

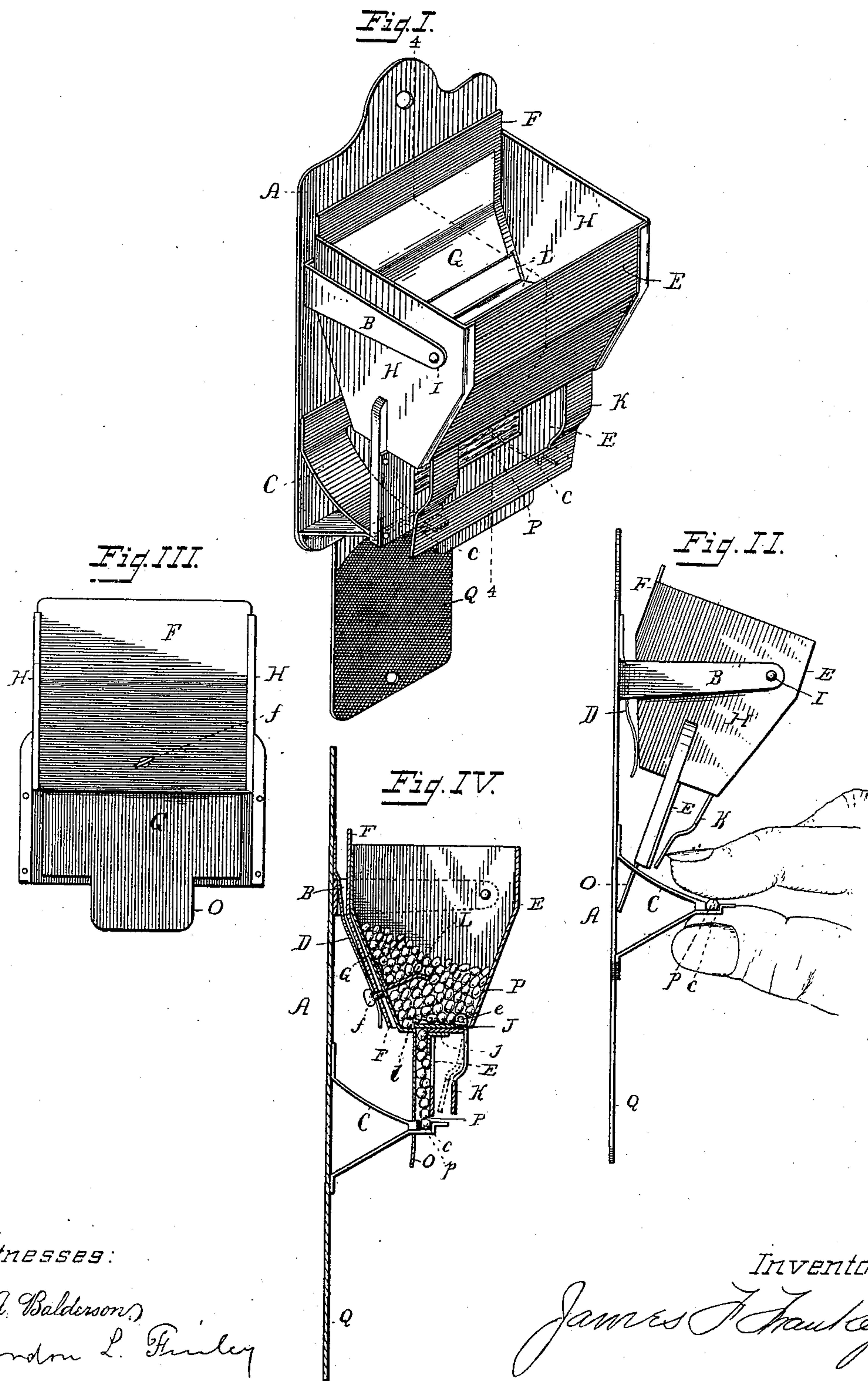
(No Model.)

J. F. FRANKEY.
WALL MATCH BOX.

2 Sheets—Sheet 1.

No. 598,884.

Patented Feb. 8, 1898.



(No Model.)

2 Sheets—Sheet 2.

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Fig.V.

