L. M. RINGWALT & C. S. LAMPREY.

EXPRESS-CALLS.

No. 178,674. Patented June 13, 1876.

FIG. 1.

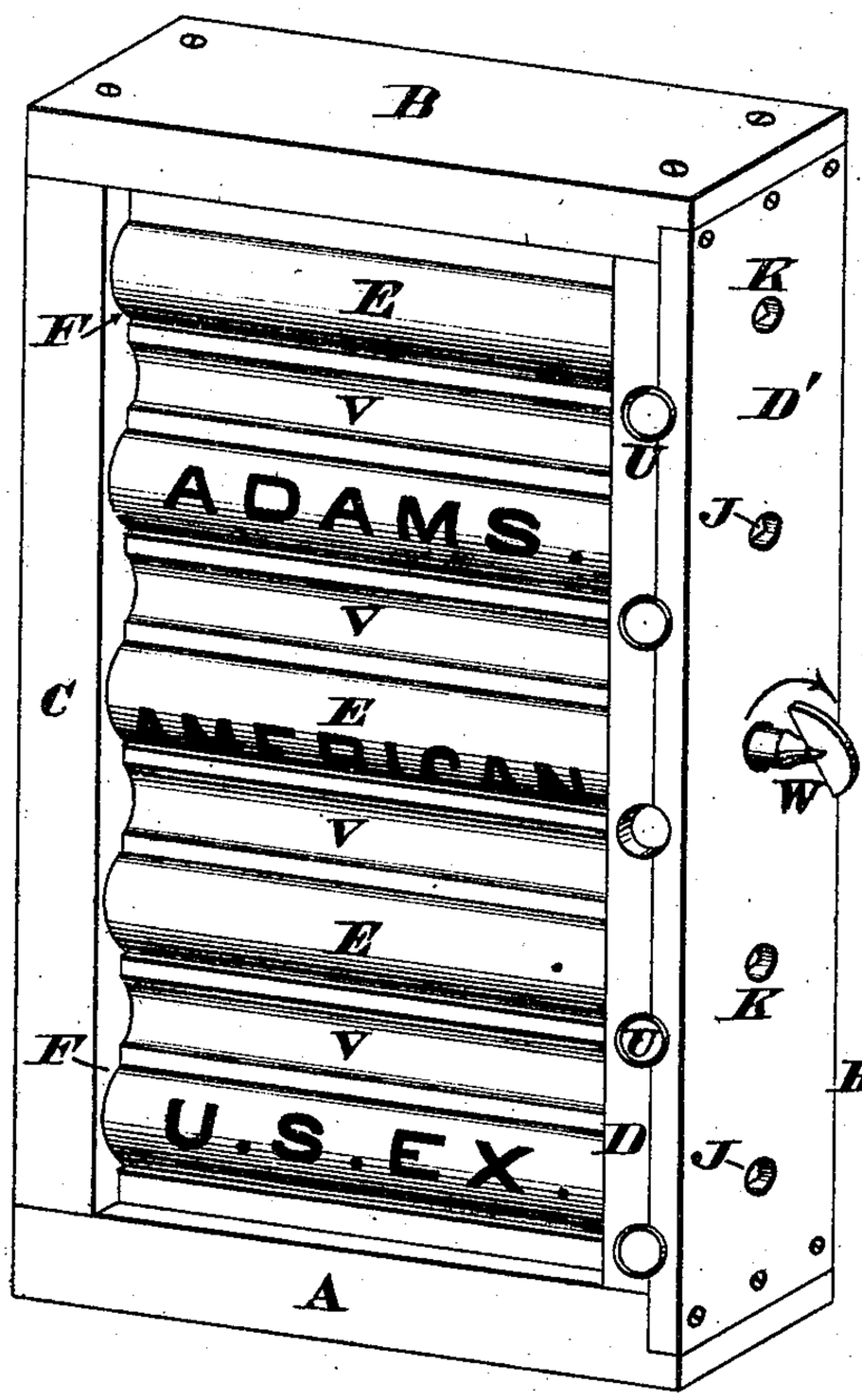


FIG. 2.

