

**J. McA. JONES.**  
**Boat-Detaching Apparatus.**

No. 156,798.

Patented Nov. 10, 1874.

Fig. 1.

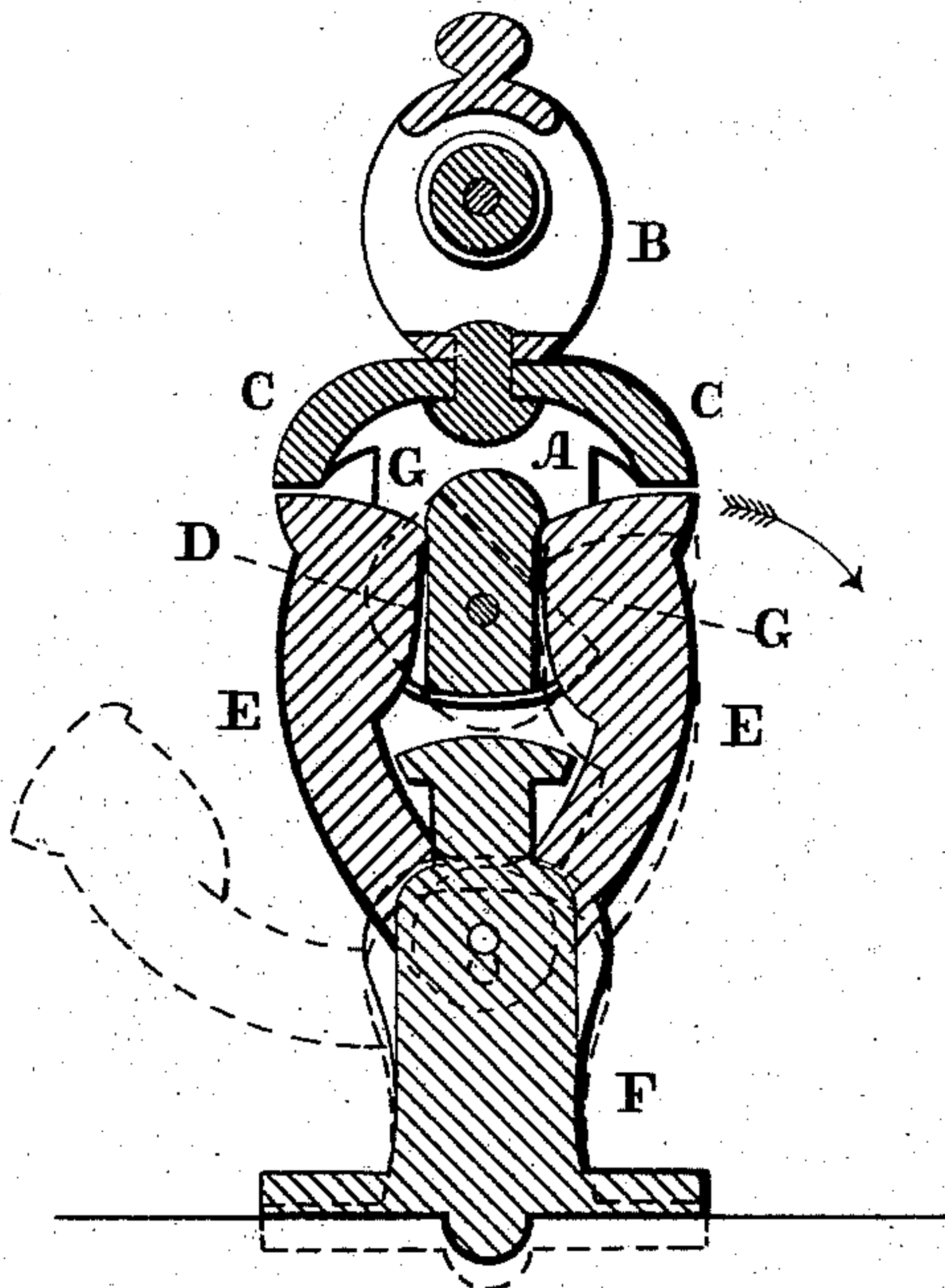


Fig. 2.

