

(No Model.)

A. RYAN.
SNAP HOOK.

No. 603,288.

Patented May 3, 1898.

Fig. 1.

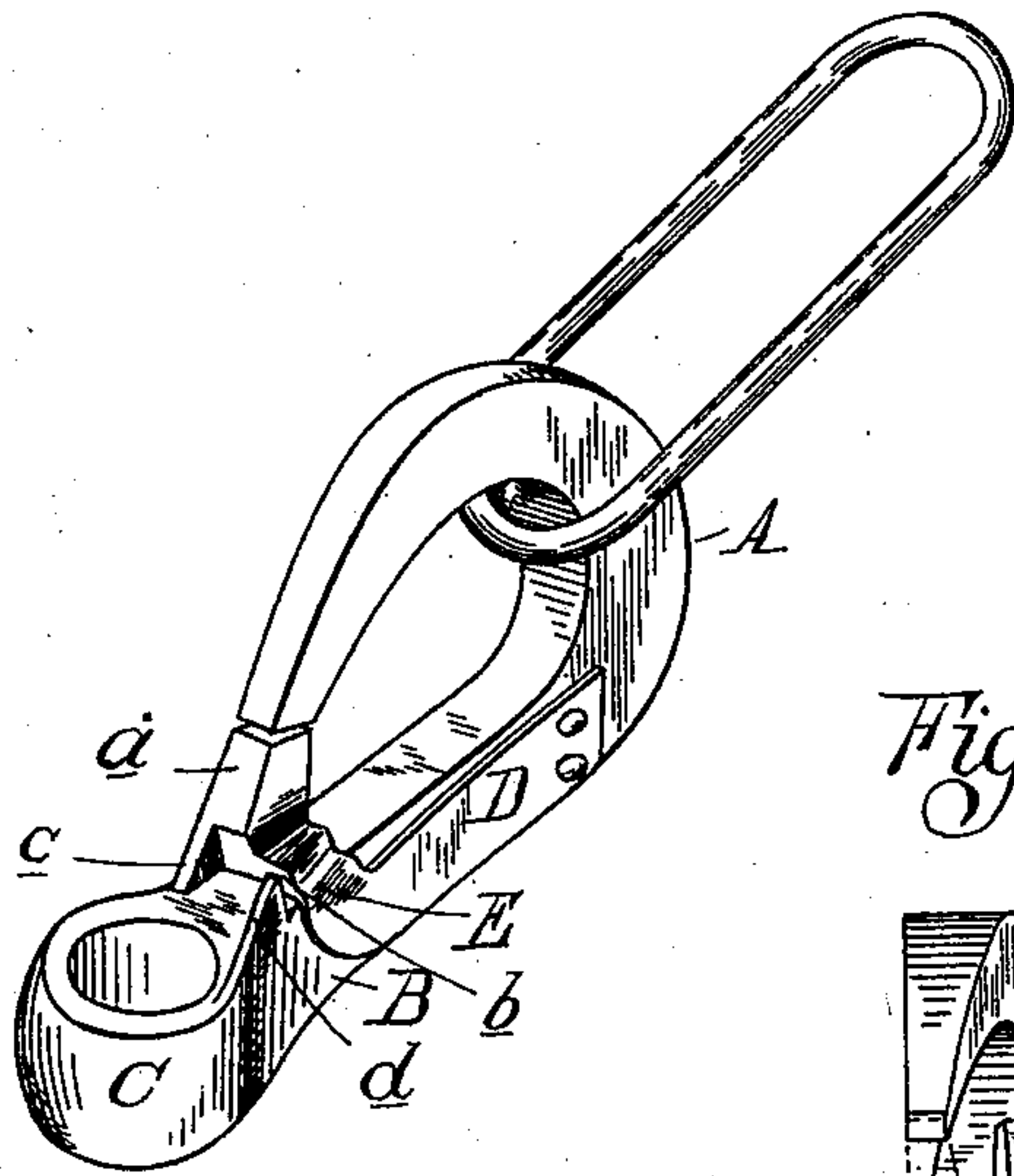
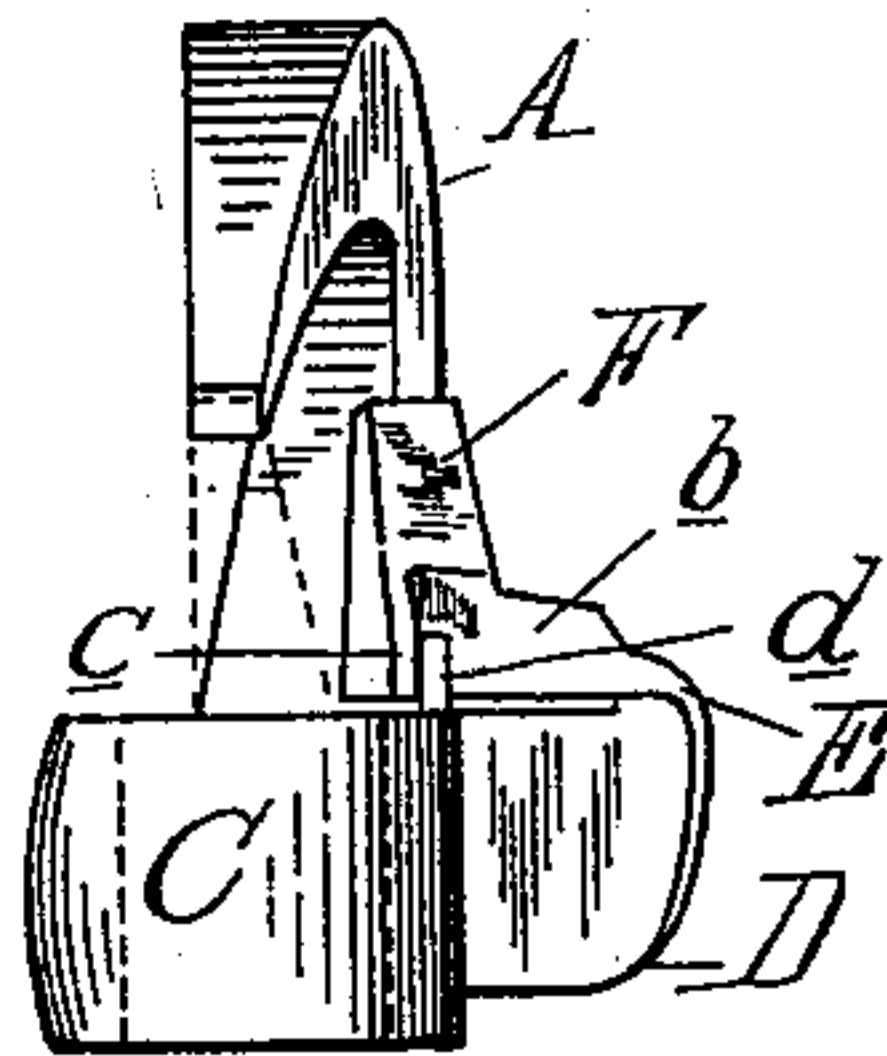