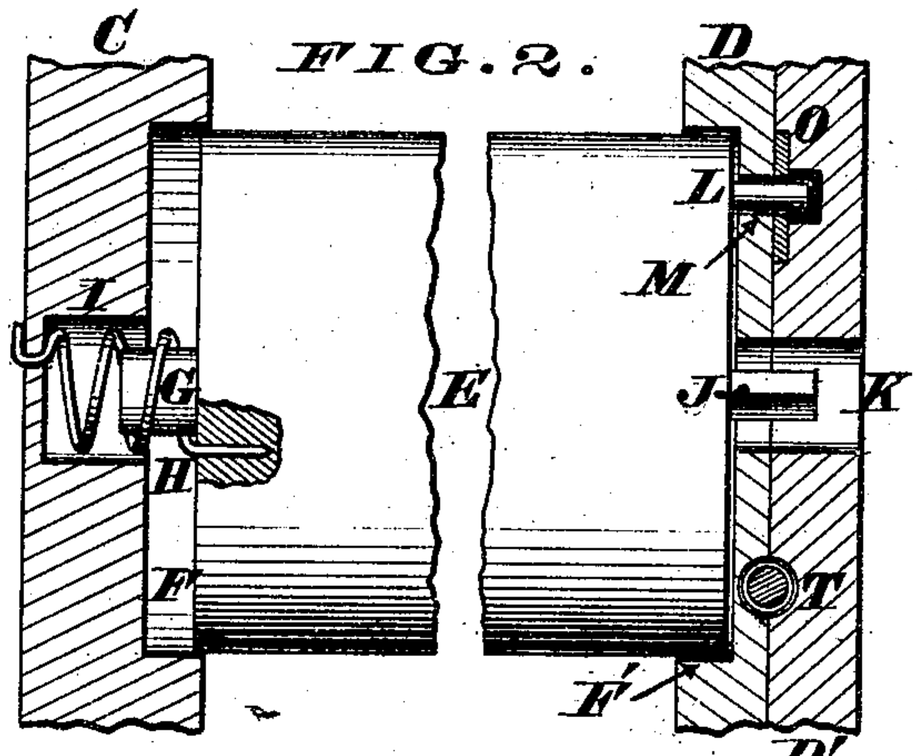


FIG. 3.

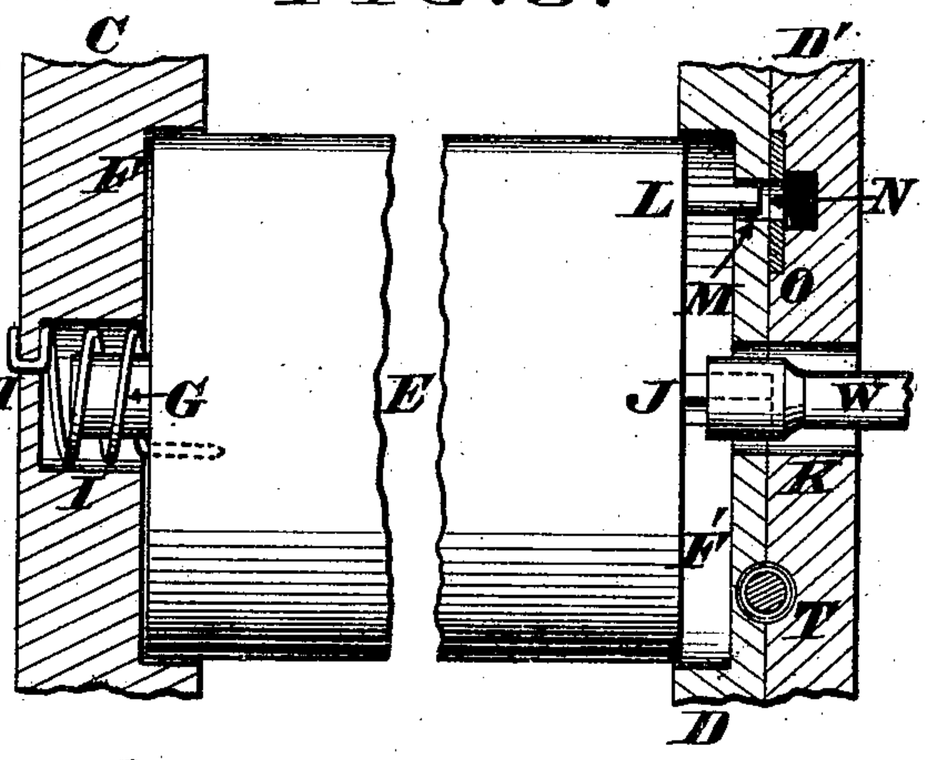


FIG. 4.