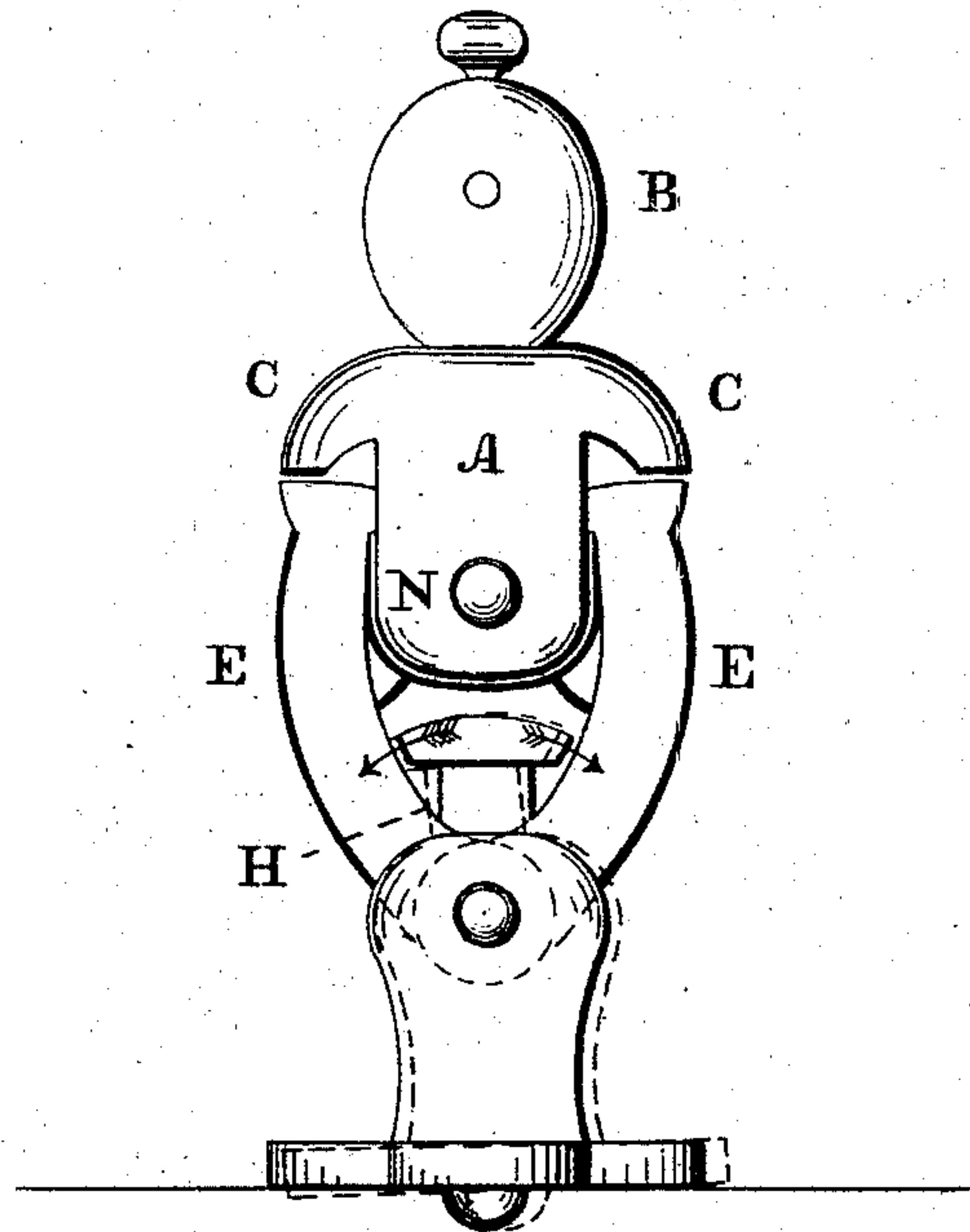


Fig. 3.

