

(No Model.)

H. L. BUXTON.
MATCH CASE AND LIGHTER.

No. 574,981.

Patented Jan. 12, 1897.

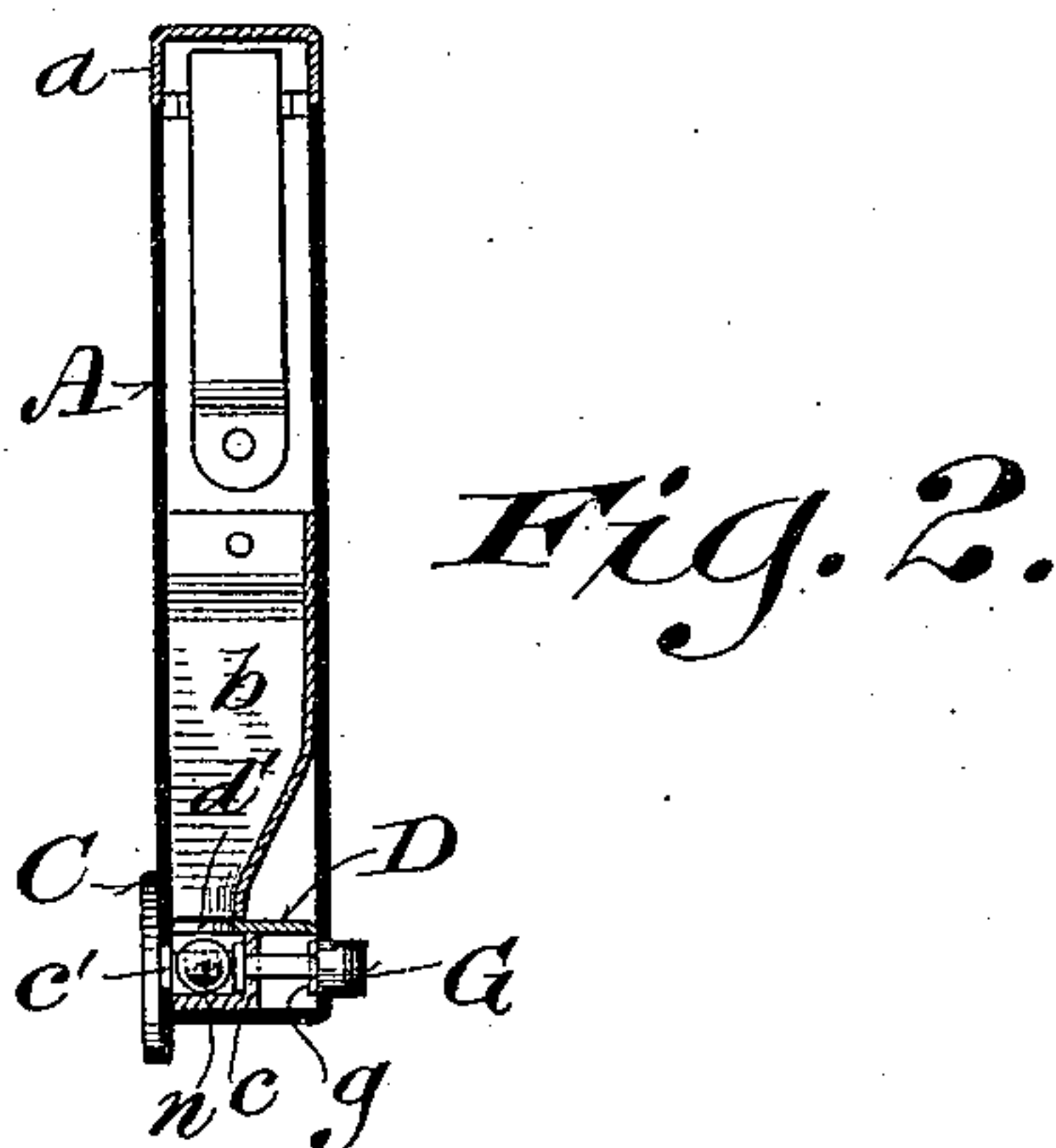
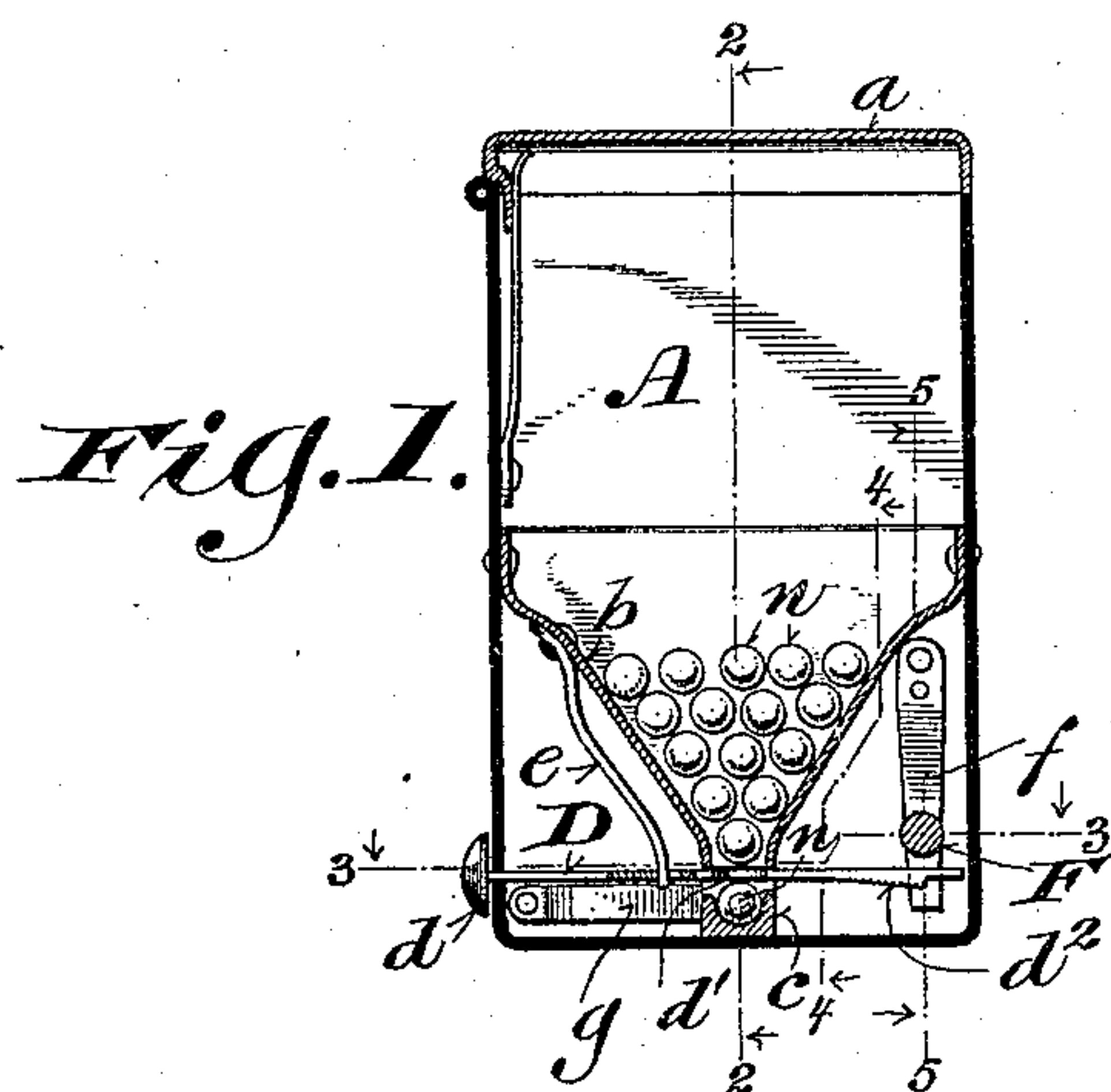


Fig. 3.