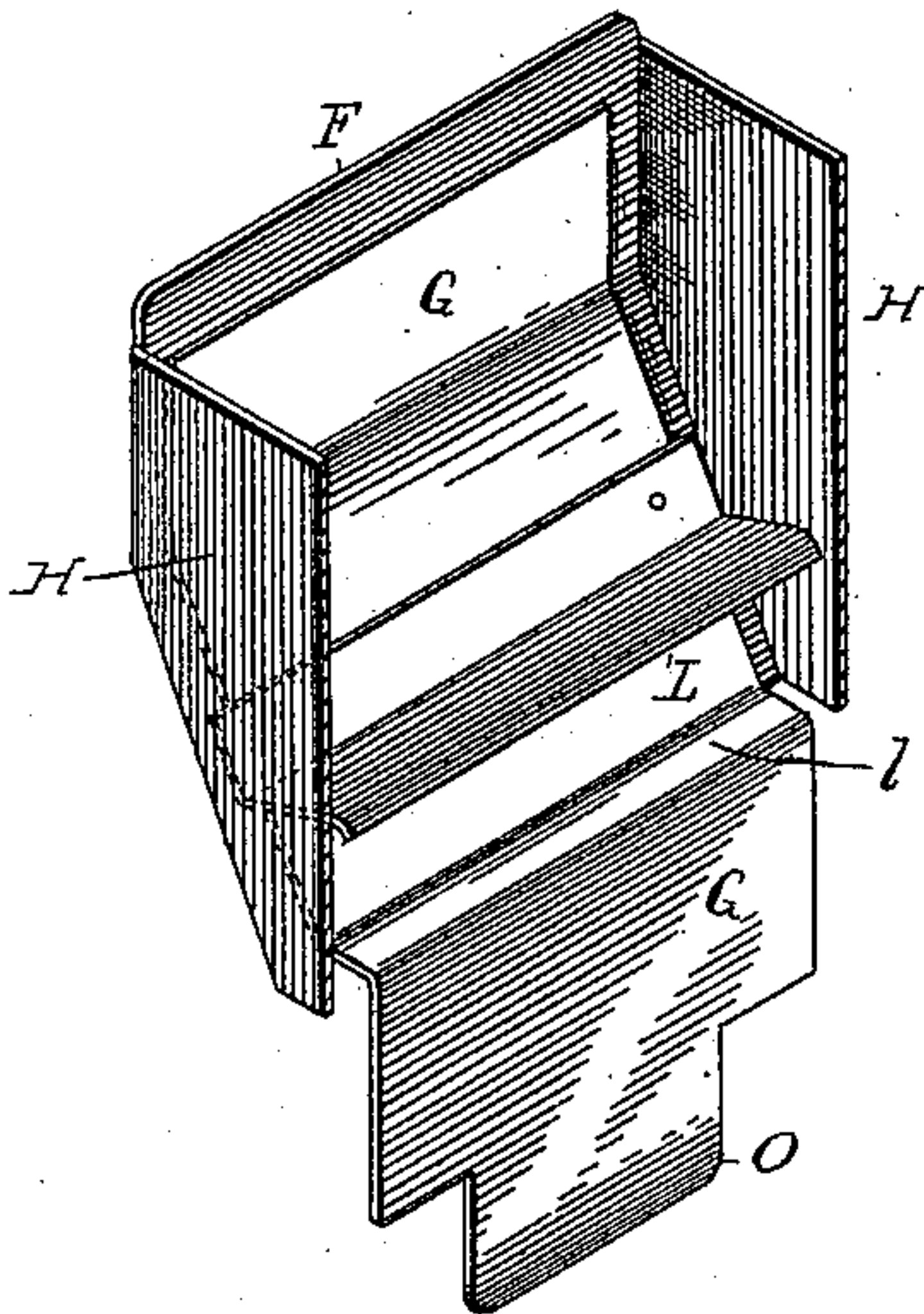


Fig.VI.