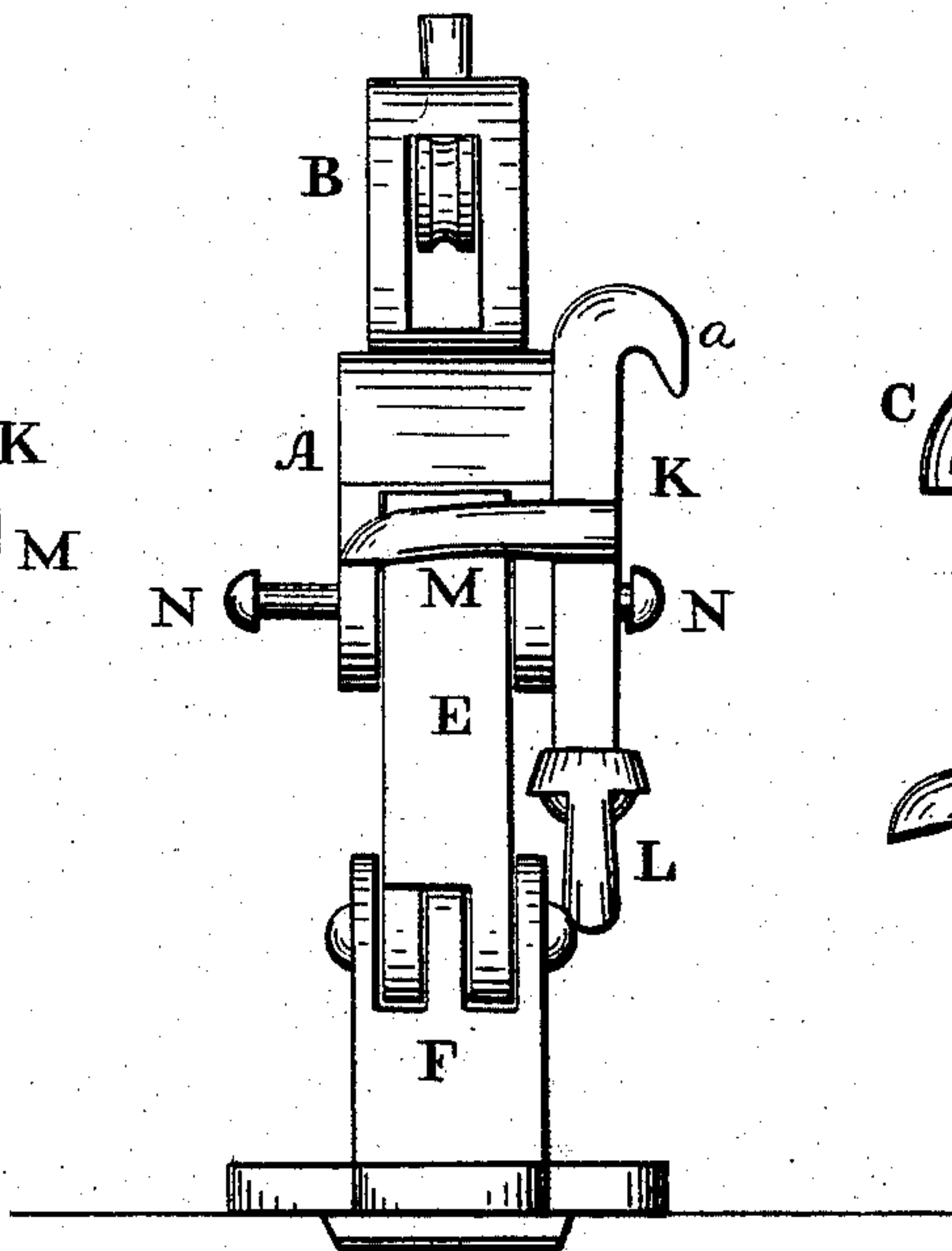


Fig. 5.