FIG. 5.

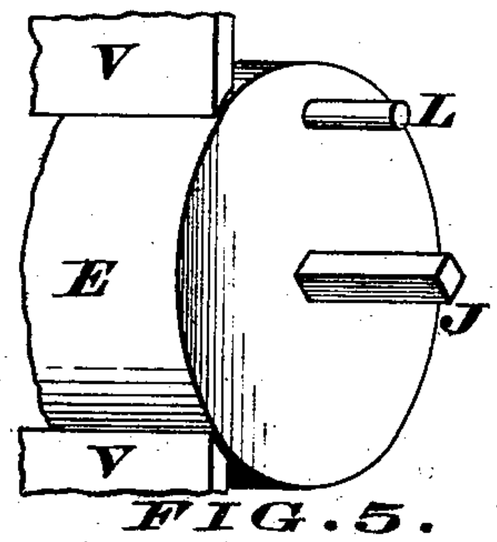


FIG. 6.

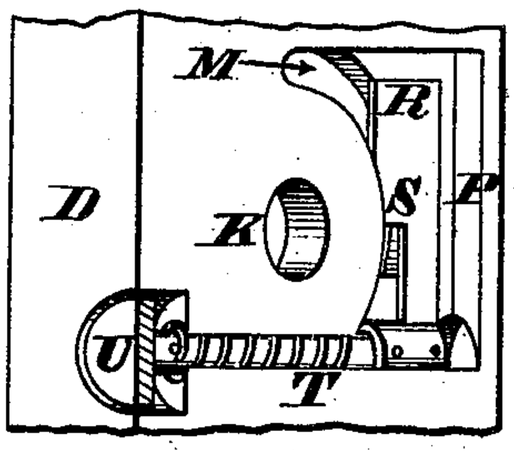
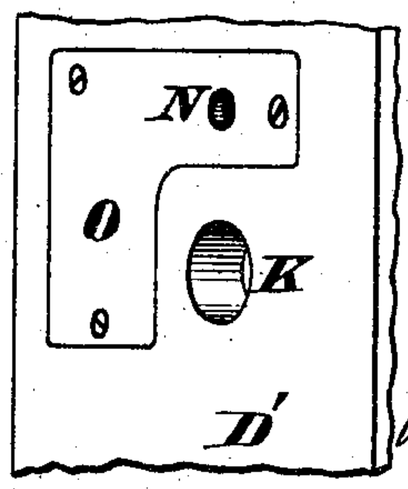


FIG. 7.



L. M. Ringwalt
C. S. Lamprey
By Knight Bros.
Att'ys.

Attest.
Jas. A. Lapsley.
Chas. J. Gooch.

FIG. 8.

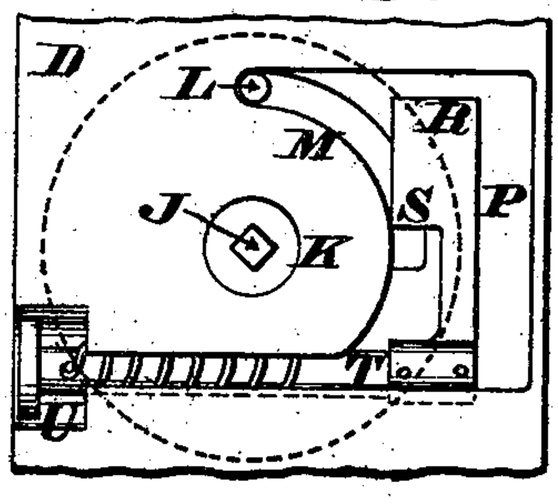


FIG. 9.

