

No. 636,368.

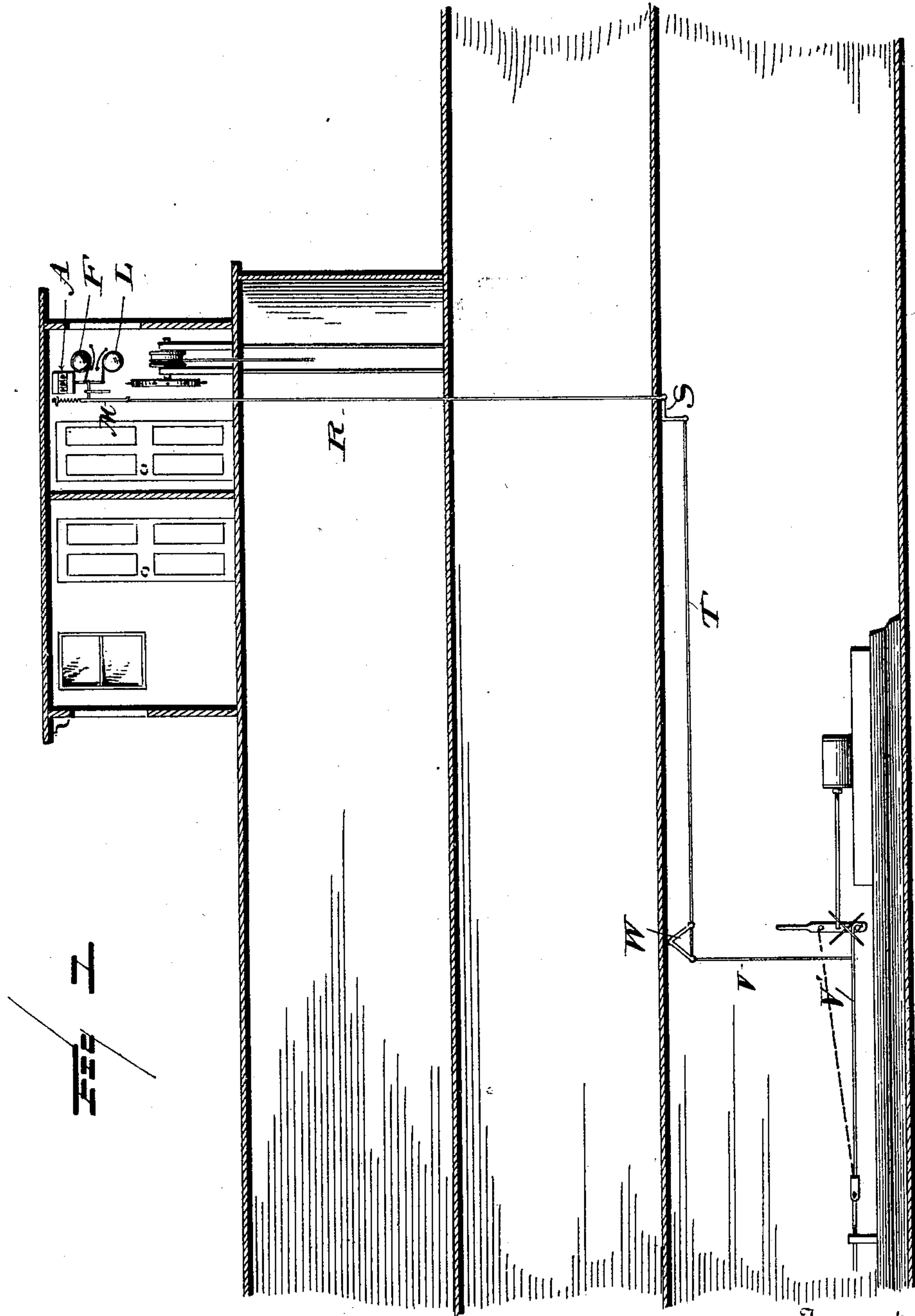
Patented Nov. 7, 1899.

D. H. VERNEUILLE.
INDICATOR.

(No Model.)

(Application filed May 1, 1899.)

