No. 890,925. PATENTED JUNE 16, 1908.

J. H. RAND.

ADJUSTABLE INDICATOR.

APPLICATION FILED OCT. 19, 1906.

Fig. 1.

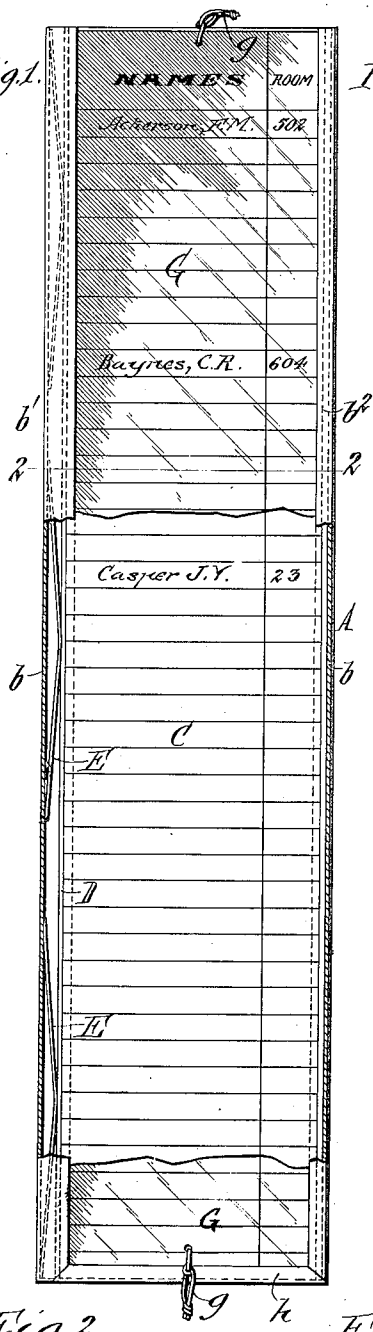


Fig. 3.

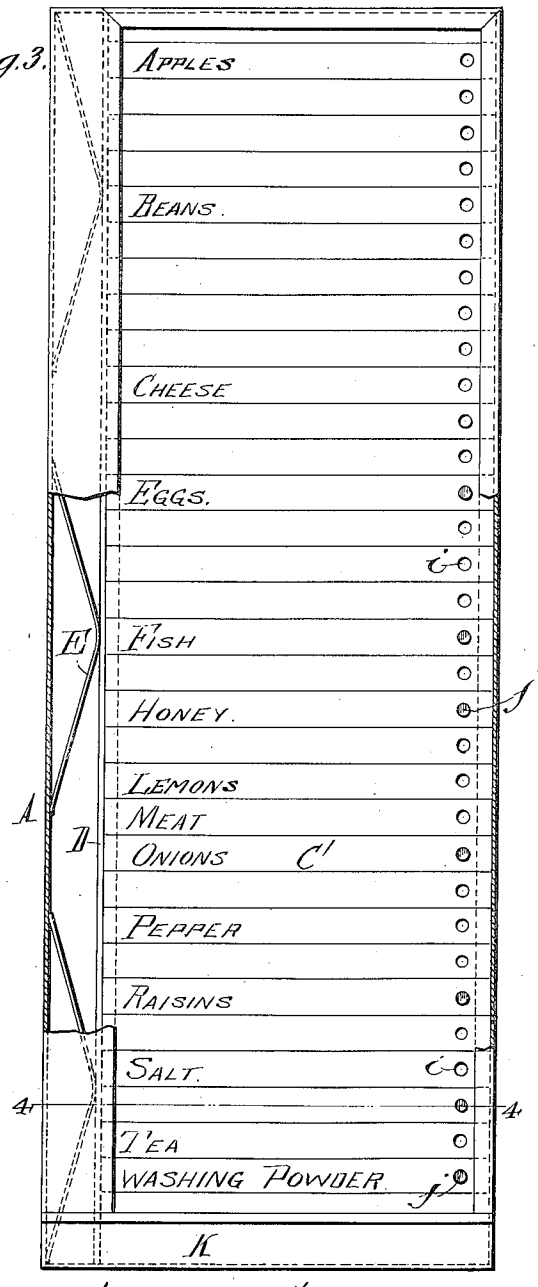


Fig. 2.

