

(No Model.)

W. R. CLOSE.  
STRIKER FOR FOG SIGNALS.

No. 497,534.

Patented May 16, 1893.

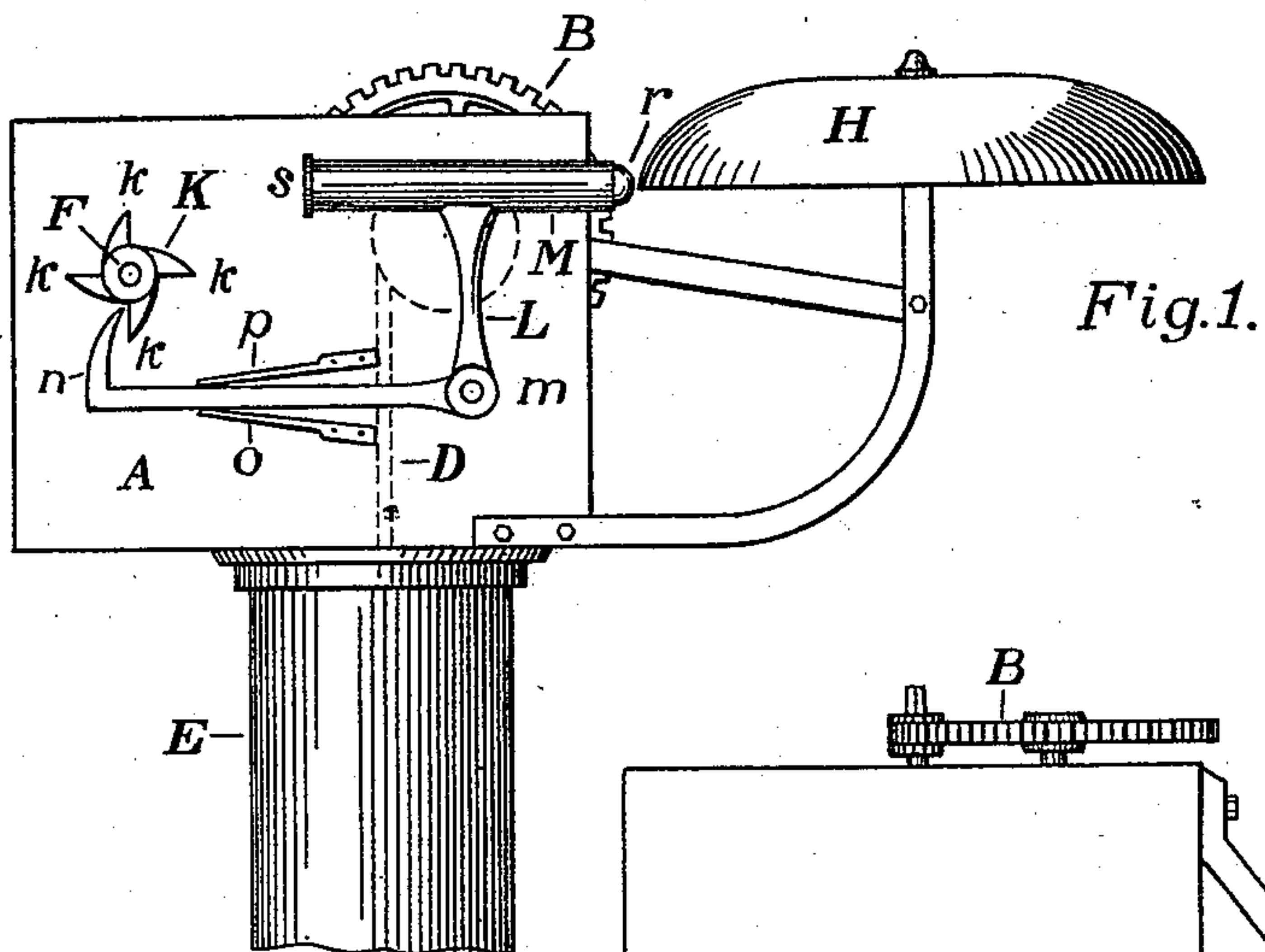


Fig. 1.

