

JOHN BOZORTH

RELEASING HOOK.

PATENTED JUN 21 1870

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Fig. 1.

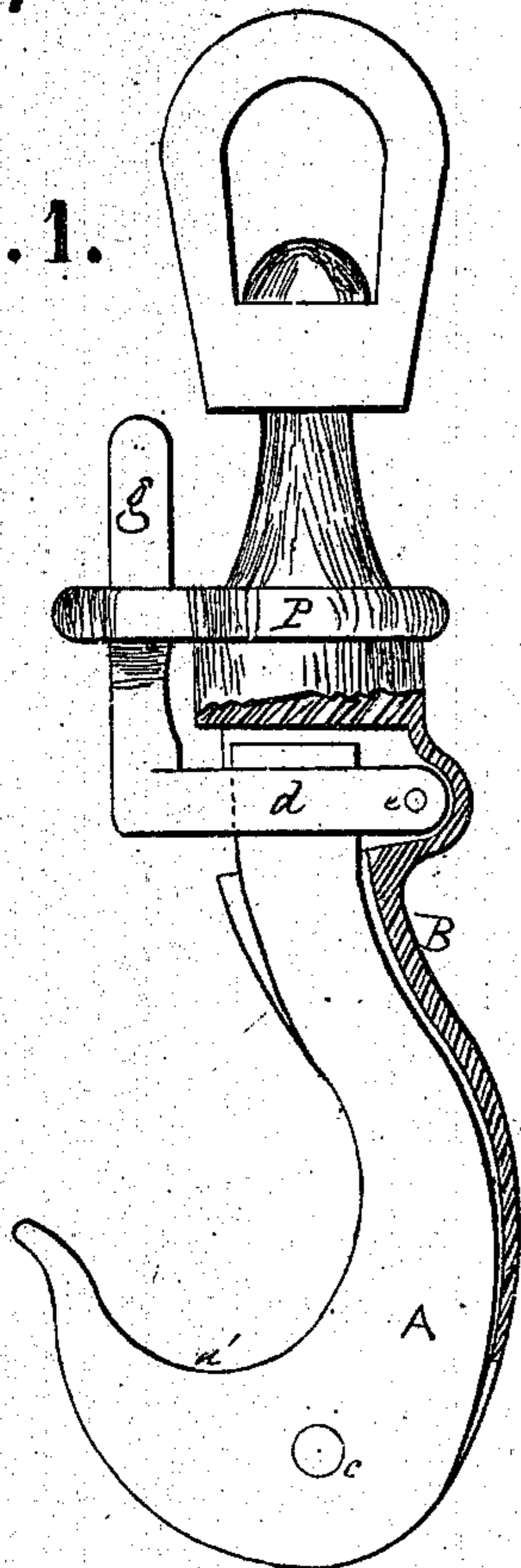


Fig. 2.

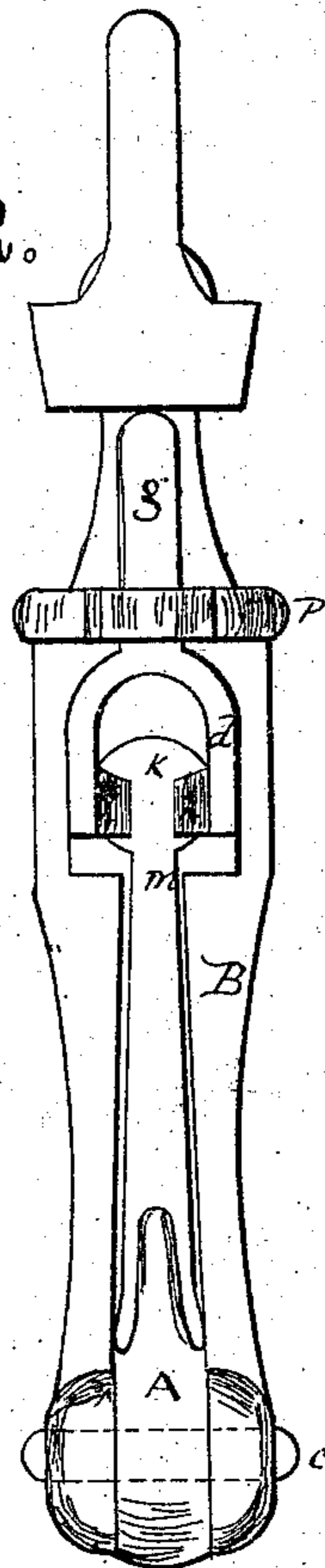


Fig. 3.

