

No. 741,755.

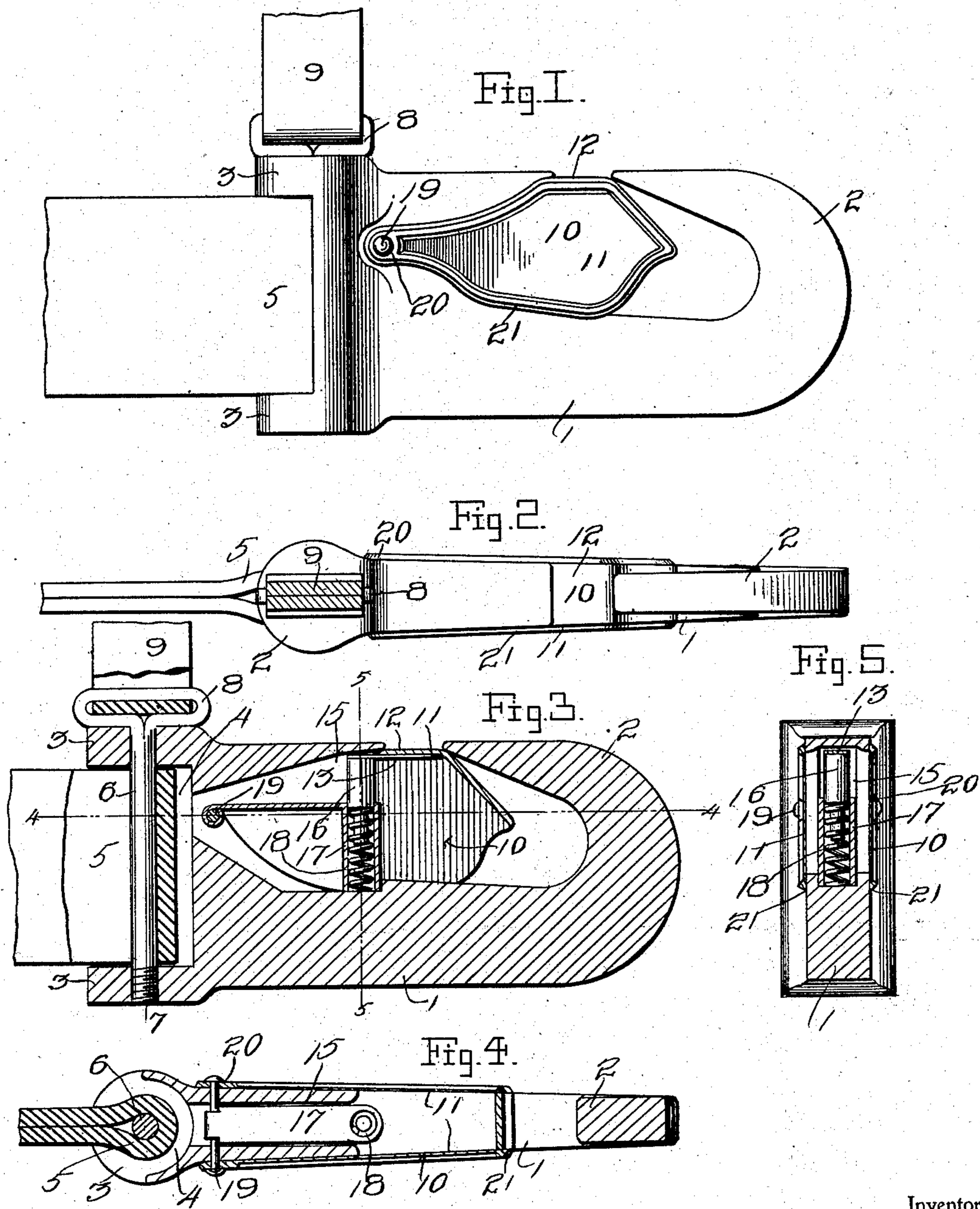
PATENTED OCT. 20, 1903.

A. ANDERSON.

TUG HOOK.

