

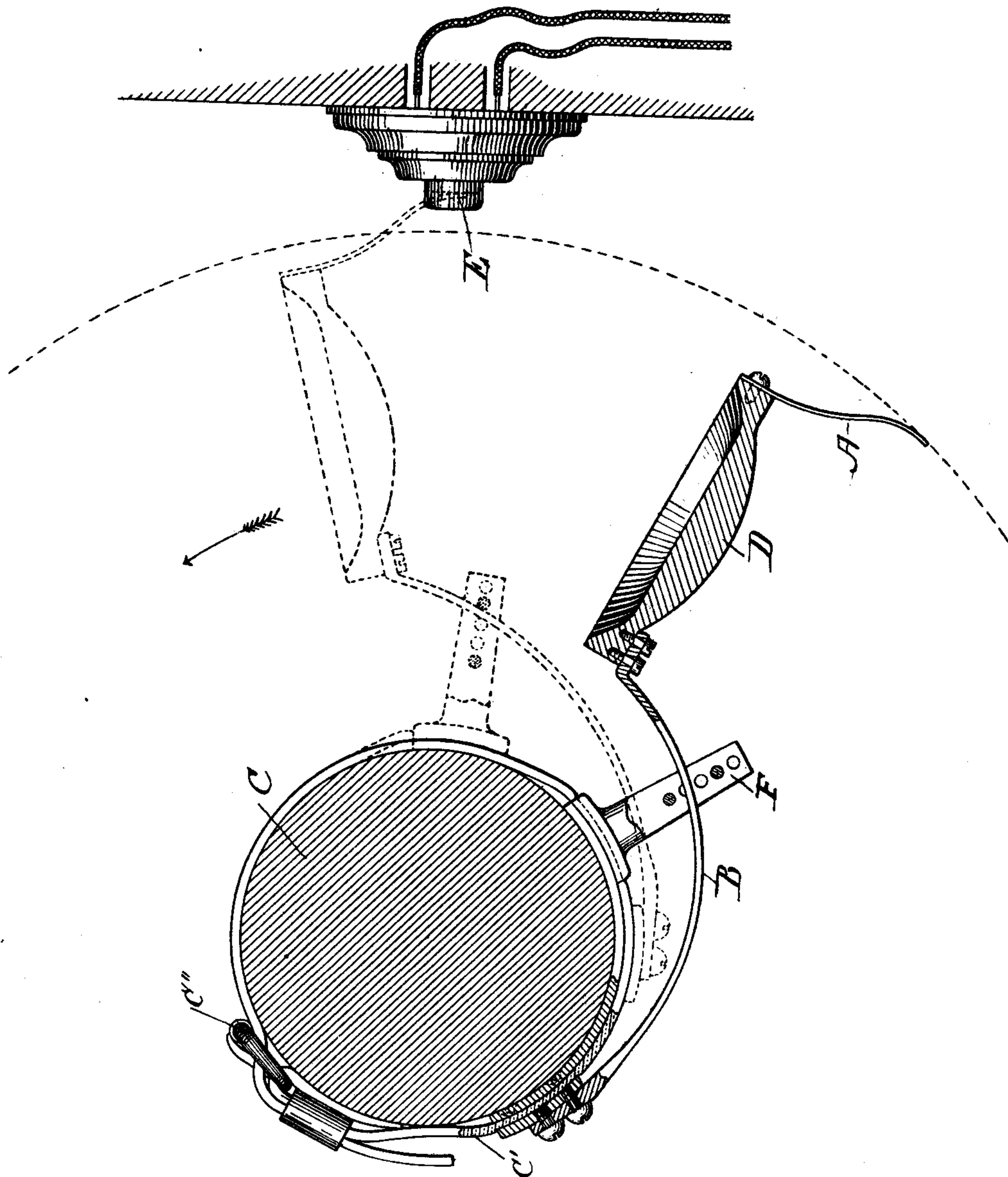
No. 675,871.

Patented June 4, 1901.

L. DA ROZIR.  
SAFETY ALARM DEVICE.

(Application filed Apr. 23, 1900.)

(No Model.)



WITNESSES:  
E. B. Tomlinson.  
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# UNITED STATES PATENT OFFICE.

LEVI DA ROZIR, OF BOSTON, MASSACHUSETTS.

## SAFETY-ALARM DEVICE.

SPECIFICATION forming part of Letters Patent No. 675,871, dated June 4, 1901.

Application filed April 23, 1900. Serial No. 13,869. (No model.)

*To all whom it may concern:*

Be it known that I, LEVI DA ROZIR, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Centrifugal Speed-Alarms, of which the following is a specification.

My invention relates to improvements in apparatus whereby an accident to running machinery is made to operate a warning signal, and thereby directly or indirectly to bring about the shutting off of power.

My improvement hereinafter to be described is particularly adapted, although not exclusively, for use in connection with a safety engine-stop device patented to me August 1, 1899, in Letters Patent No. 629,778.

In the accompanying drawing I have represented a device embodying my present invention in the form now best known to me. It is shown in elevation and partial section.

The device consists, essentially, of a contact member A, carried upon an arm B, adapted to be secured in place upon some portion of the shafting C or other rotary part of the mechanism to be controlled. To enable the arm and contact member to be secured in place upon shafting of various sizes, I mount the arm upon an adjustable attaching device, preferably a leather strap C', provided with a buckle C''. The arm carrying the contact member is so disposed relatively to the shaft or other rotating part with which it is connected that its free end, upon which the contact member is preferably located, shall be free to move in or out toward or away from the axis of the shaft. A convenient means of accomplishing this freedom of movement is afforded by constructing the arm, as shown in the drawing, as a leaf-spring, the free end of which carries a weight or mass D. This weight or mass is preferably made dish or cup shaped and is disposed with its concavity facing the direction of rotation of the shaft.

Such a form enables air-resistance to be availed of in operating the device.

It will be understood that when the shaft to which the device is attached is rotating at not above its normal speed the position of the arm (shown in full lines) will be such that the contact member will travel clear of an alarm device—for example, a push-button E—located in its path. If now an increase of speed of rotation beyond the normal occur, the free end of the arm carrying the contact member will travel in a path (shown in dotted lines) beyond that normally traveled by it and such as to bring the contact member into contact with the alarm-giving or engine-stopping mechanism.

An adjustment whereby the tension of the spring-arm and also its extreme outward motion may be regulated is shown at F, the form shown in the drawing consisting of a pair of standards (one of which is shown as broken away) disposed on opposite sides of the arm B and provided with a series of holes into which a transverse stop or stops may be placed and held. This adjustment device F is mounted upon the strap C', upon which the arm B is also mounted, as before stated. By this construction the whole apparatus is made self-contained and readily attachable to or removable from any particular piece of shafting.

I claim—

A centrifugal speed-alarm device as set forth, comprising an arm B, a cup or dish shaped weight upon said arm, a part A carried by said arm, and means for removably securing the arm to the shaft or other rotating part for the purpose set forth.

In testimony whereof I have hereunto subscribed my name this 18th day of April, 1900.

LEVI DA ROZIR.

Witnesses:

E. D. CHADWICK,  
ALEX. P. BROWN.