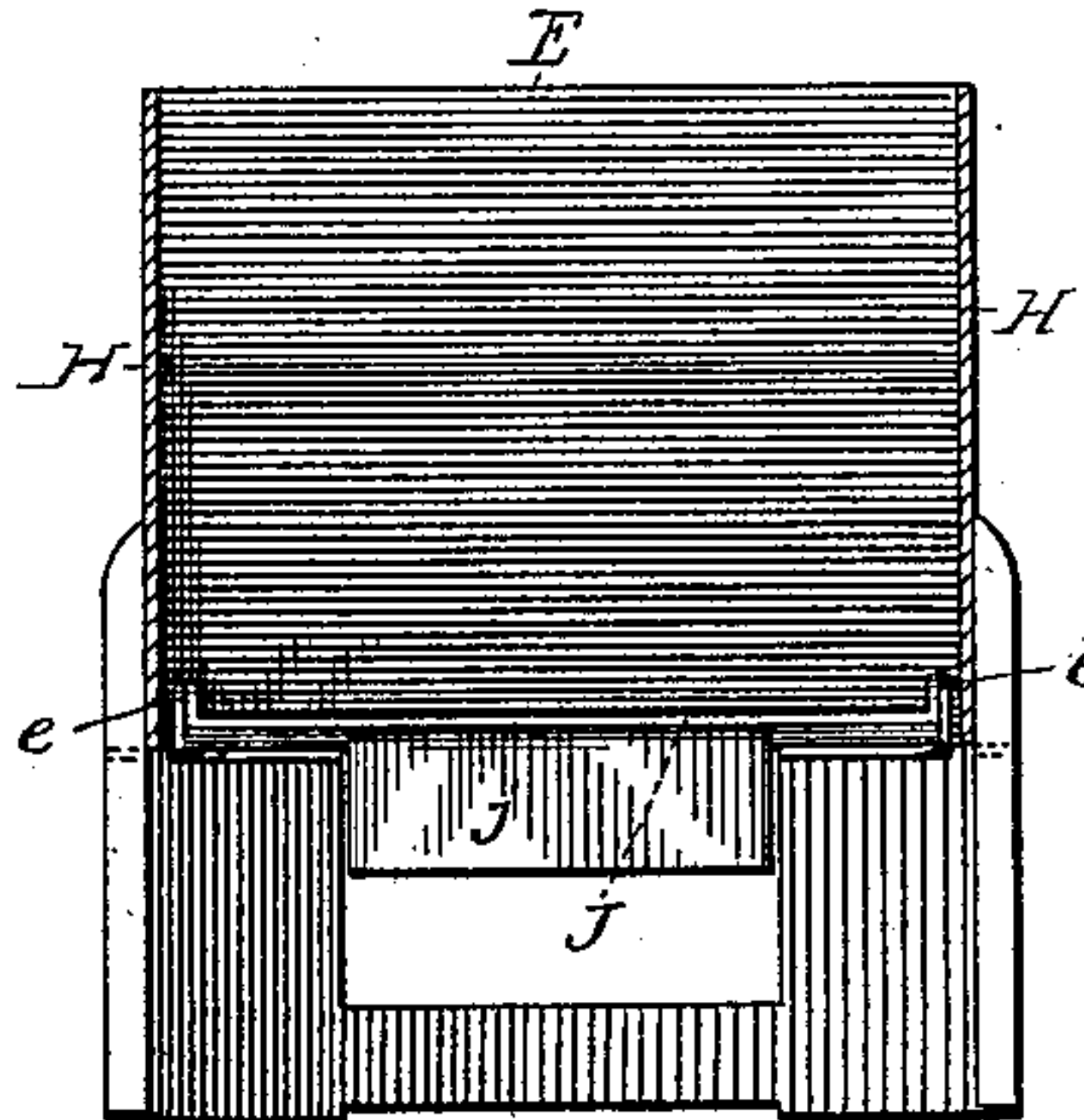


Fig.VII.