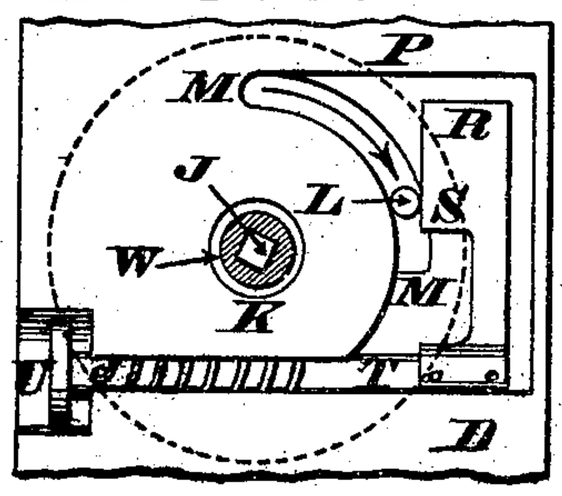
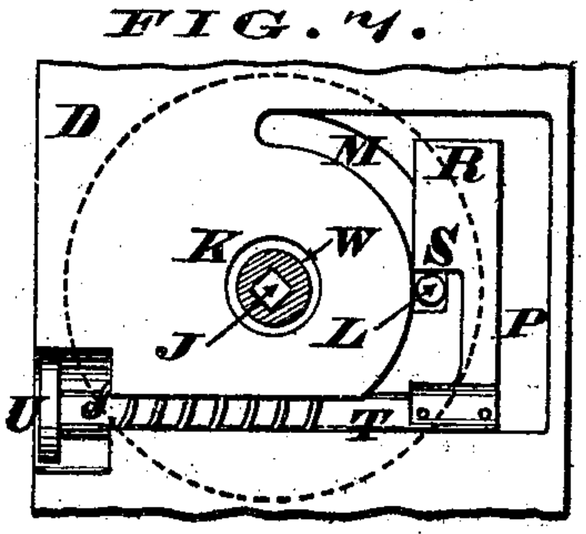


FIG. 10.



UNITED STATES PATENT OFFICE.

LANSING M. RINGWALT AND CLARENCE S. LAMPREY, OF CINCINNATI, OHIO.

IMPROVEMENT IN EXPRESS-CALLS.

Specification forming part of Letters Patent No. **178,674**, dated June 13, 1876; application filed November 8, 1875.

To all whom it may concern:

Be it known that we, LANSING M. RINGWALT and CLARENCE S. LAMPREY, both of Cincinnati, Hamilton county, Ohio, have invented a new and useful Express-Call or Signal-Box, of which the following is a specification:

Our invention relates to a "call" or signal-box, intended to be placed conspicuously on a store, or other business house, for the notification of express-drivers.

The call consists essentially of a frame, box, or housing, within which are journaled a number of horizontal drums, cylinders, or rollers, one roller for each express company and marked with its name. In the normal position of each roller its blank or uninscribed surface is presented to view, said rollers being held in this position by means of suitable spiral or helical springs, which are adapted to exercise both a torsional and a longitudinal pressure upon their respective rollers. These springs cause a stud, that projects from the end of each respective roller, to engage within a locking device which is concealed in the frame or housing, and as said stud cannot be disengaged until the proper key is applied to the roller-arbor, it is evident that the device cannot be tampered with so as to expose a call improperly. The same key which disengages the locking device affords the means of partially rotating the roller, so as to present the inscription in position to be read, and having been thus brought to this position it is automatically held thereto by means of a spring-catch that engages with the aforesaid stud. The driver, having attended to the call, restores the call to its blank condition by simply depressing the said catch, so as to permit the spiral spring to resume control of the roller.

In the accompanying drawing, Figure 1 is a perspective view of our express-call, the same comprising a frame provided with a series of rollers, of which two are represented in their normal or blank position, while two others expose their calls, and still another is in the act of being rotated by means of the key. Fig. 2 is a longitudinal section of one of the rollers in its normal position. Fig. 3 is a similar section, but showing the roller shifted longitudinally by the key, preparatory to the rotation of said drum for the purpose of exposing its call. Fig. 4 is a perspective view, showing one end of a drum or roller with its locking mechanism separated, so as to expose the operative parts of the same. Fig. 5 is an elevation of the locking mechanism, the roller being shown in its normal position. Fig. 6 is a similar elevation, but showing the roller in the act of being rotated so as to bring the inscription or call to view. Fig. 7 represents the position the various operative parts assume when the roller has made one-fourth of a revolution and is locked, so as to expose the call.

