the position of the parts when the lock is set free from the whiffletree. Fig. 2 is a top or plan view of one end of a whiffletree with my invention attached. Fig. 3 is an end view of the parts shown in Fig. 2. Fig. 4 is a detached side view of the cylindrical piece which forms the extreme end of the whiffletree.

General Description.

The letter *a* indicates the whiffletree, usually made of wood, into the end of which is inserted the cylindrical iron piece *b*, which, near its extreme point, has a groove, *c c*, upon either side, exactly opposite each other. Upon the piece *b* the trace is hooked. To the top of the whiffletree is affixed the spring *d*, to the loose end of which is hinged the metal swinging piece *e* in such manner that, when not otherwise confined, it will swing freely on the end of the spring *d*, the end of which is curled loosely around the small shaft which forms the top part of the swinging piece *e*. Just below this small shaft there is hung, within the swinging piece *e*, the locking-pawl *f*, which pawl,

except as controlled by the spring *i*, is free to swing from the position indicated by the black continuous lines in Fig. 1 to the position indicated by the dotted lines in the same figure. This spring *i* is simply a part of the spring *d* struck down so as to bear upon the top of the pawl *f*; and its effect, as readily understood, is such that it holds the pawl *f* in either of the positions represented when the pawl is so placed. Just below where the pawl *f* is hung the slot which contains it bellies out into a circular opening large enough to allow the piece *b* to slip through it, the spring *d* being pressed down sufficiently for that purpose, and the pawl *f* being thrown out, as represented by the dotted lines. Below this circular part the opening becomes the vertical slot *s*, just wide enough to slip in the grooves *c c*; as the spring *d* draws up the swinging piece *e* the sides of the slot will just slip up into the grooves *c c*, and thus lock the swinging piece *e* on the cylindrical piece *b* that it cannot be forced directly off the end thereof. Now, if the pawl *f* is thrown down into the position shown in black lines, then the swinging piece *e* cannot be pushed down so as to bring the piece *b* into the circular opening, which must be done in order to pull the swinging piece *e* off the piece *b*.

Claims.

I claim as my invention—

1. The combination of the whiffletree *a*, the piece *b* having grooves *c c*, the spring *d*, the swinging piece *e*, and the pawl *f*, the whole constructed, arranged, and operated substantially as and for the purpose set forth.

2. The combination of the whiffletree *a*, piece *b*, spring *d*, spring *i*, swinging piece *e*, and pawl *f*, the whole constructed, arranged, and operated substantially as and for the purposes set forth.

Witnesses: GEORGE L. HART.

WM. E. SIMONDS,
GEORGE G. SILL.