

(No Model.)

A. L. DORN.
DOOR SIGNAL.

No. 304,803.

Patented Sept. 9, 1884.

Fig. 1.

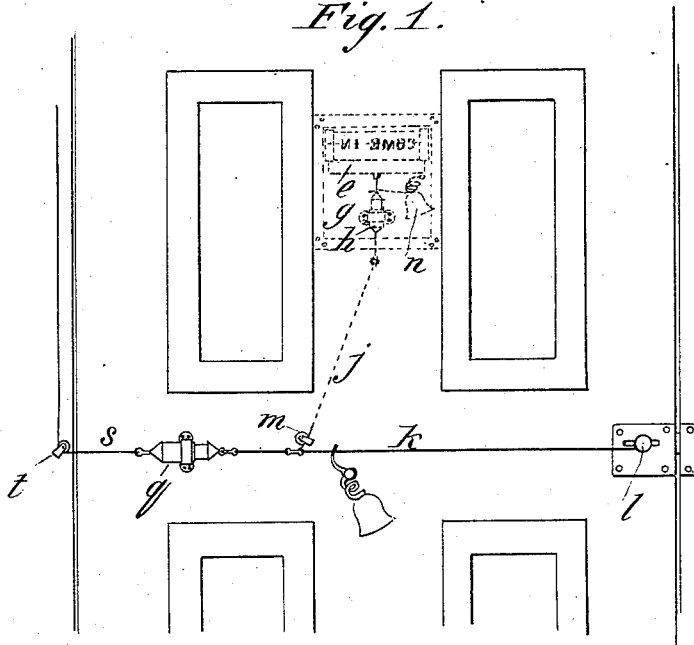


Fig. 3.

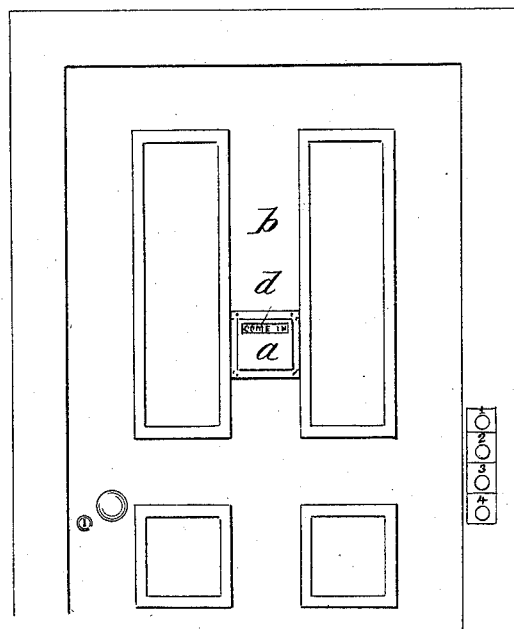
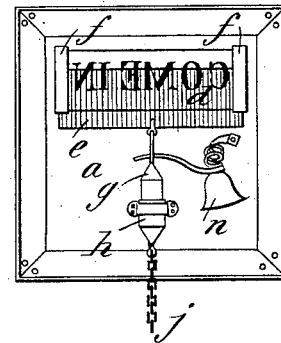
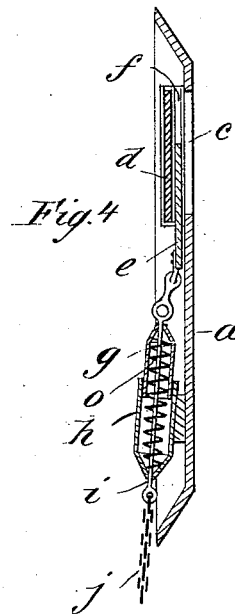


Fig. 2.



WITNESSES:

Don Twitchell
L. Bedgwick

INVENTOR:

BY *A. L. Dorn*
Munn & Co
ATTORNEYS.

UNITED STATES PATENT OFFICE.

ALONZO L. DORN, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO
WILLIAM N. DORN.

DOOR-SIGNAL.

SPECIFICATION forming part of Letters Patent No. 304,803, dated September 9, 1884.

Application filed November 12, 1883. (No model.)

