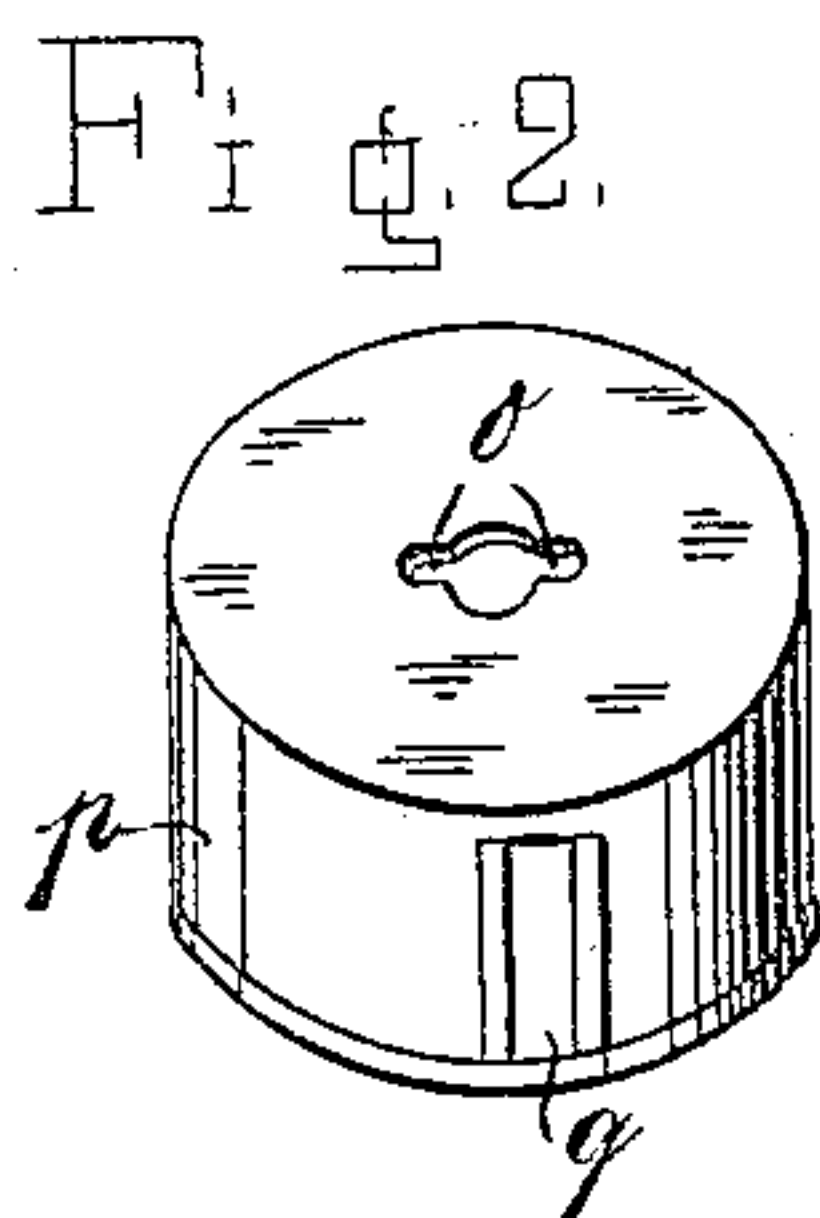
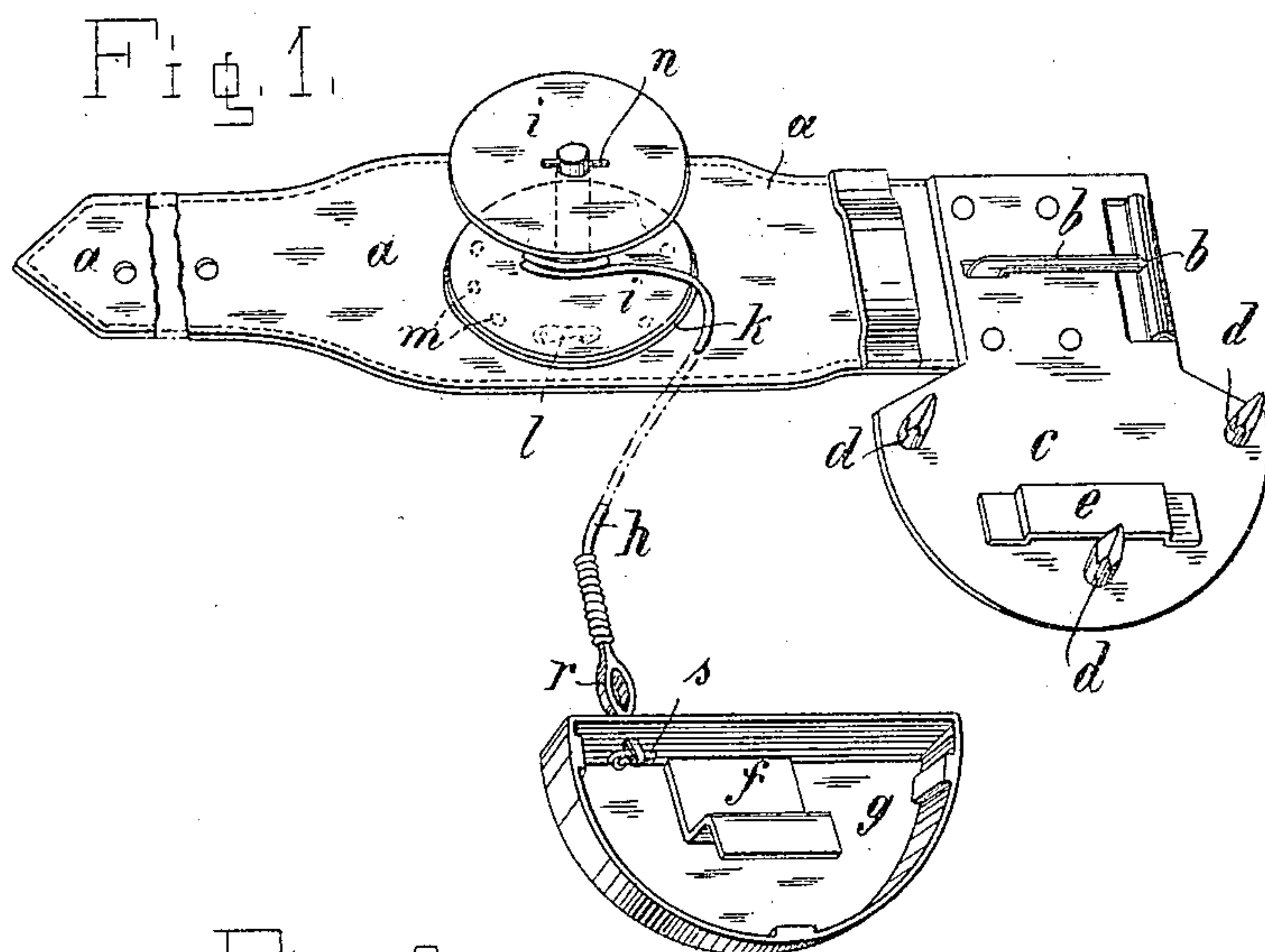


