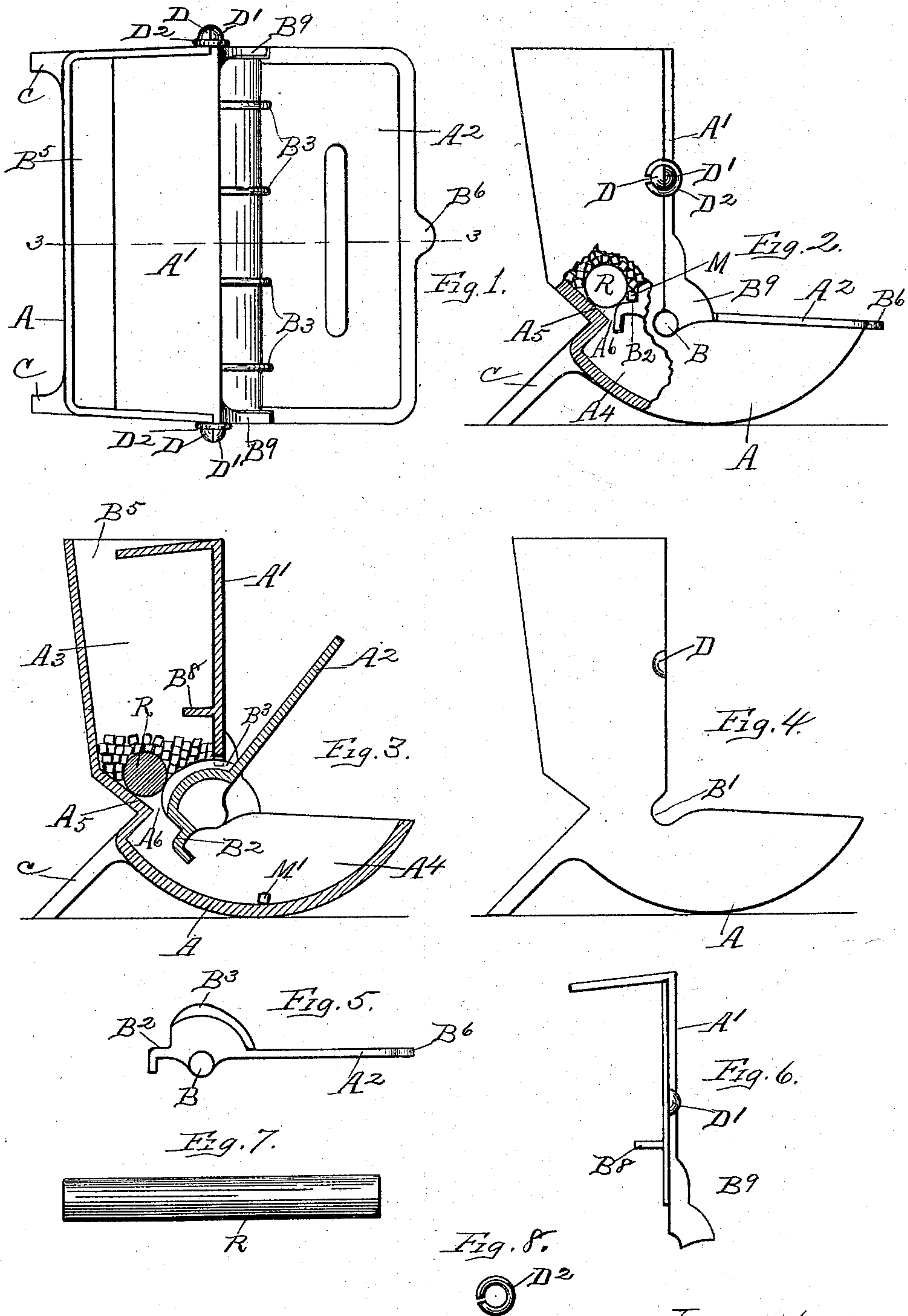


(No Model.)

M. C. RUSSELL.
MATCH SAFE.

No. 573,358.

Patented Dec. 15, 1896.



Witnesses:
G. H. Curtis.
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UNITED STATES PATENT OFFICE.

MARTIN C. RUSSELL, OF SARATOGA SPRINGS, NEW YORK.

MATCH-SAFE.

SPECIFICATION forming part of Letters Patent No. 573,358, dated December 15, 1896.

Application filed October 15, 1895. Serial No. 565,731. (No model.)

To all whom it may concern:

Be it known that I, MARTIN C. RUSSELL, a citizen of the United States, residing at Saratoga Springs, county of Saratoga, and State of New York, have invented certain new and useful Improvements in Match-Safes, of which the following is a specification.

The invention relates to such improvements; and it consists of the novel construction and combination of parts hereinafter described and subsequently claimed.

Reference may be had to the accompanying drawings, and the letters of reference marked thereon, which form a part of this specification.

Similar letters refer to similar parts in the several figures therein.