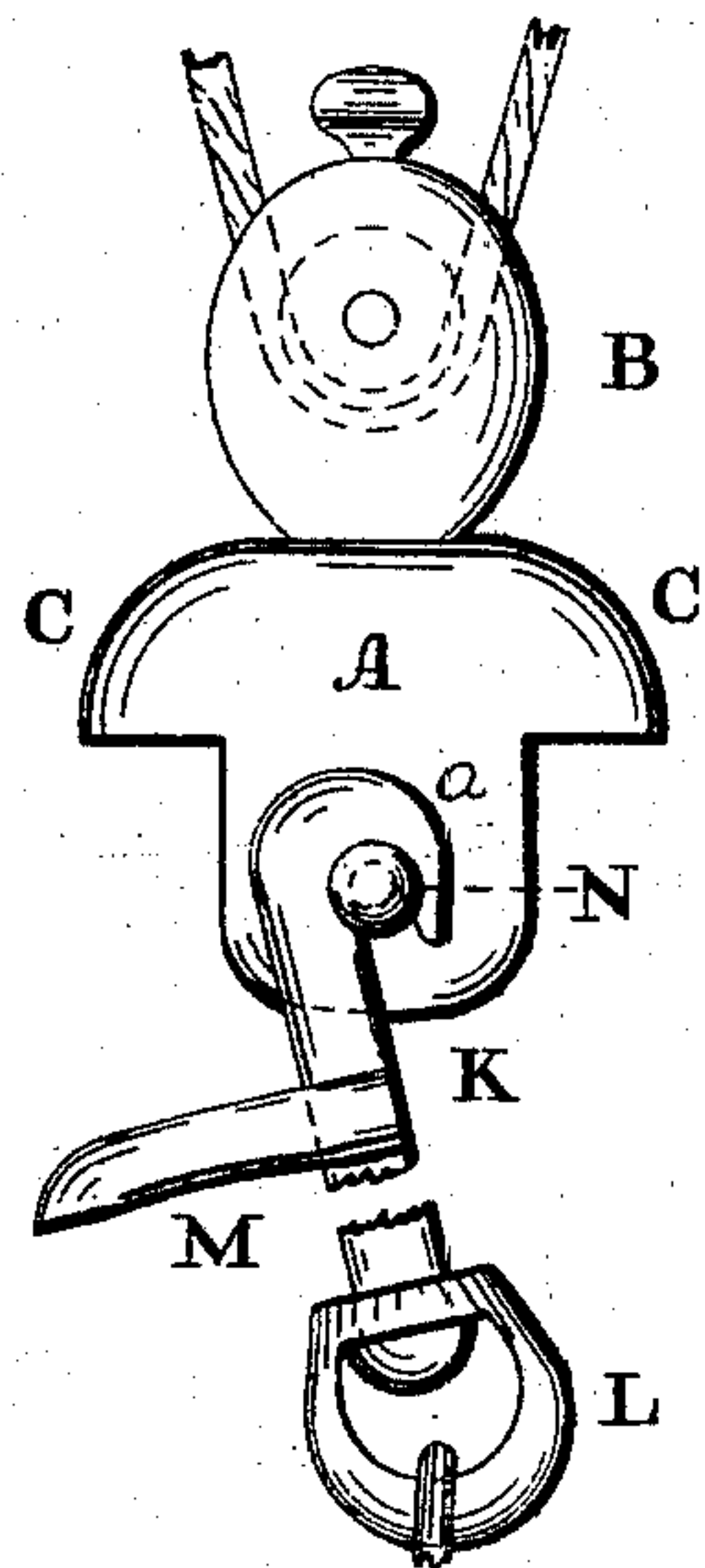
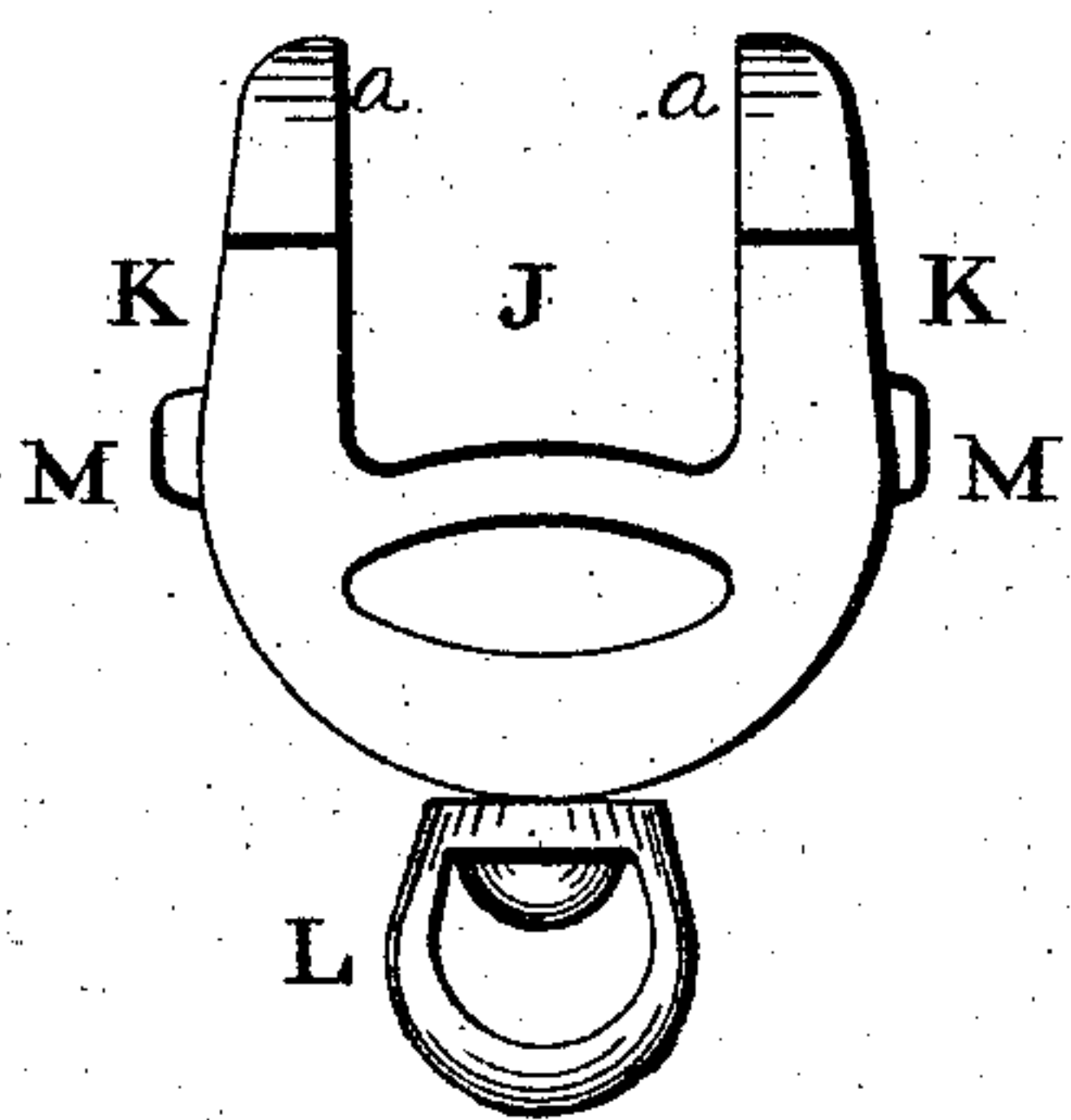