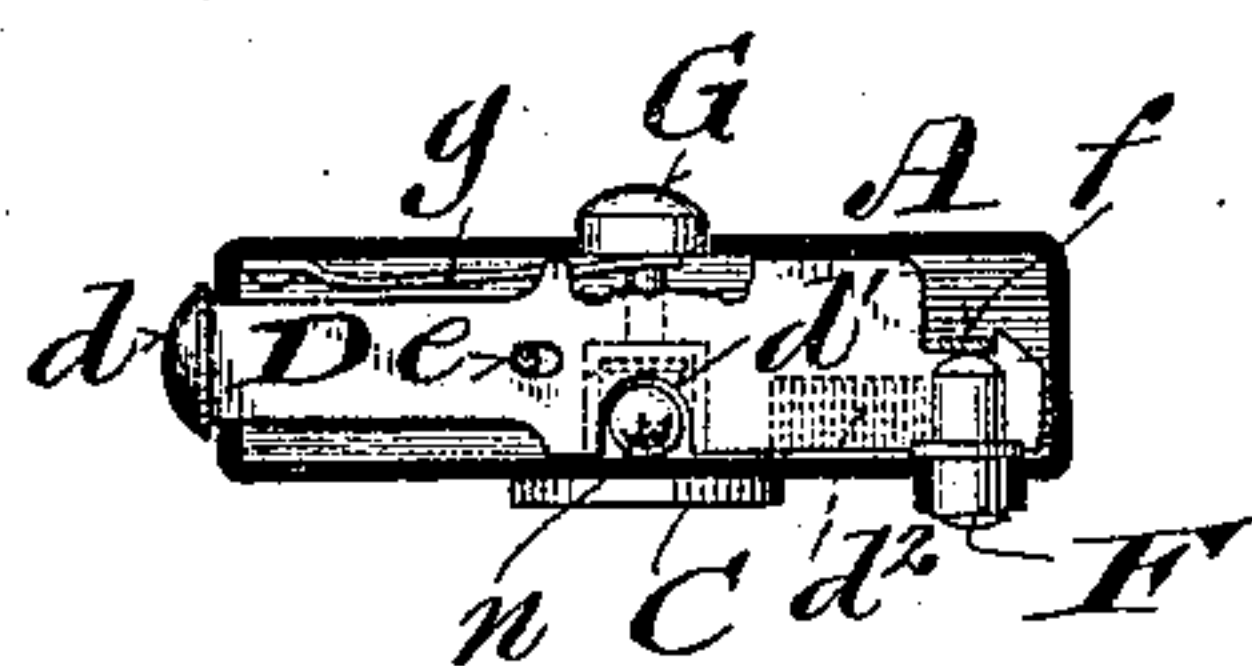


Fig. 4.