To all whom it may concern:

Be it known that I, ALONZO L. DORN, of Chicago, in the county of Cook and State of Illinois, have invented a new and Improved Door-Signal, of which the following is a full, clear, and exact description.

My invention consists of a contrivance to disclose a word-signal and to sound a bell or other equivalent device in connection with the unlatching-wire extending from the front door to the interior or upper portion of the house as now used in "flats" for unlatching the door to admit people without descending the stairs, the said signals being to notify those desiring to enter of the unlatching of the door, all as hereinafter fully described.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is an interior elevation of a door having my improved signal device attached. Fig. 2 is an exterior front elevation of the door. Fig. 3 is a rear or inside elevation of the signal device, and Fig. 4 is a sectional elevation of Fig. 3 on an enlarged scale.

I attach a small metallic case, *a*, to the exterior surface of the front door, *b*, having an opening, *c*, through the upper portion, which will in practice be suitably glazed, and a little back of the front plate, and behind said opening, I figure the words "Come in," or any equivalent word-sign, on a plate, *d*, between which and the case *a*, I arrange a slide, *e*, to hide the words when the door is latched, said slide being arranged to work up and down in guideways *f*, and also being connected to a rod, *i*, passing through a spring, *o*, contained in a telescopic or other equivalent casing, *g* *h*, one section of which casing is attached to plate *a*, so that when the spring is allowed to expand it will shift the slide up between the words and the glazed opening *c* and conceal the words. The rod *i* of the spring is connected, by a chain or wire, *j*, passing through the door, with the wire *k*, which is connected with the door-latch *l*, and extends to the room, where it is to be used for unlatching the door to admit people ringing the door-bell for ad-

mittance. The chain *j* passes under a guide-pulley, *m*, before connecting with said wire, so that when said wire is pulled the spring *o* will be compressed and the slide *e* will be pulled from before the word-signal to expose it to view; but for a signal by sound to attract the attention of persons who may fail to see the word-signal, I also propose to connect a bell, *n*, also located in the case *a*, with the spring *o* or casing *g h*, to be pulled at the same time, and thus make certain of giving due notice of the unlatching of the door. The word-signal may be arranged in any approved or equivalent way, and the bell be of any approved contrivance for giving the necessary sound. I propose to use a similar telescopic or other equivalent spring, *q*, in connection with the latch *l* and the wire or rod *k*, connected to the latch, said spring being attached to the door and interposed between the latch-rod *k*, and the wire *s* extending from the spring over guide-pulley *t* on the door-jamb, and thence to any one of a series of rooms or flats, and in practice having branches to the rest, so that the latch and the signal may be worked from any one of the flats or series of rooms alike. The springs *q* and the rod *k* slide the latch-bolt and fasten the door again after being unlatched.

The wire or chain *j* may be connected with rod *k* or wire *s* either side of the spring *q*; but I prefer to connect it with the wire *s* on the distal side of the spring from the latch.

I propose to use this latch-operating spring device either with or without the signal attachment, and will also attach a bell, *u*, to the inside of the door and connect it with rod *k* or wire *s*, to be used with or without the signal device of case *a*.

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

1. The combination of a signal device with the door *b* and the unlatching-wire *k*, said signal device being arranged to be worked for giving the signal by said wire when pulled to unlatch the door, substantially as described.

2. The signal-case *a*, containing the word-signal *d e*, and spring *o*, attached to the door *b*,

in combination with the latch-wire *k*, said spring being connected to said latch-wire, substantially as described.

3. The signal-case *a*, containing the word-
5 signal *d*, bell *n*, and the spring *o*, attached to the door *b*, in combination with the latch-wire *k*, said spring being connected to said latch-wire, substantially as described.

4. The incased telescopic or equivalent
10 spring *q* and rod *k*, in combination with the latch *l* and wire *s*, extending to one or more rooms, substantially as described.

5. The combination of signal-bell *u*, incased telescopic or equivalent spring *q*, rod *k*, and pull-wire *s*, substantially as described. 15

6. The combination of case *a* and its signal devices, wire *j*, and bell *u*, with the latch *l*, rod *k*, telescopic or equivalent incased spring *q*, and pull-wire *s*, substantially as described.

ALONZO L. DORN.

Witnesses:

BENJAMIN O. DORN,
WM. ZIMMERMAN.