(No Model.)

E. OLSEN.

SIGNAL BELL.

No. 485,297. Patented Nov. 1, 1892.

Fig. 1.

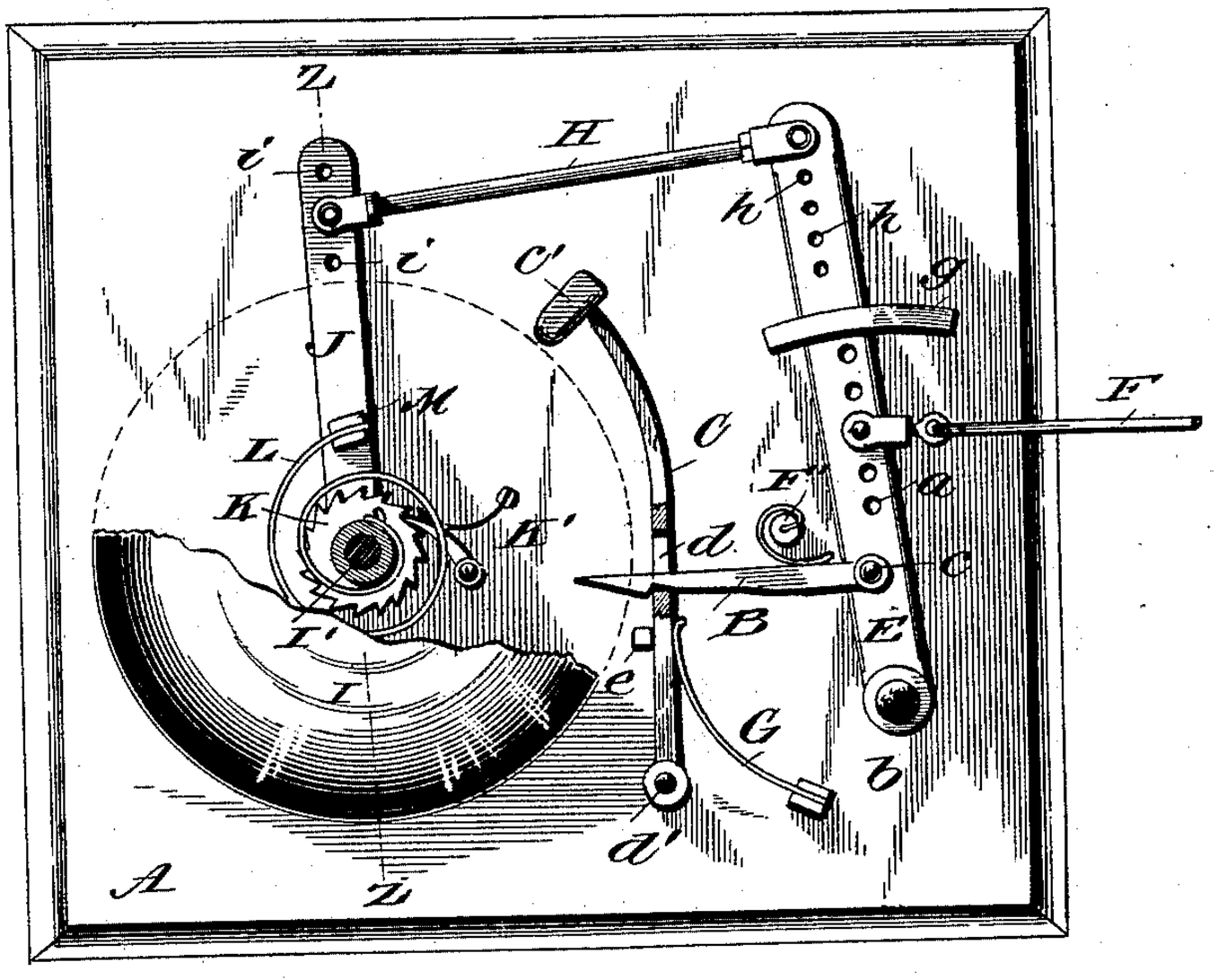
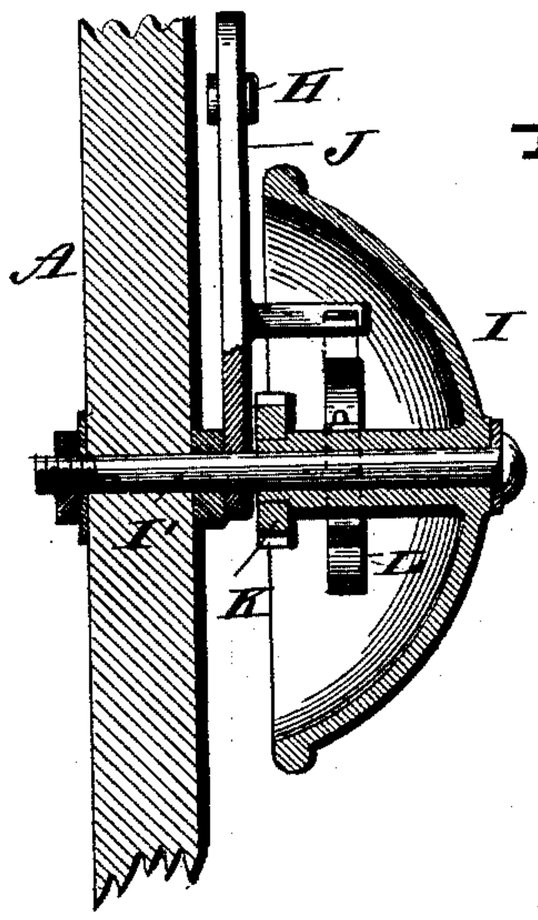