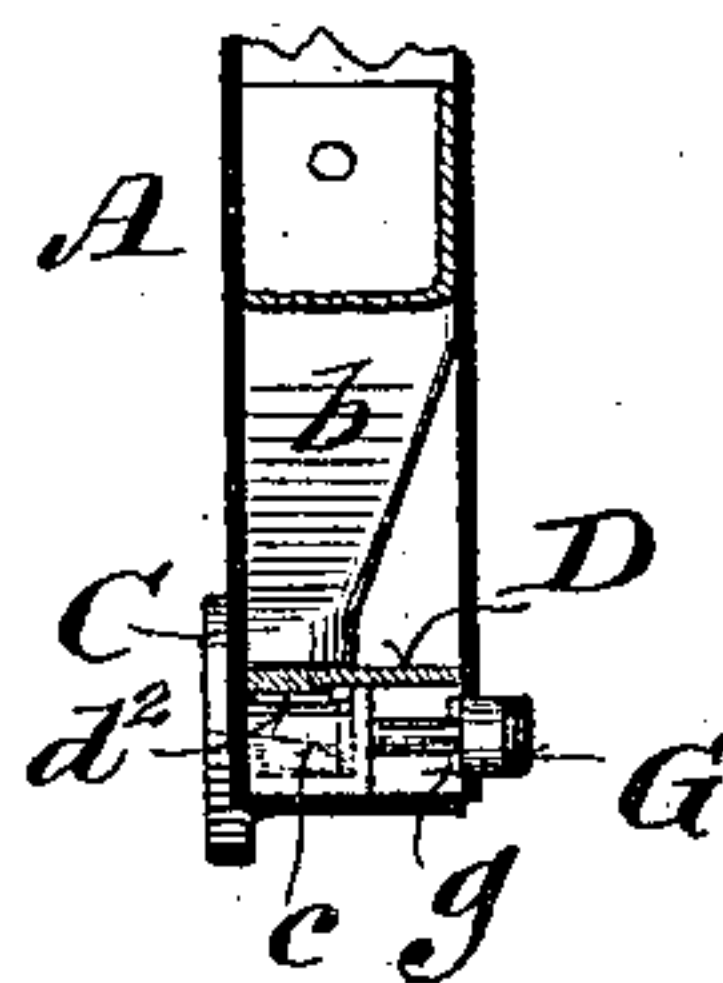


Fig. 5.

