

No. 717,460.

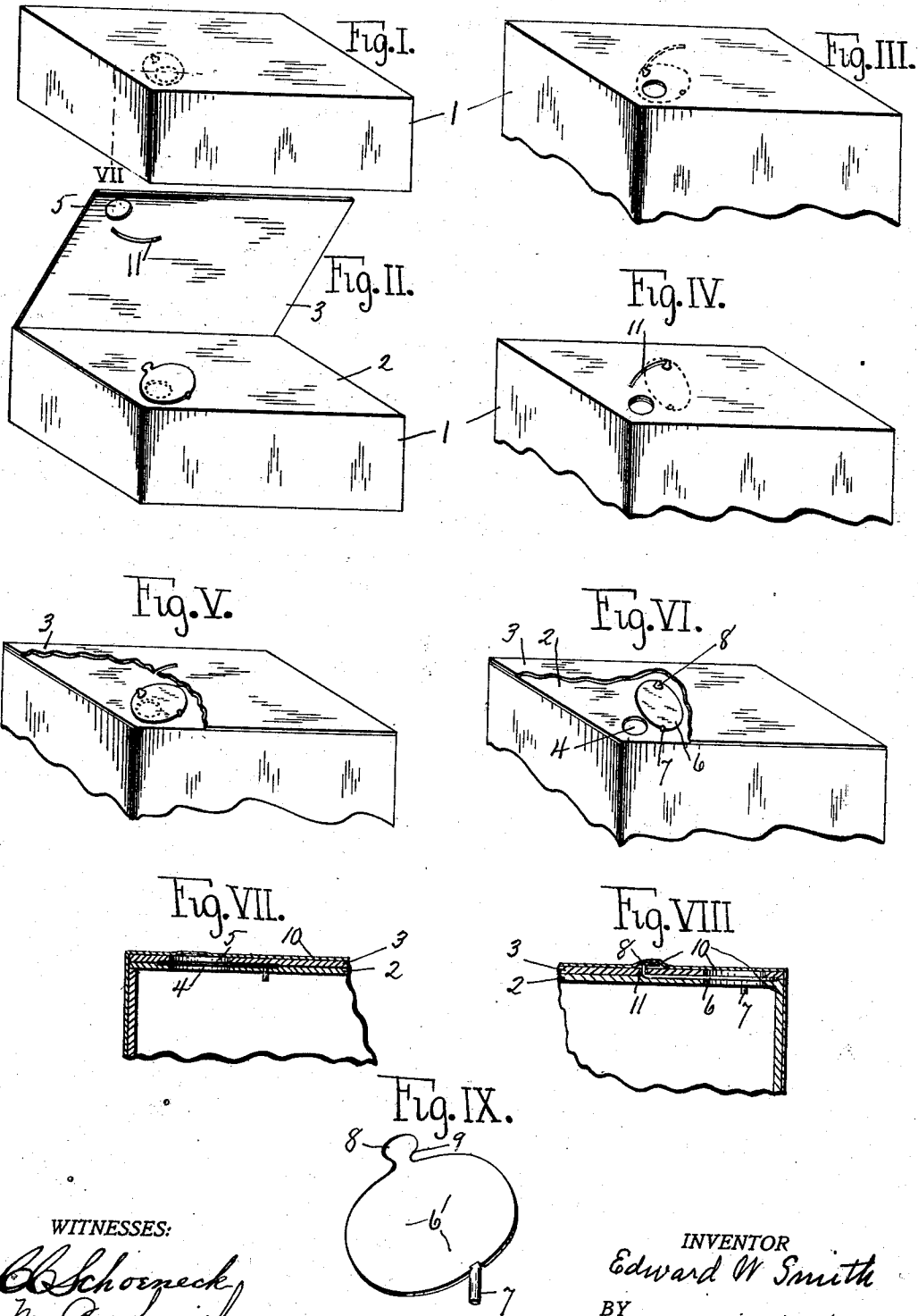
Patented Dec. 30, 1902.

E. W. SMITH.

COMBINED PROTECTOR AND OPENER FOR BOXES.

(Application filed June 28, 1902.)

(No Model.)



WITNESSES:

W. Schorneck
M. B. Smith

INVENTOR

Edward W. Smith

BY

Alfred Wilkinson
ATTORNEY.

UNITED STATES PATENT OFFICE.

EDWARD W. SMITH, OF ROCHESTER, NEW YORK, ASSIGNOR OF TWO-THIRDS TO WILKINSON & LANCASTER, OF SYRACUSE, NEW YORK, A COPARTNERSHIP, AND FLORENCE B. THOMPSON, OF ROCHESTER, NEW YORK.

COMBINED PROTECTOR AND OPENER FOR BOXES.

SPECIFICATION forming part of Letters Patent No. 717,460, dated December 30, 1902.

