

J. TROTTIER.

Improvement in Manufacture of Boxes, &c.

No. 127,811.

Patented June 11, 1872.

fig. I.

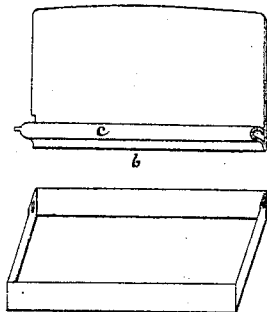


fig. II.

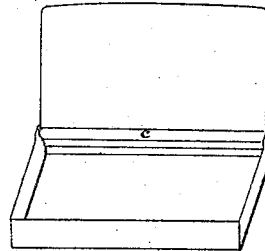


fig. III.

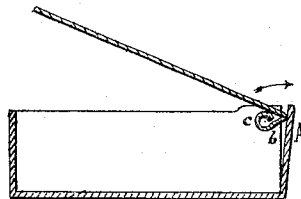


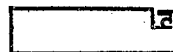
fig. IV.



Witnesses.

E. B. B. B.
A. J. J.

fig. V.



Inventor

J. H. Trotter

UNITED STATES PATENT OFFICE.

JULES TROTTIER, OF HENNEBON, FRANCE.

IMPROVEMENT IN THE MANUFACTURE OF BOXES, &c.

Specification forming part of Letters Patent No. 127,811, dated June 11, 1872.

Specification describing certain Improvements in the Manufacture of Boxes, Cases, and analogous articles, invented by JULES TROTTIER, of Hennebion, in the department of the Morbihan, in the Republic of France.

This invention relates to a system of closing, which acts as a spring simply by the arrangements given to the shape of the lid and to the construction of the body of the box.

Figure I is a view of a box embodying this invention, with lid detached ready for fitting. Fig. II is a view of same box completed. Fig. III is a lateral section, double the ordinary size of the box. Figs. IV and V are lateral sections of different types based upon the same principle.

The side A of the box is detached from the body at each end, so that a pressure acting in the direction indicated by the arrow, Fig. 3, has the effect of causing it to yield in its entirety. Upon the pressure ceasing the flexibility of the metal immediately brings it back to its first position. I use this power to contribute to the closing of the lid—in short, it is the side of the box that constitutes the spring which is to keep it open or shut. The lid, which turns on a hinge, possesses a projection, *b*, extending beyond the hinge. It is this projection which, acting as a cam on the side of the box, causes pressure during the pivoting of the lid until the moment when the lid, hav-

ing attained the perpendicular, the cam no longer acts on the side; but that, on the contrary, it is this latter which, released from pressure, springs back to its first position and presses upon the hinge; thus the lid can no longer close without renewing the play just described, which necessitates a power quite sufficient to keep the box open or closed.

This arrangement is susceptible of the greatest variation, (two modifications are given, Figs. IV and V of the drawing,) but as in reality the principle does not vary, these arrangements may be indefinitely changed and applied to every kind of box to which this system is adaptable.

The hinge which I use in this box is made of a part of the lid, which is rolled, and thus forms a pivot, turning in two openings made in the sides of the box.

I claim as my invention—

A system of closing, applicable to all metallic boxes, such closing being composed of the side A of the box acting as spring, of the projection *b* of the lid as cam, and of the enrolled part *c* of the lid as hinge, these pieces being arranged and operating substantially as and for the purpose hereinbefore set forth.

JULES TROTTIER.

Witnesses:

ALPHONSE BARAL,
C. GUY.