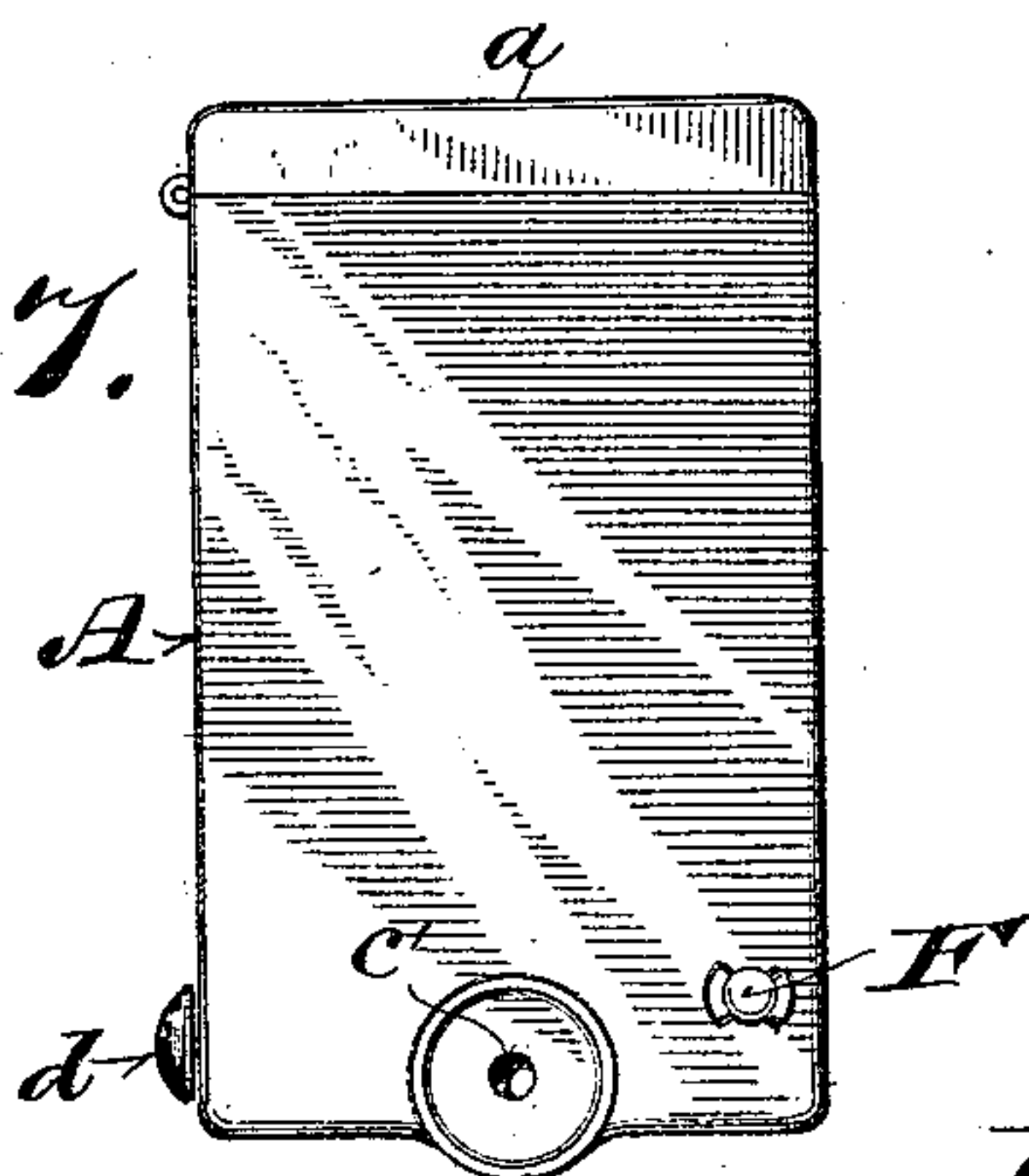
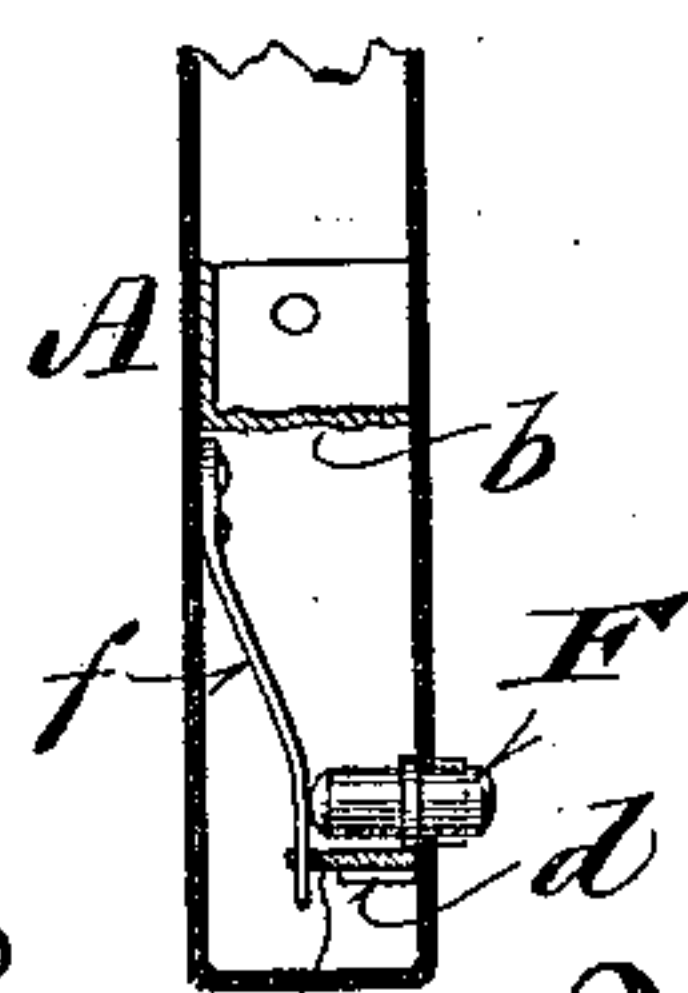


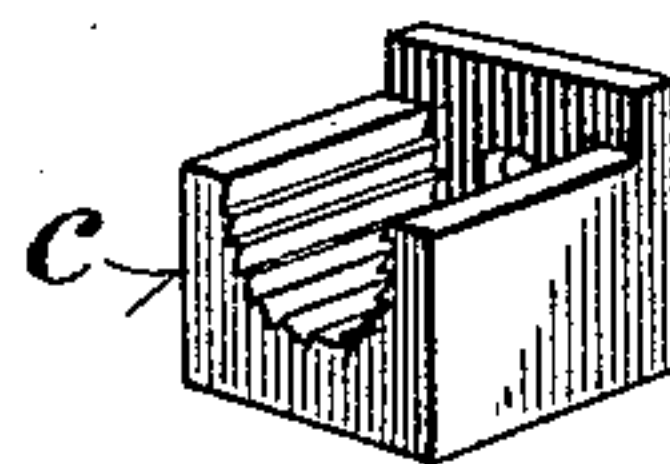
Fig. 6.