2 Sheets—Sheet 1.



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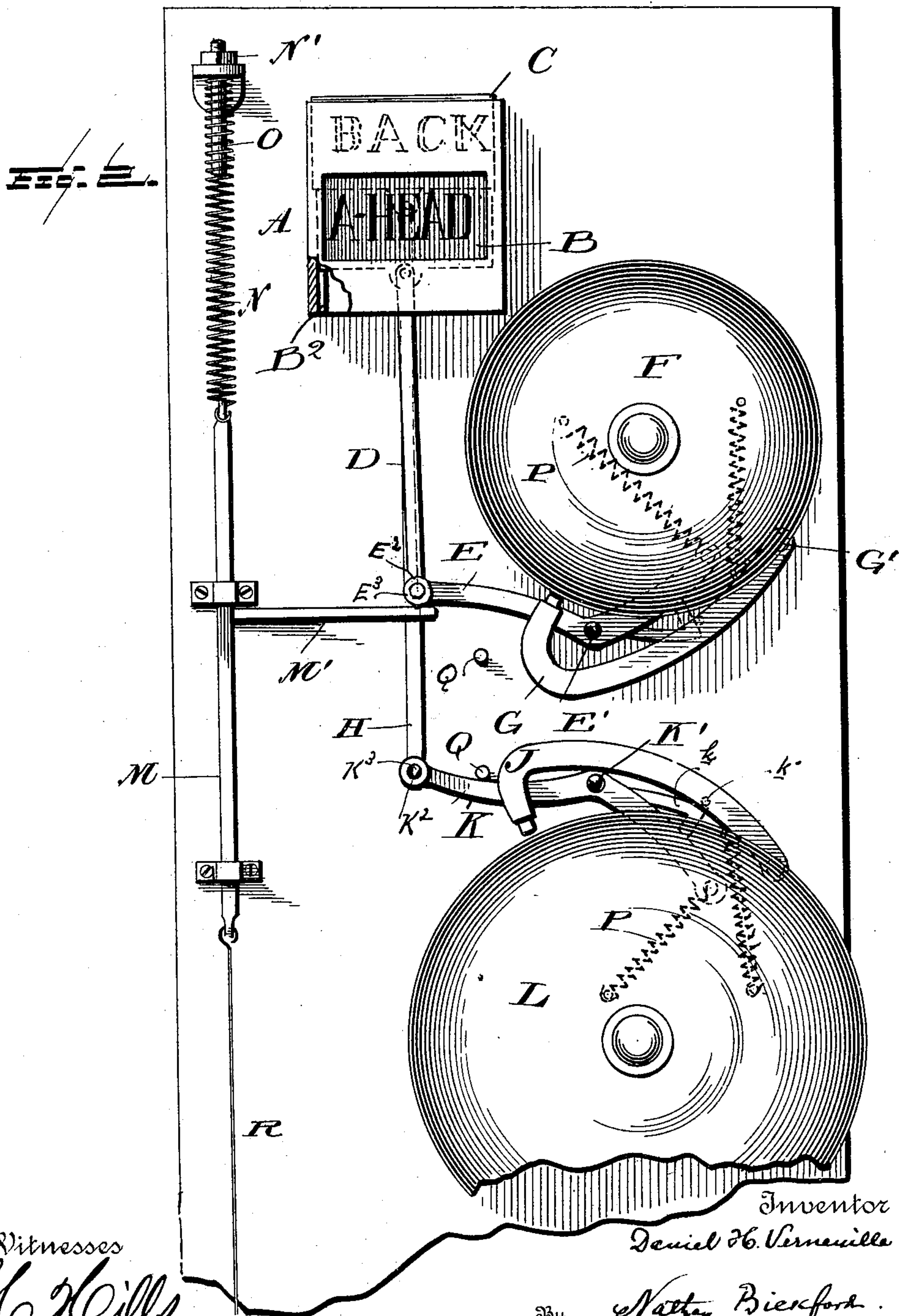
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UNITED STATES PATENT OFFICE.

DANIEL H. VERNEUILLE, OF MOBILE, ALABAMA.

INDICATOR.

SPECIFICATION forming part of Letters Patent No. 636,368, dated November 7, 1899.

Application filed May 1, 1899. Serial No. 715,154. (No model.)

To all whom it may concern:

Be it known that I, DANIEL H. VERNEUILLE, a citizen of the United States of America, and a resident of Mobile, county of Mobile, State of Alabama, have invented certain new and useful Improvements in Indicators, of which the following is a specification.

This invention relates to new and useful improvements in indicating devices, and especially to an apparatus designed for use particularly upon steamboats and in the pilot-houses, whereby the pilot may know positively that when he has signaled to the engineer in the engine-room to actuate the reversing mechanism the signal has been properly responded to by the showing of a card at a convenient location to the pilot bearing the words "Ahead" or "Back," accordingly as the lever-reversing mechanism is operated.

More specifically the present invention consists in providing an indicating apparatus having display-cards adapted to be located in the pilot-house, which cards are actuated by a reversing-bar which, as it is operated by connections with the reversing mechanism in the engine-room, will cause one or the other of the cards to be disclosed and at the same time ring a bell, which will serve as a means of acquainting the pilot of the adjustment of the reversing mechanism by the engineer in response to the signal given by the pilot.

To these ends and to such others as the invention may pertain, the same consists, further, in the novel construction, combination, and adaptation of the parts, as will be hereinafter more fully described and then specifically defined in the appended claims.

My invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this application, and in which drawings similar letters of reference indicate like parts throughout both views, in which—

Figure 1 is an elevation showing the indicating apparatus set up in a pilot-house and having connections with the reversing mechanism in the engine-room. Fig. 2 is a side view of the indicator enlarged.

Reference now being had to the details of the drawings by letter, A designates the indicator-containing box, which it is my purpose to have located in the pilot-house of a

ship and convenient to the pilot. Within this box or casing are the two indicating-cards B and C, one of which, as B, has printed thereon the word "Ahead," while the second card has printed thereon the word "Back." The card B is fastened to the upper end of the rod or bar D, while the lower end of said bar is fastened to a lever E, which latter is pivoted at E', adjacent to the gong F. The spring-actuated hammer G is pivoted at G' and in such a position that its free end will be depressed by the free end of the lever E as the end of the lever E, which is pivoted to the lower end of the bar D, is raised. As the free end of the lever E tilts down it strikes against the shank of the hammer, thus drawing down the hammer, which is spring-actuated, and allows the hammer to spring back and strike the gong and showing the "ahead" card in the indicating-box, which is located in the pilot-house. This card B is so mounted in the casing that its edges will slide in slots B² in the walls of the box. Mounted directly over the "ahead" card in said casing is the second card referred to, and this "back" card C is guided in the same slots B² and is connected to a bar H, located directly behind the bar D, the upper end of which bar H may be forwardly bent, if desired, so that the two bars will not interfere with each other. To the lower end of the bar H, which is slightly longer than the bar D, is connected the outer end of the lever K, which latter is pivoted at K' to the casing, and its angled portion k is adapted to strike against the pin k' and actuate the hammer J as the outer end of said lever K is depressed by lever H. As the angled portion k passes the pin k' the free end of the hammer J will be drawn by means of the spring P against the gong L.

For operating the levers and the indicators I provide the member M, which I term a "reversing-bar," and which has an arm M' at right angles thereto, which arm is designed to strike against washers E² and K², that are mounted on the pins E³ and K³, respectively at the ends of the levers E and K, accordingly as it is desired to cause one indication or another and to ring one or another of the gongs. Connected to the upper end of said member M is a coiled spring N, which in turn is fastened to a rod O, carrying a nut N' on its upper

threaded end. The office of this spring is to retain the member M normally at its highest limit, in which position the reversing mechanism of the engine is set to go ahead and in which position the "ahead" card will be indicated in the pilot-house.

In order to limit the movement of the two levers toward each other, I provide stops Q, and a coiled spring P is connected at its ends to said levers, the tension of which spring is supposed to return the levers to their normal positions.

The lower end of the member M is connected to a wire R, which in turn is fastened to one corner of the angle-lever S. This angle-lever is also connected at another of its corners to the wire T, and the opposite end of the wire T is connected to a second angle-lever W, to a corner of which is also fastened one end of the rod V, the lower end of the latter being pivoted or otherwise connected to the cam-rod, as at V'. The reversing mechanism, to which no claim is made in this application, is of the ordinary construction and has connection with the cam-rod, whereby the cam-rod may be raised or lowered a short distance sufficient to actuate the indicating mechanism and to strike the gongs.

The operation of my invention is as follows: The indicator is set on the "ahead" adjustment, in which position the reversing member M is at its highest limit and the "ahead" card disclosed at the sight-aperture. When the pilot signals to reverse the engine, as the reversing-lever in the engine-room is actuated the cam-rod is raised in the position shown in dotted lines, and the member M is drawn down, the "back" card disclosed, and the "ahead" card drawn down out of sight. As

the "back" card is disclosed the hammer J is caused to strike the lower gong to give a signal to the pilot of the reversal of the lever.

From the foregoing it will be noted that the pilot will know positively whether the signal which he has given to the engineer has been promptly and correctly complied with by the engineer. In the daytime the cards will show and at night-time the two gongs, of different tone, will be struck.

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

1. An indicating device for pilot-house, &c., comprising in combination with the eccentric-rod and reversing mechanism of an engine, the spring-actuated indicator-bar having a right-angled extension thereon, the indicating-cards and bars connected thereto, the levers having pivotal connections with the lower ends of said bars and washers on their pivotal pins, the gongs, and hammers actuated by said levers, which latter are adapted to trip the hammers as the spring-actuated bar is operated, as set forth.

2. In an indicating device, the combination with the spring-actuated indicator-actuating bar, the indicating-cards, the bars connected at their upper ends to said cards, the pivotal levers and hammers adapted to be actuated as the spring-actuated bar is operated, the reversing-lever and connections, as shown and described.

Signed by me, at No. 65 Conti street, Mobile, Alabama, this 13th day of April, 1899.

DANIEL H. VERNEUILLE.

Witnesses:

SYLVESTER F. CUNNINGHAM,
CORNELIUS QUARTERMUS.