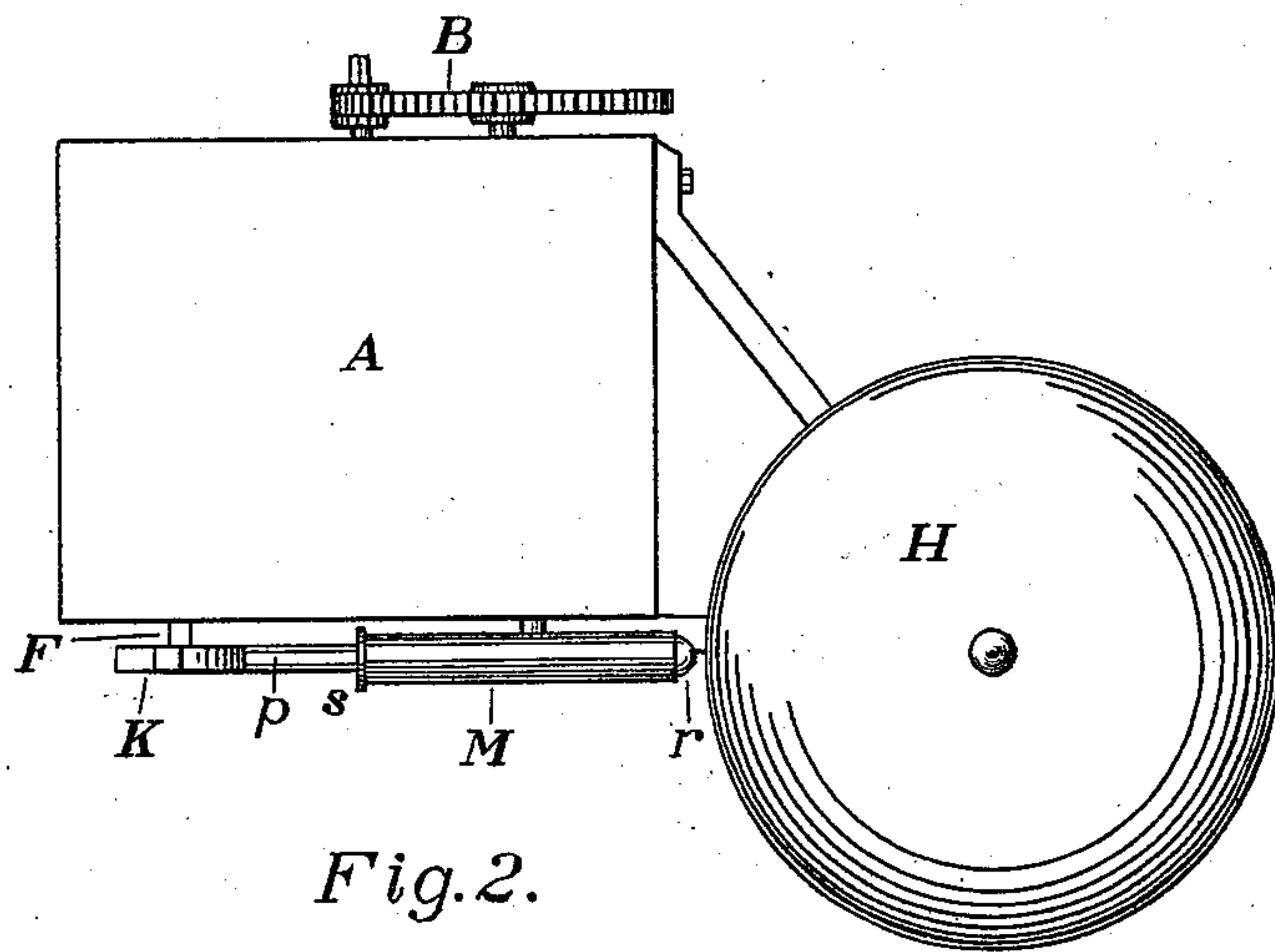


Fig. 2.