Figure 1 of the drawings is a top plan view of my improved match-safe. Fig. 2 is a side elevation of the same in a closed position with a portion of the side wall broken away. Fig. 3 is a central vertical section, taken on the broken line 3 3 in Fig. 1, of the same in an open position. Fig. 4 is a side view of the box-section with the stationary and movable covers detached. Fig. 5 is an edge view of the movable cover detached. Fig. 6 is an edge view of the stationary cover detached. Fig. 7 is a plan view of the roller detached. Fig. 8 is a plan view of one of the spring-clips which fasten the parts together.

My improved match-safe is preferably made of metal cast in three sections.

A is the box-section, A' the stationary cover or front, and A² the movable cover.

The stationary cover forms one of the vertical walls of the upper supply-chamber A³, and the movable cover forms the upper wall of the under delivery-chamber A⁴.

The box-section is provided with a downwardly-inclined shelf A⁵, which projects inwardly to the passage-way A⁶, which connects the upper and under chambers.

The movable cover is provided with a pair of trunnions B, one on each side of the safe, which respectively fit suitable bearing-apertures B' in the box-section.

The inner end of the cover forms a tilting platform B², adapted to receive and support a single match M, as shown in Fig. 2, also with a series of ribs B³, slightly eccentric to the trunnions.

The tilting platform, when the movable cover is closed, projects inwardly from the side of the box opposite the inclined shelf A⁵.

I drop a metallic roll R onto the inclined shelf and platform in the position shown in Fig. 2, and thereby close the passage-way between the two chambers.

The upper chamber is supplied with matches inserted through the top opening B⁵.

The operation of the device is as follows: The movable cover is lifted, as by handle B⁶, from the position shown in Fig. 2 to approximately the position shown in Fig. 3, whereupon the match which rested on the tilting platform drops down through the passage to the position shown at M' in Fig. 3, and the ribs B³, acting in conjunction with the roller, lift the superposed matches to the position shown in Fig. 3. While the cover is lifted or open, the match can be easily removed from the delivery-chamber. When the movable cover is released, it falls by gravity from the open position shown in Fig. 3 to the closed position, as in Fig. 2, and one of the superposed matches drops down upon the platform in position to be delivered to the lower chamber when the cover is again opened. I am thus able to deliver matches successively, one at a time, from a supply-chamber into an accessible delivery-chamber.

By employing the loosely-supported yielding roller to close the passage-way I am able to successfully feed one at a time matches varying in size.

The platform is made large enough to receive the largest and most irregularly-formed match, and when the platform is tilted and the ribs forced inwardly to lift the superposed matches the roller yields sufficiently to permit of the easy and accurate working of the parts, so that it very seldom happens that the platform is tilted without delivering a match on the first trial, and one or more repetitions of the trial is sure to deliver a match.

As a protection or shield for the platform, to prevent the possibility of wedging when the supply-chamber is full of matches, I provide the inwardly-projecting shelf B⁸ immediately above the platform, which prevents a hindering-pressure of matches upon the working parts.

The legs C serve to keep the box in the proper upright position when the safe is resting upon a desk, table, or similar support instead of hanging upon a vertical wall, as commonly practiced.

The vertical cover is provided with the side wings B⁹, which serve to hold the trunnions in their bearings.

As a means for securing the sections together I provide the box-section with a pair of semispherical lugs D, one on each side, and the stationary cover with a pair of similar lugs D', all so disposed as to bring the lugs on the cover into juxtaposition with the respective lugs on the box-section, as shown. I then secure the parts in position by springing over the heads of each pair of lugs in juxtaposition a spring-clip, as the split ring D². I am thus able to secure the three cast sections together just as they come from the foundry without the labor and risk of breakage incident to drilling holes for rivets.

By securing the brittle cast sections together by means of the yielding spring-clips the yielding nature of the fastening renders the device less liable to breakage in use while operating the movable cover to actuate the working parts which feed the matches.

The essential function of shelf B⁸ is to prevent one end of the matches in the partly-filled supply-chamber from springing up so

much higher than the other end as to become wedged in a crossed position, while the ribs coöperate with the roller to separate the other matches from the one on the platform.

What I claim as new, and desire to secure by Letters Patent, is—

1. A match-safe having an upper supply-chamber and an under delivery-chamber connected by a valved passage-way, consisting of an inclined stationary shelf projecting from one side into such passage-way, a tilting platform projecting from the opposite side of the passage-way toward the shelf, and a yielding roller adapted to engage the shelf and platform and close the passage-way between them, and means for tilting the platform, substantially as described.

2. In a sectional match-safe, the combination with a pair of semispherical lugs, on adjacent sections and in juxtaposition with each other, of a resilient, expansible ring sprung over the heads of the pair of lugs and yieldingly embracing the same, substantially as described.

In testimony whereof I have hereunto set my hand this 4th day of October, 1895.

MARTIN C. RUSSELL.

Witnesses:

GEO. A. MOSHER,
FRANK C. CURTIS.