A represents the base, B the top, C one side, and D D′ the other side, of a suitable box, frame, or housing, within which are fitted the various operating parts of the device. E are the drums, rollers, or cylinders of any suitable dimensions and material, and either solid or hollow, as may be preferred. These rollers are journaled in suitable circular excavations F F′, which are made in the opposing surfaces of the sides C and D of the frame. Each roller is furnished at one end with a short gudgeon, G, around which is coiled a spiral spring, H, of which one end is secured to the frame C, while the other end is attached to the roller. (See Fig. 2.) The frame C is chambered out, as at I, so as to receive the gudgeon G, and to allow free torsional and longitudinal play of the spiral spring H. This gudgeon is supplemented, at the other end of the roller, by a square or other non-circular arbor or shaft, J, which occupies a central position in the key-hole K of the frame side D D′. Projecting from the same end of the roller, and at a suitable distance above the arbor J, is a stud or pin, L, which is adapted to traverse the slot M of frame D, and then to enter the aperture N of plate O, the latter being secured to the inner surface of side D′, as shown at Fig. 4. The aforesaid slot M is concentric with the axis of the roller E, and it passes through, from the excavation F′, to the recess P of frame D, which recess contains a detent R, shouldered at S, and attached to a sliding spring-bolt, T, whose exposed end carries a knob or button, U. The parts R S T U constitute my spring-catch before spoken of. V are slats of any suitable shape to fill the interstices between the consecutive rollers, and of such length as to extend from one side to

the other of the frame, in which they occupy suitable sockets. W is a removable key, whose barrel is adapted to engage with the arbor J. (See Figs. 3, 6, and 7.)

To illustrate the manner of using our call we will suppose that the blank or unlettered sides of the rollers E are exposed to view, the studs L, in this normal condition of the device, passing completely through the concentric slot M and entering the aperture N of plate O, as represented in Fig. 2. The rollers are maintained in this normal position by the stress of their springs H, and it is evident that neither roller can be rotated so as to indicate a call until it is first shifted longitudinally toward the frame C, so as to disengage the stud L from its retaining-socket N. This act, however, can be accomplished only by the instrumentality of the key W, by means of which the roller is first pressed longitudinally away from the frame-post D D′ toward the side C, the spring H being thereby compressed in the chamber I, and the stud L completely withdrawn from its retaining-socket N. (See Fig. 3.) The roller having made about one-fourth of a revolution, the stud L arrives at the lower end of slot M, and, simultaneously therewith, the retaining device R T flies forward, so as to engage the shoulder S over the stud L, and thereby to lock the roller E in its new position, as shown in Fig. 7. In this position of the roller, its inscription or call is completely exposed to view, and will so remain until released by the compression of the stud or knob U. This call being capable of being set only by its proper key, cannot be tampered with by mischievous or irresponsible hands.

While describing the preferred form of our invention, we reserve the right to modify the same in non-essential particulars. For example: The various rollers, instead of the cylindrical, may be of sectoral or polygonal form. The series of rollers may be protected in front with a glass. The knobs may form parts of ornaments upon the frame, which ornaments may be duplicated on the other side for the double purpose of appearance and secrecy. Other locking devices may be employed in conjunction with our rollers and operating key. The pin L may be superseded by a segmental projection from the end of the roller. The various operating parts may be situated either to the right or left, and may operate either forward or backward, and by pulling instead of thrusting action, or vice versa. The inclosing frame or housing can be made of cast-iron, and the operative parts be boxed in any suitable manner and inserted in said frame.

We claim as new and of our invention—

1. An express-call, consisting of an inclosing box, frame, or housing, within which are journaled a series of rollers, suitably inscribed on one side, and capable of rotation, so as to expose or conceal said inscriptions, the rollers, when thus rotated in either direction, being positively locked in position, substantially as herein described and set forth.

2. The combination of housing A B C F D F′ M, longitudinally shiftable, and rotatable rollers E G J, spiral spring H, and locking devices N S T, as and for the purposes designated.

In testimony of which invention we hereunto set our hands.

LANSING M. RINGWALT.
CLARENCE S. LAMPREY.

Witnesses:
GEO. H. KNIGHT,
HARRY E. KNIGHT.