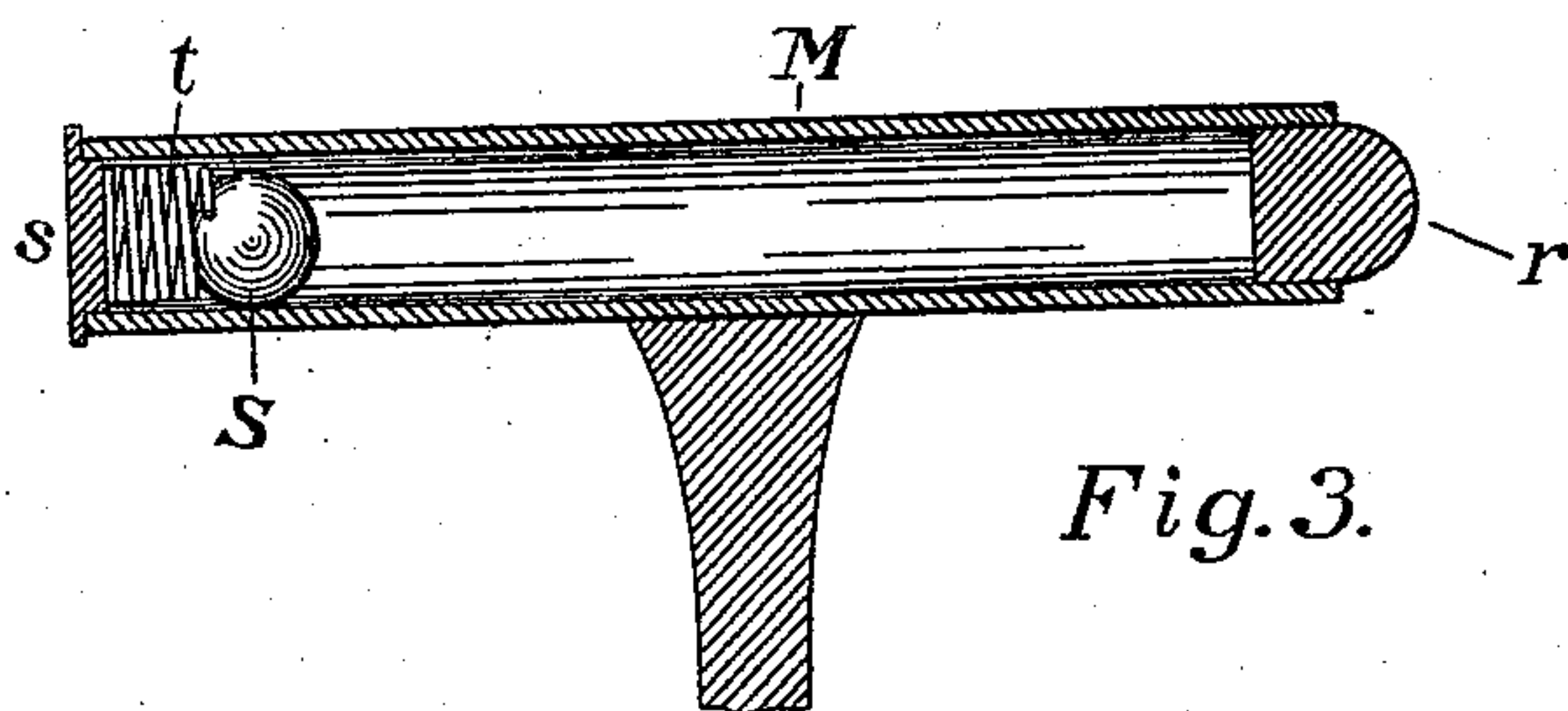


Fig. 3.

WITNESSES.  
*H. E. Collett*  
*J. M. Long*

*Walter R. Close*  
INVENTOR.  
*By J. R. Mason*

ATTY.



# UNITED STATES PATENT OFFICE.

WALTER R. CLOSE, OF BANGOR, MAINE, ASSIGNOR OF ONE-HALF TO CHARLES E. HILL, OF SAME PLACE.

## STRIKER FOR FOG-SIGNALS.

SPECIFICATION forming part of Letters Patent No. 497,534, dated May 16, 1893.

Application filed July 20, 1892. Serial No. 440,598. (No model.)

*To all whom it may concern:*

Be it known that I, WALTER R. CLOSE, a citizen of the United States, residing at Bangor, in the county of Penobscot and State of Maine, have invented certain new and useful Improvements in Strikers for Fog-Signals; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention consists of a striker for fog signals and is fully illustrated in the accompanying drawings in which—

Figure 1 is a side elevation of striker mounted upon the signal. Fig. 2 is a plan. Fig. 3 is a longitudinal section of striker with inclosed ball in elevation.