Application filed June 26, 1902. Serial No. 113,210. (No model.)

To all whom it may concern:

Be it known that I, EDWARD W. SMITH, of Rochester, in the county of Monroe, in the State of New York, have invented new and useful Improvements in a Combined Protector and Opener for Boxes, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

My invention relates to an improvement in covers for paper boxes adapted particularly to contain granular and powdery substances. Its object is to provide a cover which may be opened and closed easily; and it consists, essentially, in a box having a double cover, perforated near one corner for convenience in pouring out the contents, and of a metallic cover-plate pivoted between the two flaps of the double cover, so that it may be swung to open or close the orifices. The cover-plate is provided with an integral flexible thumb-piece extending upwardly through a curved slot in the upper flap, by which the cover-plate is turned. This thumb-piece may be sharp on one edge to cut the guiding-groove, and is bent down against the top flap when the box is packed, retaining the cover-plate in position to close the orifices in the two covers. An outside paper wrapper is then preferably pasted over the cover, which engages with the downturned thumb-piece and insures closing of the orifices. When the box is opened, the wrapper is torn at the corner over the orifices, the thumb-piece is bent up, and the cover-plate thereby swung to one side, the thumb-piece engaging with the guide-slot or cutting a guide-slot. The desired amount of the contents is then poured out and the cover-plate is turned back to closed position, tightly closing the orifices and protecting the remainder of the contents from waste and injury by dust, moisture, insects, &c.

My invention will be understood by reference to the drawings herewith, in which the reference-numerals of the specification indicate the same parts in all the figures.

Figure I is an isometric view of a paper box provided with my invention. Fig. II is a similar view, with the upper flap raised, showing the cover-plate in closed position. Figs.

III and IV are corresponding views, with a portion of the paper wrapper removed, showing the cover-plate respectively in closed and open position. Figs. V and VI are corresponding views, with a portion of the upper flap broken away, showing the cover-plate respectively in closed and open position. Fig. VII is a section of a portion of the box, enlarged on section-line VII of Fig. I. Fig. VIII is a corresponding section substantially at right angles to Fig. VII. Fig. IX is an isometric view of the cover-plate detached.

In the figures, 1 indicates the box of pasteboard or other suitable material, 2 the cover, and 3 the upper flap correspondingly perforated at 4 and 5.

6 is the cover-plate, having the integral pintle 7, on which it is journaled, and the integral flexible thumb-piece 8, provided, if desired, with the cutting edge 9.

10 is the outside wrapper, and 11 is the curved guide-slot originally formed in the top flap or cut therein by the thumb-piece when the box is first opened.

My invention may be easily and economically applied to pasteboard and similar boxes containing dry materials, which are conveniently poured from the box a portion at a time, as in case of cereals, in the household. It is useful for protecting the materials from injury and, by its construction and arrangement, is maintained firmly in position between the two flaps of the cover whether open or closed.

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

1. The combination with a paper box having a double cover formed of upper and lower flaps provided with registering orifices and the upper flap with a curved guide-slot, of a metallic cover-plate arranged between the flaps, an integral journal-pintle on the cover-plate engaging with one of the flaps and forming a center on which the cover-plate is swung, a flexible thumb-piece on the cover-plate extending upwardly through the guide-slot and an outside wrapper around the box and secured over the cover-plate and orifice.

2. The combination with a paper box hav-

ing a cover and an upper flap arranged over the cover, said cover and flap being formed with registering orifices, of a metallic cover-plate arranged between the cover and the
5 flap, an integral journal-pintle on the cover-plate engaging with the cover of the flap, and an integral thumb-piece on the cover-plate.

3. The combination with a paper box having a double cover formed of upper and lower
10 flaps provided with registering orifices, of a metallic cover-plate, an integral pintle on the cover-plate engaging with the lower flap of the cover, and an integral, flexible thumb-piece on the cover-plate having a sharp edge
15 extending upwardly through the upper flap.

4. The combination with a paper box having a double cover formed of upper and lower flaps provided with registering orifices, of a
20 metallic cover-plate arranged between the flaps, an integral pintle on the cover-plate engaging with the lower flap of the cover, an

integral, flexible thumb-piece on the cover-plate having a sharp edge extending upwardly through the upper flap, and an outside wrapper around the box. 25

5. The combination with a paper box having a double cover formed of upper and lower flaps provided with registering orifices and the upper flap with a curved guide-slot, of a
metallic cover-plate arranged between the 30 flaps, an integral pintle on the cover-plate engaging with the lower flap of the cover, an integral, flexible thumb-piece on the cover-plate extending upwardly through the guide-slot, and an outside wrapper around the box. 35

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

EDWARD W. SMITH.

Witnesses:

C. C. SCHOENECK,
G. A. LANCASTER.