Fig. 4.



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# UNITED STATES PATENT OFFICE.

JOHN MCA. JONES, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF HIS RIGHT TO WILLIAM ALLEN, OF SAME PLACE.

## IMPROVEMENT IN BOAT-DETACHING APPARATUS.

Specification forming part of Letters Patent No. 156,798, dated November 10, 1874; application filed October 10, 1874.

*To all whom it may concern:*

Be it known that I, JOHN MCA. JONES, of the city and county of Philadelphia, and the State of Pennsylvania, have invented a new and useful Improvement in Boat-Detaching Devices; and I do hereby declare the following to be a clear and exact description of the nature thereof, sufficient to enable others skilled in the art to which my invention appertains to fully understand, make, and use the same, reference being had to the accompanying drawings making part of this specification, in which—

Figure 1 is a central vertical section of the device embodying my invention. Fig. 2 is a side elevation thereof. Fig. 3 is an end view. Fig. 4 is a front view of a detached part. Fig. 5 is a side view thereof.

Similar letters of reference indicate corresponding parts in the several figures.

My invention consists in detaching apparatus, which is arranged at the bow and stern of a boat, and so constructed that the apparatus at one end shall be detached or disengaged, whereby the operation is reliable, and without jeopardy to the occupants of the boat. It further consists in means for preventing disengagement of the apparatus during longitudinal swaying of the boat. It also consists in means for preventing disengagement of the apparatus during lateral swaying of the boat, or in case the boat strikes the vessel from which it is being lowered. It also consists in a lock, which is adapted to be applied to the detaching apparatus prior to the time that the detachment is to be accomplished, and constructed to afford means for attaching the boat to the hoisting-tackle, for raising the boat when so required.