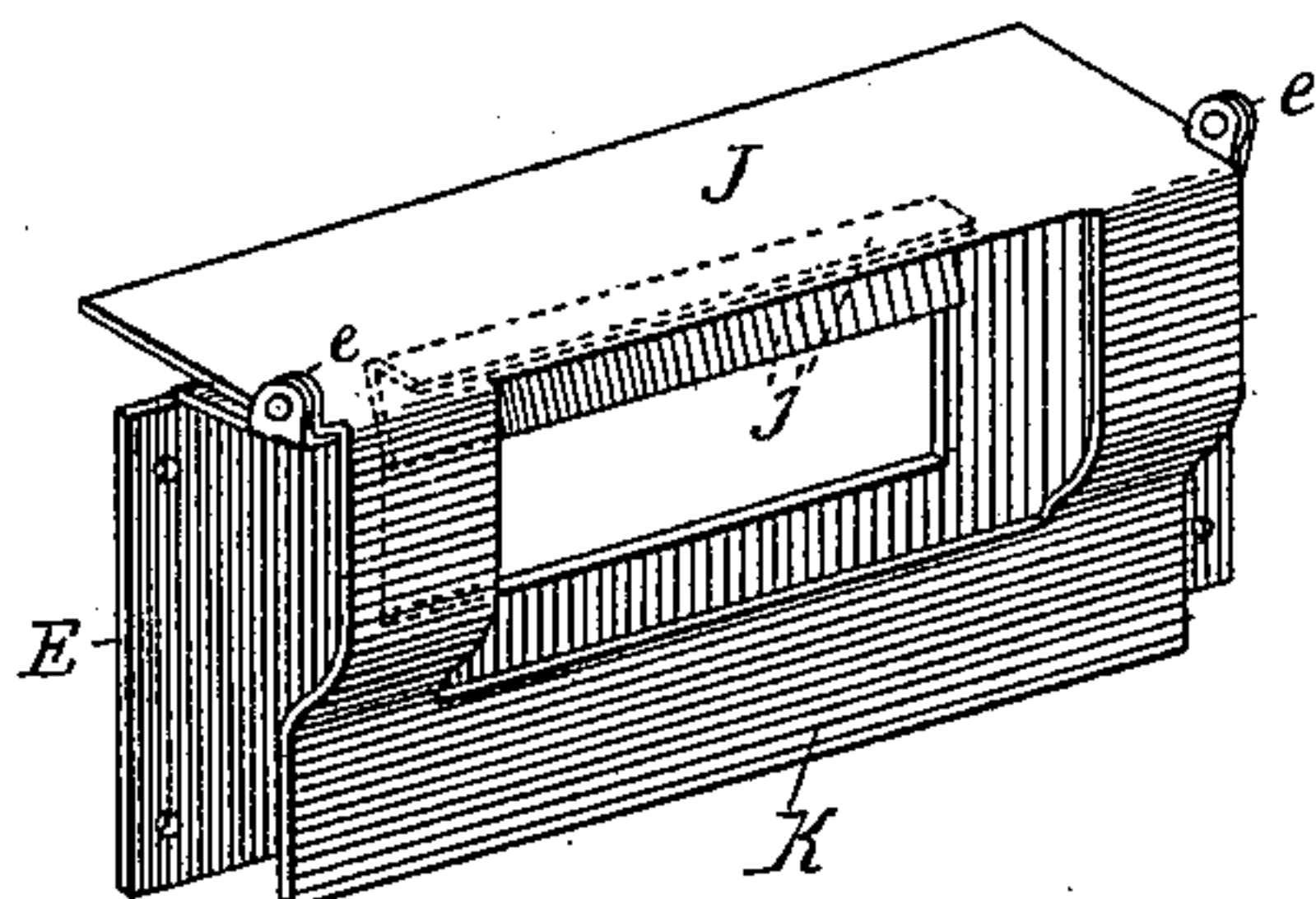