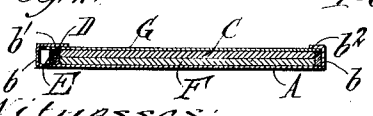
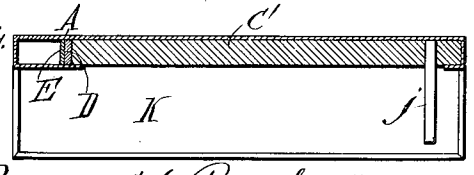


Fig. 4.



Witnesses:
Louis W. Gratz.
Richard Sommer.

James H. Rand Inventor
by Geyer & Popp Attorneys

UNITED STATES PATENT OFFICE.

JAMES H. RAND, OF NEWTONVILLE, MASSACHUSETTS.

ADJUSTABLE INDICATOR.

No. 890,925. Specification of Letters Patent. Patented June 16, 1908.

Application filed October 19, 1906. Serial No. 339,600.

To all whom it may concern:

Be it known that I, JAMES H. RAND, a citizen of the United States, residing at Newtonville, in the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in Adjustable Indicators, of which the following is a specification.

This invention relates to the class of adjustable indicators or indexes comprising a back or frame and a series of cards, slips or blocks bearing the desired names, numbers or other entries and held in the frame in such manner as to be capable of ready insertion, removal and adjustment for changing the indicator from time to time as required. An indicator of this character is described and shown in Letters Patent of the United States No. 829,670, granted to me August 28, 1906.

It is the object of my present invention to improve and simplify the construction of the indicator with a view of facilitating the insertion and removal of the name-cards or blocks and reducing the cost of the device.

In the accompanying drawings: Figure 1 is a face view, partly in section, of one form of the improved indicator. Fig. 2 is a cross section in line 2—2, Fig. 1. Fig. 3 is a face view, partly in section, of another form of the indicator. Fig. 4 is a cross section in line 4—4, Fig. 3.

Similar letters of reference indicate corresponding parts throughout the several views.

The embodiment of the invention shown in Figs. 1 and 2, is designed as an indicator or directory for office-buildings. A indicates its back or frame, preferably constructed of sheet metal, such as tin. The front edges of its side walls *b* are bent inwardly to form opposing guides or flanges b^1, b^2.

C indicates the name or index-cards, tablets slips or blocks arranged in the frame one below another and engaging under the guide-flanges b^1, b^2, so as to be held in place in the frame and yet be adjustable up and down in the same upon removing one or more cards from the indicator.

At one side of the frame under the adjacent guide-flange is arranged a yieldable follower strip D which bears against the contiguous ends of the several index-cards C and presses the same against the opposite side wall *b* of the frame, so as to reliably confine them under the guide-flange of the last-named wall. In the construction shown in the drawings, this yieldable follower is arranged at the left hand side of the register and backed by a number of springs E of any suitable construction, those shown in the drawings being flat and angular or V-shaped, with their apexes facing the back of the follower. The flange b^1 is of sufficient width to overlap and confine the adjacent ends of the index-cards when in their normal position and the cards are of such a length that they can be moved toward the left far enough to clear the right-hand flange b^2.

In the indicator shown in Figs. 1 and 2, the cards are comparatively thin and backed by a filling strip F of card board or other suitable material extending from end to end of the indicator, but this strip may be omitted in some cases, if desired. When the name-tablets are of card board or other flexible material, the filling strip F, which is as wide as the length of the tablets, serves as a stop which receives the thrust of the spring-pressed follower in the normal position of the tablets, relieving the latter from such pressure and preventing them from bulging or buckling which might otherwise occur. For this purpose, said filling strip when made of card board is comparatively thick and stiff.

As shown in the drawings, the indicator may be provided with a cover G of celluloid or other transparent material to protect the name-cards. This cover slides under the guide flanges b^1, b^2 and may be provided at its upper and lower ends with cord-loops *g* or other means for conveniently pulling it up or down in its guides. The cover is free to slide upward, but its downward movement is limited by a stop-flange or shoulder *h* at the lower end of the frame.

In order to insert a card in the indicator, its left-hand end is placed under the corresponding guide flange b^1 and pushed to the left against the resistance of the follower D, until its opposite end clears the right hand flange b^2, when upon releasing the card, the compressed springs of the follower react and shift the card under the last-named flange, locking it in place. In order to remove a card, the same is pushed to the left by a pen knife or other means until its right hand end is clear of the guide flange b^2, when upon raising it above the latter, the card will spring out from under the left-hand flange.

The follower D preferably consists of a strip of spring steel or similar flexible mate-

rial. By this construction, the follower is free to yield to the pressure of the individual name cards upon shifting them laterally, enabling a card to be removed without disturbing adjacent cards or causing the same to drop out of the indicator-frame.