Witnesses: C
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UNITED STATES PATENT OFFICE.

HENRY L. BUXTON, OF MILWAUKEE, WISCONSIN.

MATCH CASE AND LIGHTER.

SPECIFICATION forming part of Letters Patent No. 574,981, dated January 12, 1897.

Application filed November 2, 1894. Serial No. 527,694. (No model.)

To all whom it may concern:

Be it known that I, HENRY L. BUXTON, of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Match Cases and Lighters; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it pertains 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.

The main object of my invention is to provide a receptacle or case and lighter adapted for use with globular matches, whereby a case of small compass will contain a comparatively large supply of matches, which may be ignited one at a time by a simple manipulation and will burn a sufficient length of time under various conditions, such as in a high wind, for various purposes, such as lighting cigars, &c.

It consists of certain novel features in the construction and arrangement of the component parts of the case and lighter, as hereinafter particularly described, and pointed out in the claims.

In the accompanying drawings like letters designate the same parts in the several figures.

Figure 1 is a longitudinal section of a match case and lighter embodying my invention. Fig. 2 is a medial longitudinal section on the line 2 2, Fig. 1. Fig. 3 is a cross-section on the line 3 3, Fig. 1. Fig. 4 is a longitudinal section on the line 4 4, Fig. 1, of a portion of the case, showing the ejector. Fig. 5 is a similar section on the line 5 5, showing the catch and releasing device of the igniter. Fig. 6 is a detail view, on an enlarged scale, of the pocket or cavity for holding a single match to be ignited; and Fig. 7 is a front elevation of the case.

A designates the case, which may be made like or similar to an ordinary pocket match-case, of sheet metal or any suitable material, and provided with a spring-closed cover *a*. It is formed or provided with a funnel-shaped bottom or converging walls *b*, which terminate above and close to a pocket or cavity *c* of sufficient size to receive and hold a single globular match.

D is a thin plate or slide constituting a cut-off and igniter and movable transversely in the lower portion of the case between the open end of the converging bottom *b* and the pocket or cavity *c*. It projects at one end through an opening in the case and is provided on the outside with a suitable thumb-piece or head *d*. It is also formed with an opening *d'*, which registers with the opening in the bottom *b* and the pocket or cavity *c* when the slide is thrust into the case, and is of sufficient size to permit the passage of a single match at a time from the receptacle above into the cavity below it. *e* is a spring attached to any convenient part of the case and engaging with said slide, which it tends to move outwardly. The slide is thickened and roughened on the under side at or near the end opposite the head *d*, as at *d*², Figs. 1 and 3, so as to engage the upper side of a match held in pocket *c* when the slide is released and is thrust outwardly by the spring *e* and after the opening *d'* passes the opening in the bottom *b*. The upper side of the slide is made smooth, so as not to abrade and ignite the match in the receptacle above it, and serves to close the opening between the pocket *c* and said receptacle and to prevent the burning match in the pocket from igniting the matches in said receptacle.

A spring-catch *f* is arranged inside of the case to pass over an incline on and engage a notch in said slide and hold it in the position shown in Fig. 1 with the spring *e* strained and the opening *d'* directly opposite the pocket. A push-button *F*, bearing at its inner end against said spring-catch and projecting at its outer end through an opening in the case, serves to release said slide. An opening *c'*, somewhat smaller than the size of the globular matches, is formed in the side of the case directly opposite the pocket with which it communicates and permits the ingress of air and the egress of the flame of a burning match. Around this opening on the outside of the case is formed a rim or guard *C*, which serves to shield the flame and to prevent its being extinguished by a strong wind or draft. It also serves in lighting a cigar to guide and hold the end of the cigar in place.