Similar letters refer to corresponding parts throughout the figures.

The object of my invention is to provide a new form of striker for fog signals operated by clock-work mechanism actuated by a weight.

As in the Letters Patent for fog signals, No. 472,335, dated April 5, 1892, granted to myself and C. E. Hill, I provide a strong clock-work mechanism which is inclosed in the case A to run for an extended period of time, say six months, with any usual winding device indicated at B. A weight is carried upon a wire rope D winding upon a drum upon the cylinder shaft of the clock mechanism, as commonly, and travels in a hollow post E.

Upon a shaft F actuated by the clock-work mechanism and extending outside the casing of the clock-work and geared to turn in one minute or thereabout as may be desired I mount a cam-wheel K having any convenient number of projections *k k*.

The striker M hereinafter described is mounted upon a lever-arm L bent substantially at right angles and pivoted at its elbow *m* to the frame, the power arm of the lever being provided with a tail-piece *n* adapted to engage with and be operated by the cam-wheel K as the latter revolves. A spring *o* is fitted to the frame and arranged to bear upward upon the power arm of the lever and force the tail-piece thereof between the projections of the cam-wheel, and a spring *p* is similarly

fitted to the frame arranged to bear downward upon the power arm of the lever and return it to position after having risen. As the cam-wheel revolves the power arm of the lever is forced down and the striker M drawn back away from the gong H against the spring *o*, the gong H being attached to the frame in such position as to receive the blow of the striker M as it moves forward. As the projection of the cam-wheel in engagement with the tail-piece of the lever passes the tail-piece the action of the spring *o* and the weight of the striker carries the striker forward and a blow is delivered upon the gong, when by the action of the spring *p* the striker is instantly retracted from contact with the gong.

The striker M consists of a hollow metallic cylinder having its forward end *r* closed and loaded and its rear end *s* closed. Within the cylinder is a heavy metallic ball S of such diameter as to travel freely in said cylinder. The striker M is mounted about midway of its length and nearly balanced upon the weight arm of the lever L. As the weight arm of the lever is raised the ball S rolls back to the rear of the cylinder where it is preferably cushioned upon a spring *t* of such power as to be compressed by the weight of said ball. As the weight arm descends the striker M moves forward and as the center is passed the ball S assisted by the spring *t* rolls forward and strikes the loaded end *r* of the striker at the moment the stroke is delivered upon the gong, and so by its weight and momentum greatly increases the force of the blow. The number of projections upon the cam-wheel K may be varied accordingly as more or less strokes are desired with each revolution of the shaft F.

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

1. In a striker for fog signals and in combination with a hollow metallic cylinder having a closed and loaded point and a closed butt, a metallic ball within said cylinder of such diameter as to travel freely within said cylinder.

2. The herein described striker for fog signals consisting of the combination of a hollow metallic cylinder having a closed and loaded point and a closed butt; a metallic



ball within said cylinder of such diameter as to travel freely therein; and a spring within said cylinder, attached to the butt thereof, and of such power as to be compressed by the weight of said ball.

3. In a fog signal a striker consisting of the combination of a hollow metallic cylinder having its forward end closed and loaded and its rear end closed; a metallic ball within said cylinder of such diameter as to travel freely therein; said cylinder being mounted horizontally near the middle of its length upon a bent lever pivoted to the signal frame and adapted to be tripped and operated by a cam-wheel carried upon a shaft actuated by clock-work mechanism.

4. A fog signal consisting of the combina-

tion of a clock-work mechanism; a shaft operated by said mechanism and carrying a cam-wheel; a striker consisting of a hollow metallic cylinder having a closed and loaded point and a closed butt and carrying within it a metallic ball of such diameter as to travel freely therein, said cylinder being mounted horizontally near the middle of its length upon a bent lever pivoted to the signal frame and adapted to be tripped and operated by said cam-wheel; and a gong or bell so placed as to receive the blow of said striker.

WALTER R. CLOSE.

In presence of—

G. I. MANSUR,

H. E. COLLETT.