When the improvement is used as a directory for office-buildings, a suitable number of the backs or frames are attached to a board or other support. The indicator may also be adapted to various other uses, such for example as a telephone directory, an automobile indicator for garages, a price list for stores or a kitchen-accessory for indicating the articles or supplies to be ordered from time to time.

Figs. 3 and 4 show the invention embodied in a kitchen indicator. This may be constructed like the indicator first described, but the cards are preferably replaced by wooden blocks C^1 bearing the names of the various articles and each having a hole or socket *i* adapted to receive a removable indicating peg *j*. In the use of this indicator, the pegs inserted in the blocks indicate the articles to be ordered, while the pegs not in use may be kept in a pocket K at the lower end of the frame. In this case, the name-blocks can be pushed to the left by means of the pegs, in removing them from the indicator. Or, if desired, the point of a lead pencil, a knife-blade or other suitable instrument may be inserted in the holes of the blocks for this purpose. The cards of the first-described construction may also be provided with such holes, if desired.

I claim as my invention:

1. An indicator comprising a back having opposing guides, a plurality of removable indicating tablets arranged one below another, engaging said guides and shiftable both vertically and laterally therein, said guides having means for normally preventing displacement of the tablets in a plane at right angles to the back, and yielding means acting against one end of the tablets for normally holding their opposite ends in engagement with the corresponding guide while permitting the tablets to be shifted laterally toward said yielding means to clear the last-named guide, substantially as set forth.

2. An indicator comprising a back having opposing guides provided with inwardly-extending flanges, a plurality of removable tablets arranged one below another, engaging under said flanges and capable of lateral movement, and yielding means acting against one end of the tablets for holding their opposite ends in engagement with the corresponding guide-flange, while permitting the tablets to be shifted laterally to release their last-named end from said flange, substantially as set forth.

3. An indicator comprising a back, a guide arranged thereon, a spring-operated member movable on the back relatively to said guide, and a plurality of removable indicating members arranged one below another and capable of vertical adjustment, opposite ends of said indicating members engaging said guide and said spring-operated member, respectively, whereby the indicating members can be disengaged from said guide by shifting them endwise toward said spring-operated member, substantially as set forth.

4. An indicator comprising a back having opposing guides, a plurality of removable tablets engaging said guides and laterally movable therein, and a flexible, spring-pressed follower bearing against one end of the several tablets, substantially as set forth.

5. An indicator comprising a back having opposing guide-flanges, removable tablets engaging under said flanges, a follower bearing against one end of the tablets and consisting of a flexible strip, and a backing spring for the follower, substantially as set forth.

6. An indicator having side walls provided with inwardly-extending guide-flanges, a plurality of removable tablets engaging under said flanges and made shorter than the distance between said side walls, a follower arranged under one of said flanges and bearing against the adjacent ends of the tablets, and a backing spring for said follower, the guide-flange which covers said follower being of sufficient width to overlap and confine the tablets when in their normal position, substantially as set forth.

7. An indicator comprising a back having opposing flanged walls, tablets engaging under the flanges of the walls and movable both vertically and laterally, the tablets having openings adapted to receive a suitable instrument for shifting them laterally, and yielding means acting against one end of the tablets and permitting them to be shifted laterally to release their opposite ends from the flange of the adjacent wall, substantially as set forth.

8. An indicator comprising a back, a guide arranged thereon, a spring-operated member movable on the back relatively to said guide, a plurality of removable indicating members arranged one below another and capable of vertical adjustment, opposite ends of said indicating members engaging said guide and said spring-operated member, respectively, and means for limiting the forward movement of said spring-operated member, substantially as set forth.

9. An indicator comprising a back having opposing guides, removable tablets engaging said guides, yielding means acting against one end of said tablets for normally holding their opposite ends in engagement with the corresponding guide, and means for limiting the forward movement of said yielding means, substantially as set forth.

10. An indicator comprising a back having opposing guides, removable tablets engaging said guides, a spring-pressed follower acting against one end of said tablet, and a stop arranged to receive the thrust of said follower in the normal position of the tablets, substantially as set forth.

11. An indicator comprising a back having opposing guides, removable tablets engaging said guides, a spring-pressed follower acting against one end of said tablets, and a stop-strip underneath said tablets arranged to limit the forward movement of said follower, substantially as set forth.

Witness my hand this 16th day of October, 1906.

JAMES H. RAND.

Witnesses:
A. J. NELLIGAN,
BENJN. P. HOLLIS.