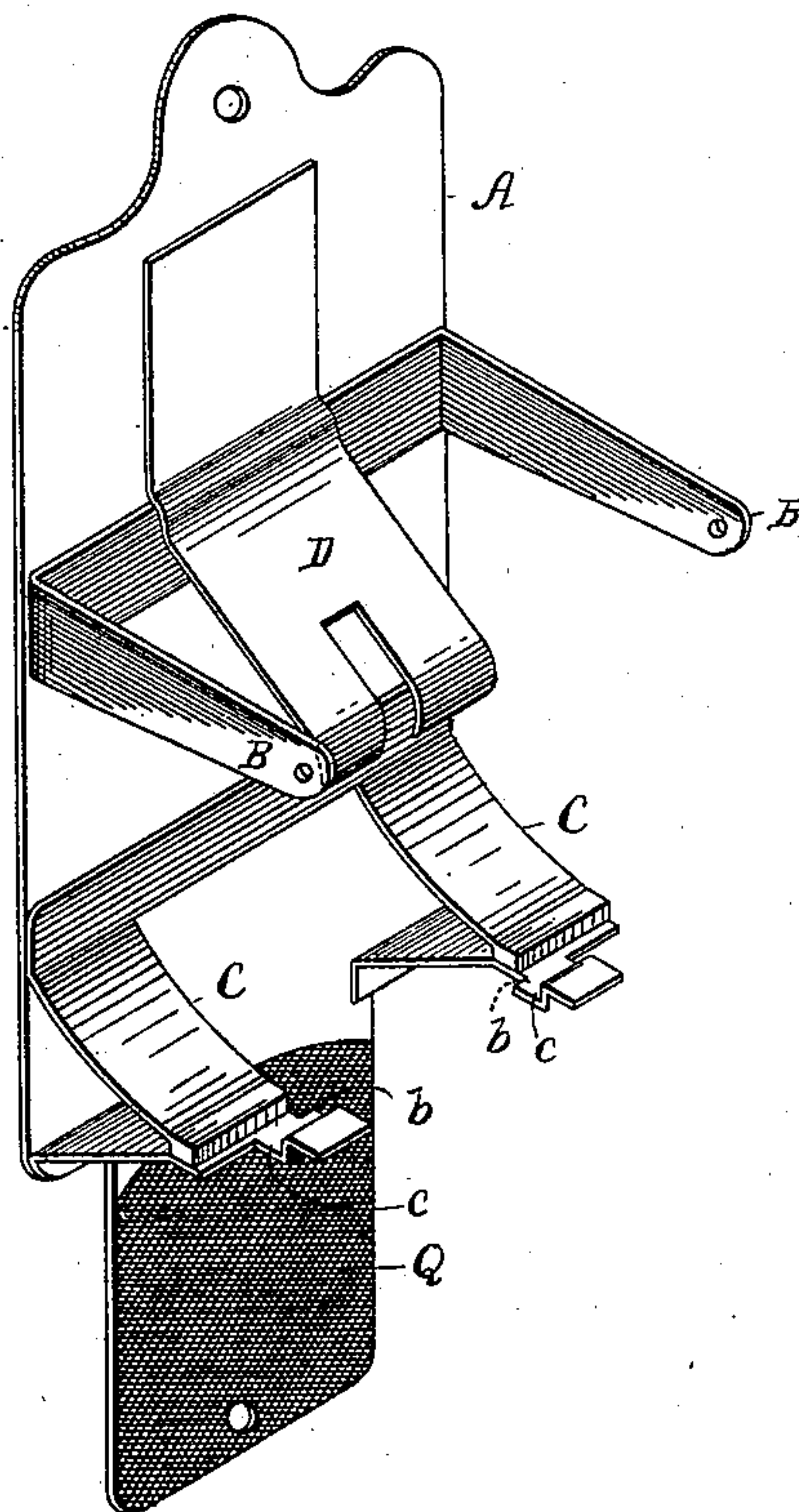