Referring to the drawings, A represents a block, which is to be suspended from the vessel by the pulley-block B, or other suitable means, and the upper portion of said block A has its sides C project laterally, so as to overhang the main portion of the block. To the sides of the block there is mounted a swinging head, D, which has its sides grooved vertically, and has an axial motion in the longitudinal direction of the block. E E represent gravitating-dogs or hooked heads, which are

pivoted at their lower ends to bearing-blocks or uprights F, which are to be secured, one at each end, to the boat. The upper portion of the dogs E are formed with tongues G, which project upwardly, and are so located that they will enter the grooves of the head D. From the center of the bearing-block F there rises a rigid standard, H, which projects upwardly between the pivoted dogs E.

The operation is as follows: The dogs are hung on the swinging heads D of the block A, in which position the sides C of said block overhang the tops of the dogs. The weight of the boat holds the dogs firmly on the head D; but if the bow and stern of the boat reach the water simultaneously, and the boat floats, the weight or downward strain on the dogs is released, and the said dogs are elevated sufficiently, so as to clear the head, whereby the dogs immediately fall outward by gravitation, and thus the boat is clear of the lowering ropes or tackle.

Should the sea run high or be rough, it is evident that one end of the boat will reach the water and float earlier than the other end. That end will at once be detached or disengaged from the ropes or tackle, in a manner similar to that above stated; but the disengaging apparatus at the other end will receive a strain or pressure that causes a swinging or rocking of the respective bearing-blocks in the longitudinal direction of the boat, whereby one side of the standard H, which is located between the dogs E, will strike or press against one of the dogs, and force it from the head D. The head, being thus uncontrolled, moves quickly on its axis toward the side on which the other dog is supported, and thus releases the latter from said head, whereby the dogs and head are entirely disengaged and both ends of the boat detached.

It must be observed that the operations of disengaging and detaching are automatic, and that when one pair of dogs is disengaged the other pair will quickly follow the operation of the first pair; but until one pair makes a start the other pair remains passive, or in position on the head, whereby, by avoiding the possibility of the disengagement of one pair of dogs and the firm connection or lock of the other pair,



the occupants of the boat are safe against elevation of one end of the boat and consequent serious results.

During the longitudinal swaying of the boat a certain amount of rocking is transmitted to the dogs, owing to the axial connection of the head E; but said amount is limited by the overhanging sides C of the block B, which are so disposed that the tops of the dogs come to a bearing thereagainst when the swinging motion of the dogs causes such bearing, and thus the displacement of the dog is prevented. The tongues on the dogs, entering the grooves in the sides of the head E, prevent disengagement of the dogs from the head D, either from lateral swaying of the boat or striking of the latter against the side of the vessel from which it is being lowered.

J represents a lock, which is to be applied to the detaching apparatus prior to the time the detachment is to be accomplished, and said lock also serves as means for attaching the boat to the hoisting-tackle, for raising the boat when so required. Said arm J consists of two vertical bars, K, which are hooked at their upper ends *a*, and have a swiveled eye, L, at the bottom. From one side of the bars K there project rearward arms M, which are separated from each other at a distance equal to the distance between the outer faces of the dogs E, so that the latter may be embraced by the arms, and all danger of premature detachment of the detaching apparatus is prevented, the lock being applied to the dogs when the boat is first being lowered, and connected to the bottom of the boat by a suitable chain or cord attached to the eye L, whereby the lock may

be readily cleared of the dogs by withdrawing said lock laterally, this being performed in advance of the time that the detaching operation of the boat is to be accomplished. When the boat is to be hoisted from the water, the lock J is attached to the head-block A by means of the hooked ends of the bars K, which are fitted on pins or bolts N, projecting laterally from said block, said pins, if desired, also forming the axis of the swinging head D; and it is evident that as the hoisting rope or chain raises the block A, and the lock J is connected to said block and to the boat, the operation of the rope or chain will raise the boat, as may be desired or necessary.

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

1. The head D, having an axial motion on the block A, and operating with the dogs E, substantially as and for the purpose set forth.

2. The standard H, interposed between the gravitating-dogs E, substantially as and for the purpose set forth.

3. The block A, carrying the head D, and formed with overhanging sides C, in combination with the dogs E, substantially as and for the purpose set forth.

4. The combined lock and suspension device, consisting of the bars K, with arms M and hooks *a*, substantially as and for the purpose set forth.

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Witnesses:

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