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

ANDREW RYAN, OF GRAND RAPIDS, MINNESOTA.

SNAP-HOOK.

SPECIFICATION forming part of Letters Patent No. 603,288, dated May 3, 1898.

Application filed March 24, 1897. Serial No. 628,943. (No model.)

To all whom it may concern:

Be it known that I, ANDREW RYAN, a citizen of the United States, residing at Grand Rapids, in the county of Itasca and State of Minnesota, have invented certain new and useful Improvements in Snap-Hooks, of which the following is a specification, reference being had therein to the accompanying drawings.

10 The invention consists in the construction of a snap-hook, and particularly in the construction of a guard for the mouth of the hook to prevent the accidental displacement or disengagement from the hook of the link or other
15 device with which the hook is engaged, and particularly in the construction of this guard, so that it will stand the rough usage to which it is subjected and so that it will meet the exigencies of such use and at the same time
20 permit the rapid and easy disengagement of the link from the hook, all as more fully hereinafter described.

In the drawings, Figure 1 is a perspective view of my improved hook, showing the
25 guard in its closed position. Fig. 2 is an end elevation showing the guard in its open position.

A is a hook; B, the shank or stem thereof, which I have shown as terminating in an
30 eye C.

The hook as I have shown it tapers gradually from the point, enlarging to the stem, the point of the hook being located at one side of the body of the stem.

35 D is a spring-tongue secured to the side of the hook or to the stem, so as to be out of the way of the devices which are engaged with the hook. This spring is secured at its outer end to the stem and at its upper end is provided with a vertical extension E, which connects into or is secured to a block F. This
40 block consists of the guard-section proper, *a*, which forms a complementary extension from the end of the hook down to the shank or stem, the side flange or extension *b*, which extends over the shank and to which the end of the spring is secured, and a lug *c*, which projects out from the guard-section, preferably formed by cutting away a portion there-
45 of, which is adapted to strike against a lug

or stop *d*, formed on the opposite side of the shank or stem of the hook.

The parts being thus constructed their operation is as follows: To engage the link with the hook the operator presses the end of the
55 link against the side of the guard-block, which moves it laterally against the tension of the spring D to form an opening, as shown in Fig. 2. The side motion of the block is limited by the lug *c* striking the stop or shoulder
60 *d*, as likewise shown in Fig. 2. As soon as the link is engaged in the hook the spring will carry the guard-block up to its initial position and prevent the accidental disengagement of the link therefrom.
65

A somewhat similar construction is shown in my Patent No. 479,465; but in practice it was found in that construction that the guard was so light that it would become broken, and there being nothing to limit its side motion
70 the spring or the guard would be broken off. By making the block on the end of the spring practically a complementary extension of the hook itself the danger of breakage of the guard is entirely overcome, and it also en-
75 ables me to make a lug on the guard and a stop on the stem of sufficient strength to resist such usage as these parts will usually get, and by making the extension *b* on the guard-block extend beside the lug or stop *d*
80 such extension acts to protect the lug from breaking in usage by blows, &c., to which the device may be subjected.

This construction forms a practical device suited to the uses to which such heavy hooks
85 are subjected in heavy hauling or teaming—such, for instance, as in logging camps, &c.

What I claim as my invention is—

1. In a hook the combination with the hook proper and its shank and stem, of a spring-
90 tongue secured thereto, a block secured to the spring-tongue and supported on the stem and movable transversely to a longitudinal plane including the hook proper and stem and adapted normally to close the opening between the
95 hook and the stem, a lug on the block, and a stop on the stem against which the lug is adapted to strike to limit the side motion of the block in opening the hook.

2. In a snap-hook, the combination with the 100

hook proper and its stem, of a spring-tongue
secured on the side of the stem, a block se-
cured to said spring-tongue and supported on
the stem and movable transversely to a lon-
5 gitudinal plane including the hook proper and
the stem and adapted normally to close the
opening between the hook proper and the
stem, a stop on the stem, a lug on the block
adapted to strike against the stop on the stem,

said block working beside said stop on the 10
stem and constituting a protecting means
therefor, substantially as described.

In testimony whereof I affix my signature
in presence of two witnesses.

ANDREW RYAN.

Witnesses:

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