Fig.VIII.



Witnesses:

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UNITED STATES PATENT OFFICE.

JAMES F. FRANKEY, OF DODGE CITY, KANSAS.

WALL MATCH-BOX.

SPECIFICATION forming part of Letters Patent No. 598,884, dated February 8, 1898.

Application filed August 5, 1891. Serial No. 401,792. (No model.)

To all whom it may concern:

Be it known that I, JAMES F. FRANKEY, a citizen of the United States, residing at Dodge City, in the county of Ford and State of Kansas, have invented certain new and useful Improvements in Wall Match-Boxes, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to that class of match-receptacles which is designed to be placed in public places where matches and toothpicks are used and which will prevent any person from grasping more than one or two of the same at one time. In other words, the design is to furnish a safe and convenient receptacle for matches and toothpicks which will readily deliver one at a time. The preferable form of this device is shown in the drawings; but I do not confine myself to any particular form.

Figure 1 is a perspective view of the front and one end of the device, with the receptacle in normal position with reference to the frame. Fig. 2 is a view of the end shown in Fig. 1, presenting the receptacle as the match is delivered, and the finger and thumb show how it is readily grasped. Fig. 3 is a view of the back of the receptacle detached from the frame and showing a part of the supplemental spring-back. Fig. 4 is a transverse sectional view through the center of the receptacle on line 4, Fig. 1. Fig. 5 is a longitudinal sectional view showing the back of the receptacle on the inside, in connection with the supplemental spring-back. Fig. 6 is a longitudinal sectional view showing the front of the receptacle on the inside, in connection with the oscillating shelf. Fig. 7 is a perspective view of the oscillating shelf detached from the receptacle. Fig. 8 is a perspective view of the frame on which the receptacle is mounted, with the receptacle detached.

Like letters of reference refer to like parts.

A is the frame on which the receptacle is pivotally mounted, with the arms B B, to which it is pivoted.

C C are segmental supports which prevent the matches from dropping through the opening at the bottom of the receptacle, except as hereinafter described. These segments are the arc of a circle, the center of whose diameter is the pivot I, on which the receptacle swings.

c c are depressions or grooves in the segments, in which a match drops as the receptacle is vibrated backward and forward, and b b are stops on the segments to limit the forward movement of the receptacle, the extended portion O of the supplemental back striking against the same.

D is a spring for returning and holding the receptacle in normal position, as shown in Fig. 1.

E is the front of the receptacle; F, the back; G, the supplemental spring-back, and H H the ends.

J is an oscillating shelf pivotally mounted to the lugs e e of the front wall, so that it has a limited oscillating motion up and down, the object of which will appear, and j is a downwardly-extended apron attached thereto.

K is an extension of the shelf J through the front wall to the outside of the receptacle, thence downward at approximately a right angle with the shelf, the lower portion furnishing a surface to be struck or pushed against to oscillate the shelf and apron and at the same time vibrate the receptacle, as will more fully appear.

The receptacle is divided into two compartments by the shelf J, which for convenience of description I denominate the "neck" and the "reservoir," the former being that portion below the shelf and the latter the portion above. The ends of the receptacle are parallel to each other. The front and back of the reservoir at the oscillating shelf are comparatively close together and thence upward recede from each other to a point near the top, while the front and back walls of the neck are practically parallel to each other, the back wall being an extended portion of the spring-back and the front being an extension of the front wall of the reservoir. The central portion is mutilated or cut away to expose the matches, as shown in Fig. 1, so that it can be readily seen when the neck is filled.

The supplemental spring-back G is permanently attached to the back of the reservoir at the top and recedes therefrom slightly until it reaches a maximum distance at the set-screw f, where the back of the receptacle terminates and the supplemental back is extended in its place, as described. The part O, extending below and between the segments

C C, strikes against the stops *b b*. The relative distance that the front and back walls of the neck may be forced apart is regulated by the set-screw *f*.

5 L is a shelf attached to the spring-back G above the oscillating shelf, the object of which is to prevent the weight of the matches from clogging the passage from the reservoir to the neck when the reservoir is full or nearly full
10 of matches.

l is an offset or second shelf attached to the supplemental back just below the oscillating shelf J, and in combination they practically close the passage between the reservoir and
15 neck when in normal position. These shelves are parallel with each other and with the top and bottom of the receptacle.

The set-screw *f* adjusts the opening between the neck and reservoir as well as the
20 front and back walls of the neck, as described, as may be required for different-sized matches.

P P are parts of matches seen through the openings in the receptacle, and *p* is a match in the grooves *c c* as it is delivered.

25 Q is an extended portion of the frame, presenting a serrated surface for abrading the match.

The device is operated in the following manner. The receptacle is filled with matches
30 with the ends in the direction of the ends of the receptacle, when the lid covering the top (not shown in the drawings) may be securely closed, so that no matches can be taken from the top. The receptacle occupies normally
35 the position shown in Fig. 1. To procure a match, the front finger is pushed against the extension K, and the thumb is held below it, while the receptacle is pushed back, as shown in Fig. 2, when one match remains in the
40 grooves *c c* and occupies a position between the thumb and finger, so that it may be readily grasped. When the hand is taken away, the spring D returns the receptacle to normal position with some force and the extended
45 portion O of the supplemental back strikes against the stops *b b*, which jars or moves the supplemental back sufficiently to release the matches in the neck, when the lower match drops into the grooves *c c*, when by repetition
50 of the described operation it will be delivered.