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

ENGLEBRECHT OLSEN, OF WALKERVILLE, MONTANA.

SIGNAL-BELL.

SPECIFICATION forming part of Letters Patent No. 485,297, dated November 1, 1892.

Application filed January 4, 1892. Serial No. 416,973. (No model.)

To all whom it may concern:

Be it known that I, ENGLEBRECHT OLSEN, a citizen of the United States, residing at Walkerville, in the county of Silver Bow and State of Montana, have invented certain new and useful Improvements in Signal-Bells; and I do 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in signal-bells, designed more particularly as an improvement upon the device for which patent was granted to me February 5, 1889, No. 397,245; and it has for its objects, among others, to dispense with certain parts, rendering the device more certain and positive in its action, lessening the cost, and providing simpler means for regulating the tension on the pull-lever.

Other objects and advantages of the invention will hereinafter appear, and the novel features will be specifically defined by the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a plan view of my improvement with a portion of the bell broken away. Fig. 2 is a section thereof on the line *z z* of Fig. 1.

Like letters of reference indicate like parts throughout the two views.

Referring now to the details of the drawings by letter, A designates the plate or base upon which the operating parts are secured.

E is a lever pivoted to the base at *b* at one end, and to this lever is connected by any form of detachable connection the rod F, which is designed to be connected with a bell-crank or other form of lever or otherwise, according to the device with which the signal is to be used. The lever is provided with a plurality of holes *a* for such adjustment as may be necessary. This lever has pivotally connected thereto, as at *c*, a trip-lever B, provided with a hooked end which works through a slot *d* in the lever C, which is pivoted at *d'* to the base, and at its free end provided with a hammer-head *c'*. The movement of this lever is limited by a stop-pin *e*, as seen in Fig. 1, and it is forced against the bell by a spring G. The trip-lever is held in engagement with the lever C by the spring F'. The lever E is guided in its movements by a curved guide *g*, and at its upper end has adjustably connected thereto the arm H, holes *h* being provided for such adjustment.

I is the bell mounted, preferably loosely, on the bell-post I', and on this post is journaled the arm J, to which the arm H is adjustably connected at the upper end, holes *i* being provided for the necessary adjustment.

Fast upon the hub of the bell is a ratchet-wheel K, with which engages the spring-pawl K' on a projection on the base, as seen in Fig. 1.

L is a spring attached at one end to the hub of the bell and at the other end attached to the lateral arm M on the lever or arm J.

In operation when the pull-cord is worked the lever E comes forward, carrying the trip-lever with it, which in turn carries the striking-lever C forward till it stands at a certain angle, when the trip-lever leaves the hole in the striking-lever, releasing said lever, when the spring G throws the hammer-head against the bell and sounds an alarm. The tension of the spring L on the lever is regulated by turning the bell on its post, the pawl holding the spring as it is wound.

What I claim as new is—

1. The combination, with the spring-pressed striking-lever, of an operating-lever suitably pivoted at one end, a trip-lever pivoted thereto and engaging the striking-lever, and a lever on the bell-post, with a spring and ratchet and pawl for regulating the tension of the spring on the operating-lever, as set forth.

2. The combination, with the bell, the striking-lever having slot and the operating-lever, of the trip-lever pivoted to the operating-lever and having hooked end working in said slot, the arm sleeved on the bell-post and connected with the operating-lever, the spring on the hub of the bell and connected with the said arm, and the ratchet on said hub with a pawl engaging therewith, substantially as specified.

3. The combination, with the operating-le-

ver, the pull-rod adjustably connected therewith, the trip-lever pivoted to the operating-lever, the spring-actuated striking-lever and the arm on the bell-post and adjustably connected with the operating-lever, of the hub of the bell, the ratchet-wheel thereon, the spring connected at one end to said hub and at the other end to said arm, and the spring-pawl engaging said ratchet, as and for the purpose specified.

In testimony whereof I affix my signature in presence of two witnesses.

ENGLEBRECHT OLSEN.

Witnesses:

A. G. JOHNSON,

L. GAINAR.