No. 816,681.

PATENTED APR. 3, 1906.

A. PILLER.
LIFE SAVING APPARATUS.
APPLICATION FILED DEC. 10, 1904.



Witnesses

August Lindemann.
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UNITED STATES PATENT OFFICE.

ANTON PILLER, OF SPANDAU, GERMANY.

LIFE-SAVING APPARATUS.

No. 816,681.

Specification of Letters Patent.

Patented April 3, 1906.

Application filed December 10, 1904. Serial No. 236,352.

To all whom it may concern:

Be it known that I, ANTON PILLER, a subject of the King of Prussia, German Emperor, residing at Spandau, in the Kingdom of Prussia and German Empire, have invented certain new and useful Life-Saving Apparatus, of which the following is a specification.

My invention relates to a safety device enabling skaters and other persons who have fallen through the ice to cling to the ice until help arrives, and it further provides means whereby assistance can be given to extricate the skater from the water.

The improvement resides mainly in the construction of a device carried by the skater, a wristband provided with a plate having spikes to be struck into the ice, and so giving a grip to the person who has fallen in.

In the accompanying drawings, which illustrate the invention, Figure 1 is a perspective view showing the complete device. Fig. 2 is a detail, hereinafter referred to.

As shown, to wristband *a*, provided with a buckle *b*, is secured a plate *c*, so that after buckling the band around the wrist the smooth lower side of the plate lies against the inner part of the hand. The plate *c*, which is integral with the plate of the buckle *b*, has three or more spikes *d* for driving into the ice. Generally the said spikes are covered by a casing *g*, which is provided with a resilient catch *f*, moved under a clip *e* on the plate *c*. On the casing *g* there is, by means of a ring *r* and bar *s*, a line *h* attached, which is wound on the spool or bobbin *i*, arranged on the wristband.

The bobbin *i* is rotatably mounted on a pin *n*, secured to a plate *k*, attached to the wristband *a*. Between the outer disk of the bobbin and the plate *k* is a stop device *l m*, which prevents the line from unwinding automatically. The bobbin is covered by means of a case *p*, (shown in Fig. 2,) which has a lateral slot *q* for the line and an orifice *o* in the base, through which passes the pin *n*.

The method of using the device is as follows: After a skater or other person has fallen through the ice he removes the casing *g* with the fingers of the hand to which the band *a* is attached by pressing lightly on the plate. The spikes *d* are now exposed and the skater strikes the spikes into the ice while keeping the band on his wrist, and in this way gets a firm grip on the ice, so as not to be carried away by the undercurrent. The casing *g* hangs from the line, and the stop device and also the casing *p* prevent the line from unwinding. As soon as other persons come to assist, the party who has fallen in unwinds the line and throws the case *g* and the line to his rescuers, so that the latter assist him, by drawing on the line, to clamber out of the water.

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

1. In a device of the class set forth the combination with a wristband of a plate having spikes and attached to said wristband, a casing removably mounted on said plate to cover said spikes, a line having one end connected to said casing, and a bobbin secured to the wristband to which the other end of said line is attached, substantially as described.

2. In a device of the class set forth, in combination, a wristband, a plate having spikes attached to said wristband, a casing removably mounted on said plate, a bobbin secured to the wristband, a case covering said bobbin said case having a guiding-slot, a line attached to said bobbin and to said casing, and means for preventing said line from unwinding from said bobbin substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two witnesses.

ANTON PILLER.

Witnesses:

WOLDEMAR HAUPT,
HENRY HASPER.