I have now only to describe how the neck is kept filled with matches from the reservoir.

The practical utility of the device depends upon the question whether the manipulation
55 as I have described it will keep the neck constantly filled with matches from the reservoir. The receptacle is adjusted by means of the screw *f*, so that the opening between the shelves J and *l* will permit one match at a
60 time to pass through when the shelf J is raised by pushing against the extension K, (this shelf being so adjusted that it drops to normal position by gravitation.) When the receptacle is thus pushed, as shown in Fig. 2,
65 the match drops onto the shelf *l* under shelf J, when the receptacle returns to normal position and the extension O strikes the stops

b b, and the match is jarred or jolted into the neck, and thus it is kept filled as the matches are taken out at the bottom opening. 70

In case the passage between the shelves J and *l* should become clogged by a match of abnormal size or by matches getting crossed the lower end O of the supplemental back may be jarred or struck with the finger or
75 thumb, when the passage will be opened. The receptacle may be so adjusted that toothpicks may be delivered the same as matches.

The vibratory action is not an essential factor for the delivery of the matches from the
80 receptacle into the neck. This may be accomplished by a manipulation of the oscillating shelf and the spring-back in other ways, the vibrating of the receptacle being only one means for accomplishing this result. When
85 the finger pushes against the extension K, the shelf is oscillated and at the same time the receptacle is pushed back. As the receptacle returns to the normal position the lower portion O of the supplemental spring-back
90 strikes the stops *b b*, which moves or jars this back, thus effecting the delivery into the neck of a limited number of matches and separating them from the main body of matches in the reservoir. It can be readily seen that
95 this same action would take place if the receptacle was stationary and both extensions K and O were to be pressed—say one with the finger and the other with the thumb—the object of the vibration of the receptacle
100 being merely to facilitate the delivery of the matches from the neck in limited quantities.

Having thus described my invention, what I claim is—

1. A receptacle for matches and toothpicks,
105 constructed of sheet metal or other suitable material, with a narrow compartment at the bottom, so that the front and back walls come relatively close together, in combination with an inwardly-projecting oscillating shelf piv-
110 otally mounted at the front wall of the receptacle so as to oscillate on the inside thereof at approximately a right angle thereto; and so adjusted, that by manipulation, it alternately opens and closes the lower compart-
115 ment of the receptacle, allowing one or more matches at a time to enter the same, substantially as described.

2. A receptacle for matches and toothpicks,
120 constructed of sheet metal or other suitable material, in combination with an inwardly-projecting pivotally-mounted apron-shelf, the apron attachment *j* forming in connection with the shelf a T-shaped device, the shelf operating on the inside of the receptacle
125 and the apron extending downward at the front, substantially as described.

3. A match and toothpick receptacle of sheet metal or other suitable material, in combination with a supplemental spring-back
130 wall rigidly attached at one end to the back wall of the receptacle, with the other end, brought by the spring-pressure, relatively close to the front wall of the receptacle, but

so adjusted that slight pressure from the front will make an opening for the passage of the matches downwardly by gravitation, substantially as described.

5 4. A receptacle for matches and toothpicks, of sheet metal or other suitable material, in combination with a supplemental spring-back wall rigidly attached at one end to the back wall of the receptacle, with the other end
10 brought relatively close to the front wall, with one or more inwardly-extending shelves or benches rigidly attached to the supplemental spring-back wall, to facilitate the even and regular passage of the matches from the up-
15 per to the lower part of the receptacle, substantially as described.

5. A receptacle for matches and toothpicks of sheet metal or other suitable material, combined with an inwardly-extending oscillating shelf, pivotally mounted at the front

wall of the receptacle, and one or more inwardly-extending benches or shelves attached to the back wall of the receptacle by spring or other fastening so as to vibrate up and down, and so adjusted that the shelf in front 25 may be readily oscillated, and the back shelves or benches simultaneously vibrated, whereby the matches may evenly and regularly pass downward in the receptacle by gravitation aided by the motion of the oscillating front 30 shelf and the vibratory jar and motion of each back shelf or bench, substantially as described.

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

JAMES F. FRANKEY.

Witnesses:

H. MCGARRY,
M. W. SUTTON.