G is an ejector consisting of a pin or push-

button projecting at its inner end into an opening in the back side of pocket *c* in line with the opening *c'* on the front side of the case and at its opposite end through an opening in the back side of the case. It is held normally in a retracted position, as shown in Figs. 2 and 3, by a spring *g*. It operates, when thrust by the thumb or finger into the case, to eject the residuum of a burned match through the opening *c'* and clear the pocket *c* for another match. The pocket *c* may be roughened, as shown in Fig. 6, to insure the lighting of a match therein in case the roughened portion *d*² of the slide or igniter fails to ignite it.

n n designate matches adapted for use in connection with the case and lighter hereinbefore described. They are made in globular form and are composed of any suitable combustible and igniting materials which will produce a flame of the desired duration and will be ignited by friction or percussion.

The operation of my invention may be described as follows: The case being supplied with matches of the kind mentioned and held in the position shown in Figs. 1 and 7, and the slide *D* being held by the spring-catch *f* in the position shown in Fig. 1, so as to permit a match to drop into pocket *c*, the button *F* is depressed with the thumb, thereby releasing said slide, which is instantly thrown outward by the spring *e*, closing the opening between said pocket and the match-receptacle, and thereupon forcing the thickened and roughened portion *d*² on said slide across the top of the match in said pocket. The match is thus ignited and burns, and the flame issuing from the opening *c*² in the side of the case is brought in contact with the object to be lighted. The slide *D* being held by the spring *e* in its outer position, separates the pocket from the match-receptacle and prevents the burning match from igniting the matches in said receptacle. When the match has burned out, the refuse is ejected from the pocket by thrusting the pin or button *G* inward with the thumb or finger. The slide is then thrust back into the case by pressing on the head or thumb-piece *d*, and is engaged and held by the spring-catch *f* in the position shown in Fig. 1, another match dropping into the pocket *c* as soon as the opening *d'* is brought opposite said pocket. The device is now set and ready for immediate use when required.

I do not wish to be understood as limiting myself to the details of construction and arrangement herein shown and described for

the purpose of illustrating my invention, as they may be variously modified within the spirit and intended scope of the invention.

I claim—

1. The combination with a globular match, of a receptacle having converging walls terminating in or near a pocket or cavity of sufficient size to hold one match only, and a cut-off and igniter movable between said receptacle and pocket, substantially as and for the purposes set forth.

2. The combination in a case for globular matches, of a receptacle terminating in or near a pocket or cavity of sufficient size to contain but a single match, a spring-actuated igniter and cut-off movable between said pocket and receptacle, a catch for holding said igniter and cut-off in normal position, and a releasing device for disengaging said catch from said slide, substantially as and for the purposes set forth.

3. The combination in a case for globular matches, of a match-receptacle having converging walls terminating in or near a pocket or cavity of sufficient size to hold a single match, a cut-off and igniter movable between said receptacle and pocket and an ejector for removing the residuum of burned matches from said pocket, substantially as and for the purposes set forth.

4. The combination in a case for globular matches, of a match-receptacle, a pocket or cavity opposite an opening in said receptacle of sufficient size to admit but a single match, and an igniting device arranged to operate upon the match in said pocket, said case having an opening into said pocket of smaller size than one of the matches, substantially as and for the purposes set forth.

5. The combination in a case for globular matches, of a receptacle for holding a number of matches, a pocket or cavity having communication therewith and of sufficient size to hold but one match, and an igniter arranged to operate upon the match in said pocket without effect upon the matches in said receptacle, said case being provided with a lateral opening into said pocket of smaller size than an individual match, and a shield surrounding said opening, substantially as and for the purposes set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

HENRY L. BUXTON.

Witnesses:

CHAS. L. GOSS,
M. L. EMERY.