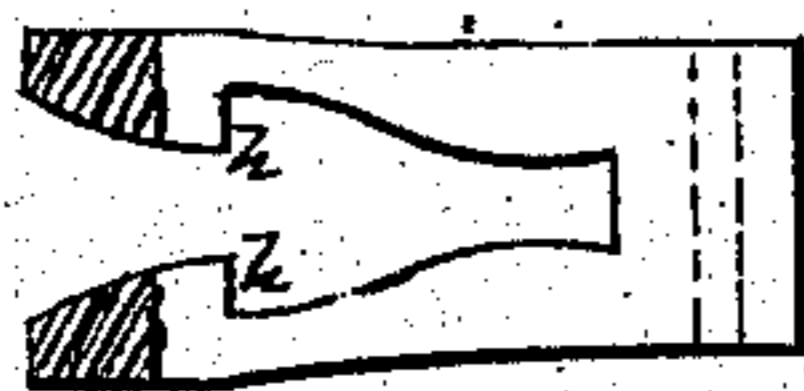


Fig. 5.

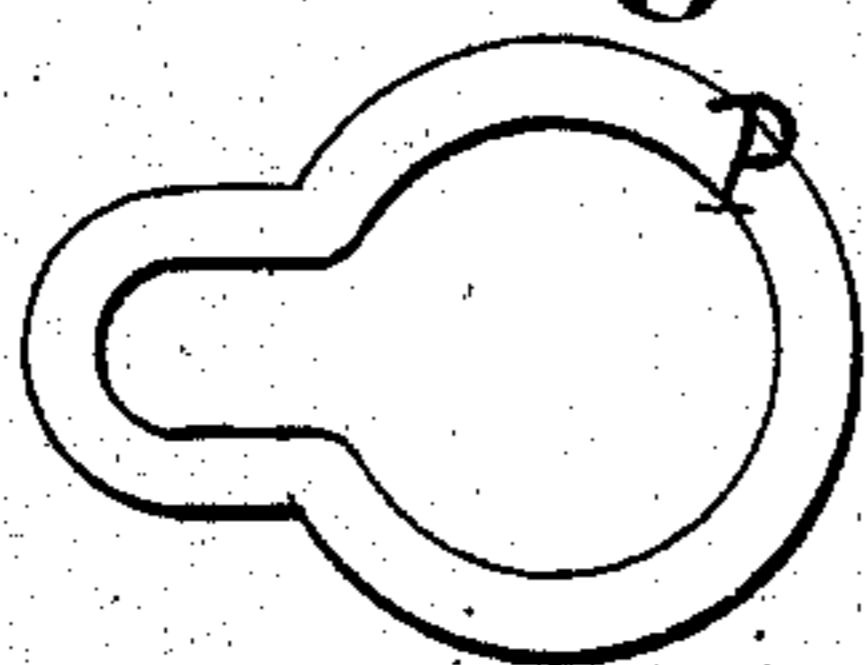
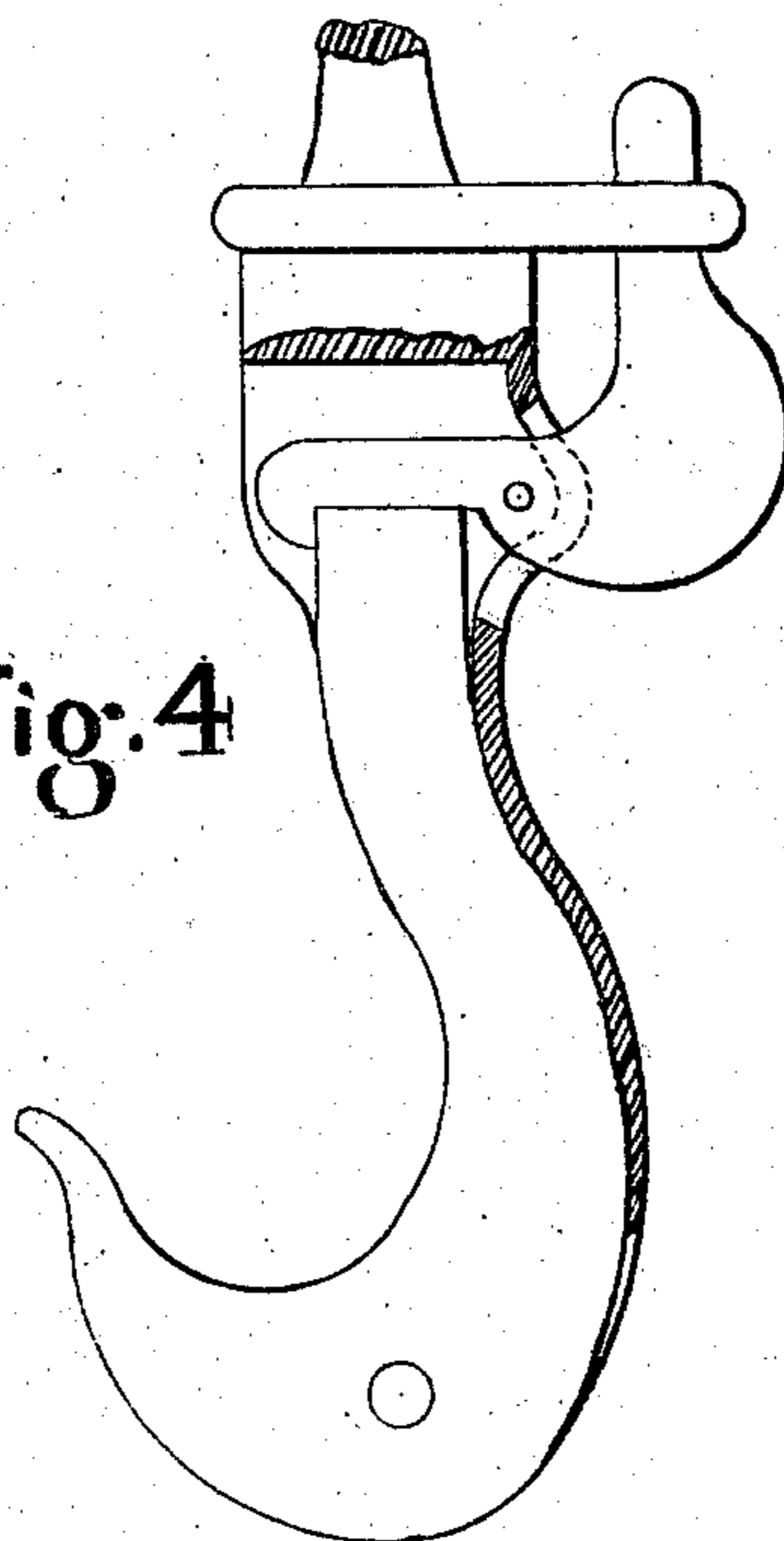