APPLICATION FILED JULY 9, 1903.

NO MODEL.



Inventor

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Witnesses

E. H. Pinchenbuck

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By

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Attorney

## UNITED STATES PATENT OFFICE.

ARVID ANDERSON, OF HURLEY, WISCONSIN.

## TUG-HOOK.

SPECIFICATION forming part of Letters Patent No. 741,755, dated October 20, 1903.

Application filed July 9, 1903. Serial No. 164,851. (No model.)

*To all whom it may concern:*

Be it known that I, ARVID ANDERSON, a citizen of the United States, residing at Hurley, in the State of Wisconsin, have invented certain new and useful Improvements in Tug-Hooks; and I do 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.

My invention relates to certain new and useful improvements in hooks for tugs or other parts of a harness.

The object of the invention is to provide a device of this character which is simple in construction, durable in use, and comparatively inexpensive of production.

With this and other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts, as will be hereinafter more fully described, and particularly pointed out in the appended claims, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation of my improved hook. Fig. 2 is a top plan view of the same. Fig. 3 is a vertical longitudinal sectional view through the same. Fig. 4 is a horizontal sectional view taken on the line 4 4 of Fig. 3. Fig. 5 is a transverse vertical sectional view taken on the line 5 5 of Fig. 3.

In the embodiment of my invention, as illustrated in the accompanying drawings, 1 denotes the body of my hook, which is formed with a curved bill 2 at one end and apertured ears 3 at its opposite end. The portion of the body between said ears is cut away, as shown at 4, to receive the folded or looped end 5 of a tug or trace, the hook being secured to the end of said tug by passing a bolt 6 through the apertures in said ears and the loop of said end. Said bolt has its lower end 7 screw-threaded to screw into the threaded aperture in the lower ear 3, and the head of said bolt is formed with a rectangular eye 8, adapted to receive a supporting-strap 9. I provide a pivoted spring-actuated tongue 10 to close against the bill. This tongue is a hollow casing, the two sides 11 of which are pivoted upon the sides of the body portion of the hook and are adapted to slide over the same when the tongue is depressed to open

the hook. The casing consists of the two sides 11 and a connecting top portion 12, which closes the hook and which is formed with a finger 13. Said finger projects into the upper portion of a cavity or recess 15, formed in the center of the body, and is engaged by a detent or plunger 16, which slides in a casing 17, and is actuated by a coil-spring 18, also inclosed in the casing 17. This casing is disposed in said cavity 15 and is secured in the same by a bolt 19, which also pivots the sides 11 of the tongue, as shown at 20. It will be seen that the spring 18 will force the detent 16 up, and the tongue of the hook will be held in its closed position owing to the engagement of said detent with the finger 13. The hook may be readily opened by depressing the tongue, as will be readily understood. The sides and top of the tongue entirely inclose the spring-detent, its casing, and the cavity, and thus protect the same from dust, moisture, snow, ice, &c. The edges of the sides 11 are beveled, as shown at 21, to form cutting edges which will scrape off any ice which may form on the sides of the hook.

The operation of my invention will be readily understood from the foregoing description and upon reference to the drawings. When the hook is used to connect a leather tug and the chain portion of a trace, the strap 9 passes up over the back of the animal and supports the trace.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

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

1. A hook comprising a body portion and a bill, the former having a recess 15, a tongue to close against the bill and having a recess 10 and side portions 11, the latter engaging the sides of the body portion of the hook, a pivot 19 for the tongue, passing through the side portions thereof, and through the body of the hook, a casing 17 in the recess 15 of the hook-body, secured therein by the pivot 19, and having a recess, and a spring-pressed detent in said recess engaging the tongue

and normally closing the latter against the bill, substantially as described.

2. A tug-hook comprising a body portion formed with apertured ears, and a bolt passing through said ears and adapted to secure the hook to the tug, said bolt being formed with an eye adapted to receive a supporting-strap, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses. 10

ARVID ANDERSON.

Witnesses:

HENRY MEADE,  
SIMON E. HOYE.