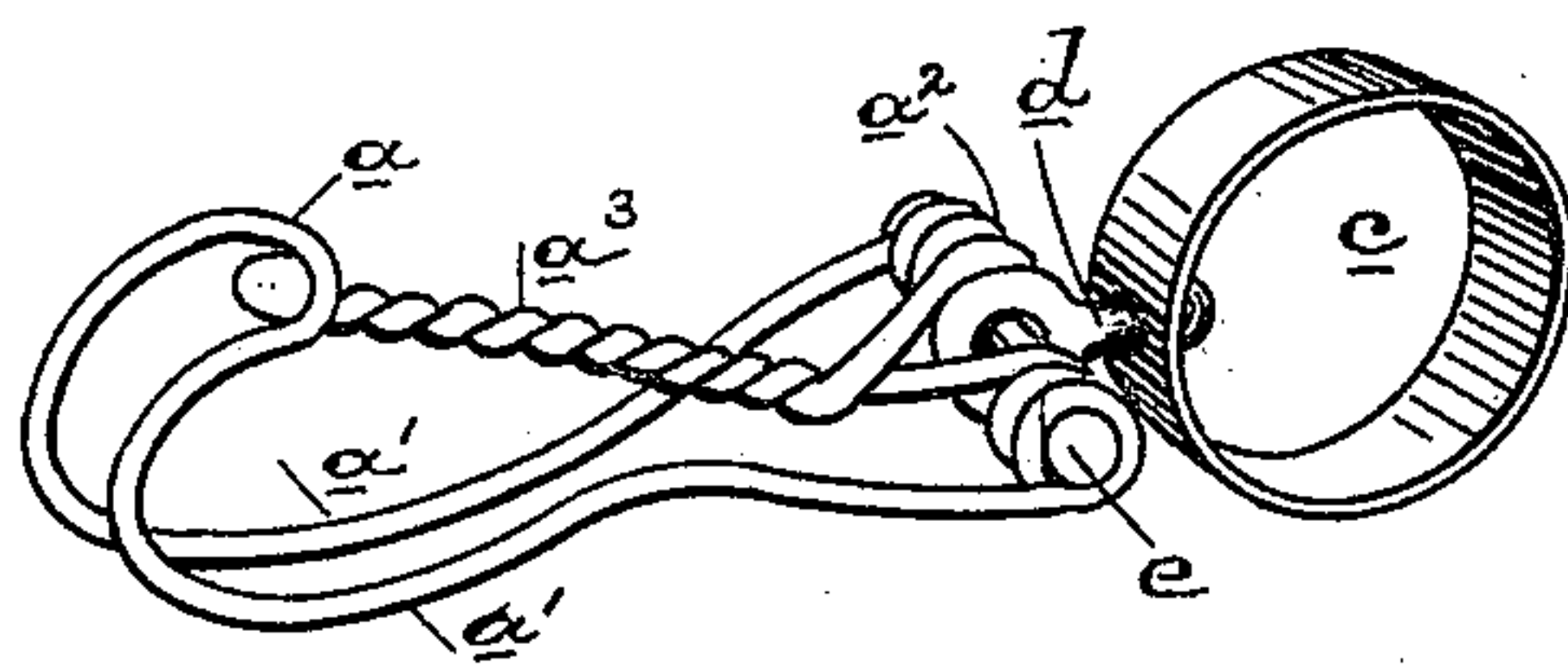


(No Model.)

F. WHITE.  
SNAP HOOK.

No. 451,314.

Patented Apr. 28, 1891.



Witnesses,  
J. H. House  
Chapman Fowler

Inventor,  
Frank White  
by Dewey & Co.  
attys

# UNITED STATES PATENT OFFICE.

FRANK WHITE, OF POMONA, CALIFORNIA.

## SNAP-HOOK.

SPECIFICATION forming part of Letters Patent No. 451,314, dated April 28, 1891.

Application filed July 11, 1890. Serial No. 358,408. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK WHITE, a citizen of the United States, residing at Pomona, Los Angeles county, State of California, have  
5 invented an Improvement in Snap-Hooks; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to snap-hooks; and it consists in the novel construction herein-  
10 after fully described, and specifically pointed out in the claim.

The object of my invention is to provide a harness and rope snap made of a single piece of spring-wire, the hinge of which is durable  
15 and of a character which will prevent it from being clogged.

Referring to the accompanying drawings for a more complete explanation of my invention, the figure represents a view of the hook,  
20 and a swiveled eye for the attachment of a rope is shown.

The snap-hook is made of a single piece of spring-wire, preferably steel spring-wire, bent at its center to form the point *a*, and thence  
25 bending downwardly and backwardly, its sides forming the body portion *a'*. These sides are then separately coiled to form the spring *a<sup>2</sup>*, and thence the ends of said side project forwardly and are twisted to form the  
30 tongue *a<sup>3</sup>*, their extreme ends being preferably soldered together and fitting under the

point portion *a*. The eye consists of a ring *c*, adapted to receive a rope, said ring being pivoted upon the outer end of a stem *d*, the inner end of which is pivoted upon a cross-  
35 pin *e*, which is fitted to the coil-spring portion of the snap-hook. Thus the eye *c* is a double-swiveled one, having a pivotal motion upon the stem *d*, said stem having a pivotal motion upon the cross-pin *e*. 40

It will be seen that this construction of snap-hook is very simple, the spring being of a most durable character, which cannot clog up with sand or ice. The eye *c*, having a double movement, is particularly advanta-  
45 geous for rope connection.

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

A snap-hook composed of a single piece of  
50 spring-wire bent centrally to form the point *a*, the body portion *a'*, the coil-spring portion *a<sup>2</sup>*, and the forwardly-projecting tongue *a<sup>3</sup>*, the cross-pin in said coil portion, the stem pivoted on said pin, and the ring pivoted on  
55 said stem, substantially as herein described.

In witness whereof I have hereunto set my hand.

FRANK WHITE.

Witnesses:

IRA F. WHITE,

FRANK J. MURPHY.