Fig. 4.



Witnesses { Edw. Brown
John Raby.

John Bozorth

United States Patent Office.

JOHN BOZORTH, OF CAMDEN, NEW JERSEY.

Letters Patent No. 104,547, dated June 21, 1870.

IMPROVEMENT IN DETACHING-HOOKS.

The Schedule referred to in these Letters Patent and making part of the same.

I, JOHN BOZORTH, of Camden, in the county of Camden, State of New Jersey, have invented an "Improved Releasing-Hook," of which the following is a specification.

The nature of my invention consists in the construction of a hook adapted especially for launching ships' boats. It is so made that, as soon as the suspended boat touches the water, it is released from the hook; or it can be released from the hook by hand, at pleasure; or it can be so secured as not to be released in either of the above ways, unless the hook is unlocked.

I will now describe its construction and operation.

Figure 1 is a side view, partly in section.

Figure 2 is an end view.

Figure 3 is the latch, in plan.

Figure 4 is a modification of the same principle.

Figure 5 is a plan of the locking-ring.

The hook A is hinged to the hollow casting B by a pin, C, so that the lowest part of the hook *a'* is a little to the outside of the pin C.

The weight upon the hook would turn it upside down were it not for the latch *d* hinged to the casting B by pin *e*. This latch is forked, as in fig. 3, the forks terminating in a handle, *g*.

When this latch is in the position shown in fig. 1, the lugs *h* catch upon the swell *k* at the top end of the hook.

If the latch is pulled down or allowed to fall, the narrow part of the hook, at *m*, will pass through the latch, and the hook be reversed.

To secure the latch *d*, so that it can neither fall nor be pulled down, I pass over its handle the ring or link P, which secures the weight against being released accidentally.

The operation of the hook is in this way:

When the boat is ready for launching, the ring P is lifted off free from the latch, and turned one quarter round. The weight of the boat upon the hook keeps the end K against the latch *d* with sufficient friction to prevent the latch falling until the boat touches the water, when the weight, being off the latch *d*, falls, and the hook cants over upside down, releasing the chain which supports the boat. The latch *d* can also be pulled down by hand (a very slight pull being sufficient to overcome the friction,) and the weight will then be dropped.

It is obvious this feature of the falling of the latch by gravity, and the release of the hook when the weight is off, is susceptible of various modifications. One is shown in fig. 4, where the latch hooks over the top end of the hook.

This hook is also of use on canal-boats and railroad freight-cars, where it is desirable to release them from the draw-line instantly.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The latch *d*, operating by gravity, in combination with the hook A, so that the hook will detach itself from the draw-chain on being relieved from strain, in the manner herein described.

2. The combination of the hook A, latch *d*, and casting B, either with or without the locking-link P, operating substantially as herein described.

JOHN BOZORTH.

Witnesses:

EDWD. BROWN,
JOS. RABY.