

No. 871,767.

PATENTED NOV. 19, 1907.

C. F. RAYNAUD.  
FOLDING PAPER BOX.

APPLICATION FILED FEB. 23, 1906.

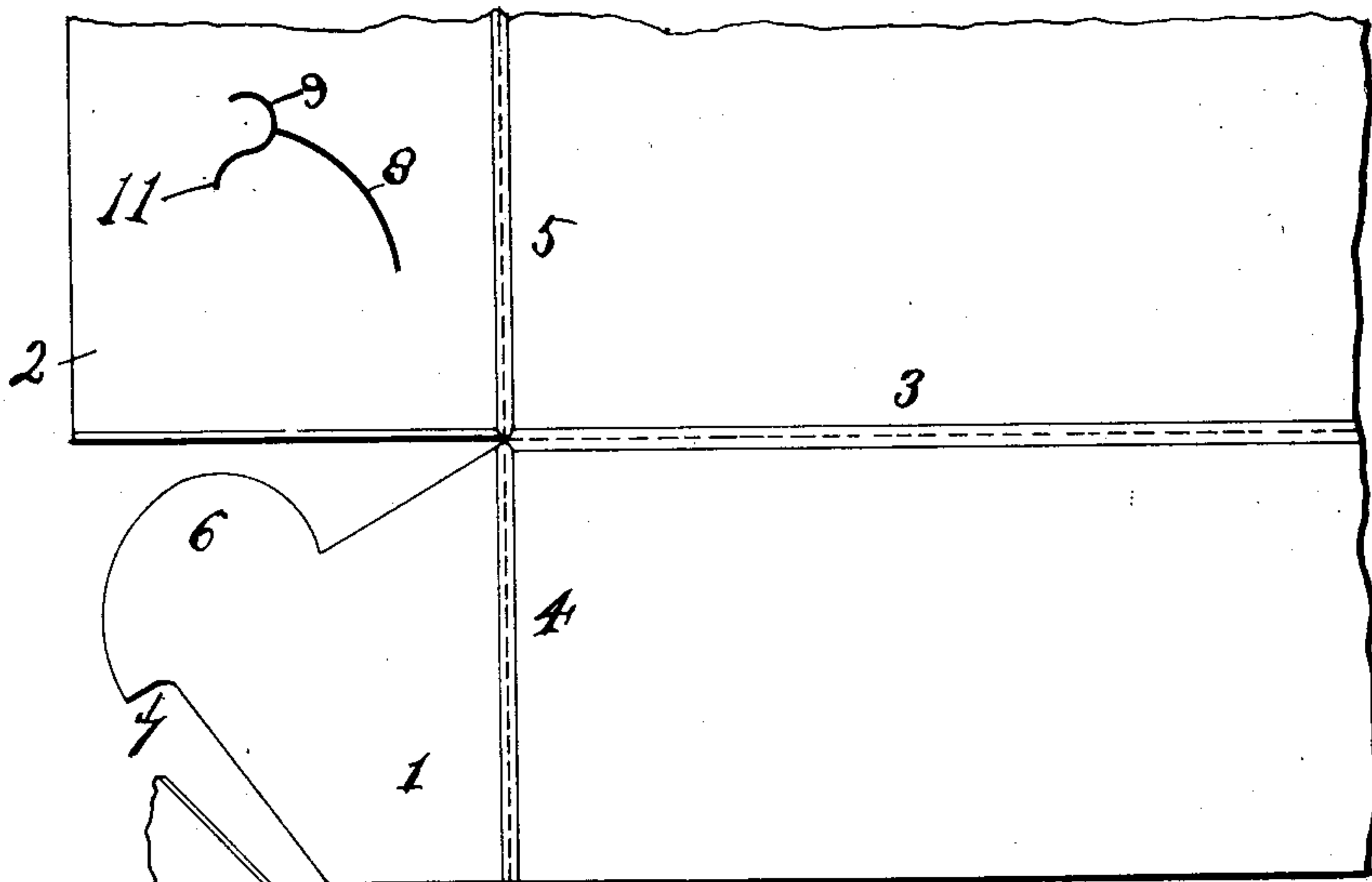


Fig. 1.

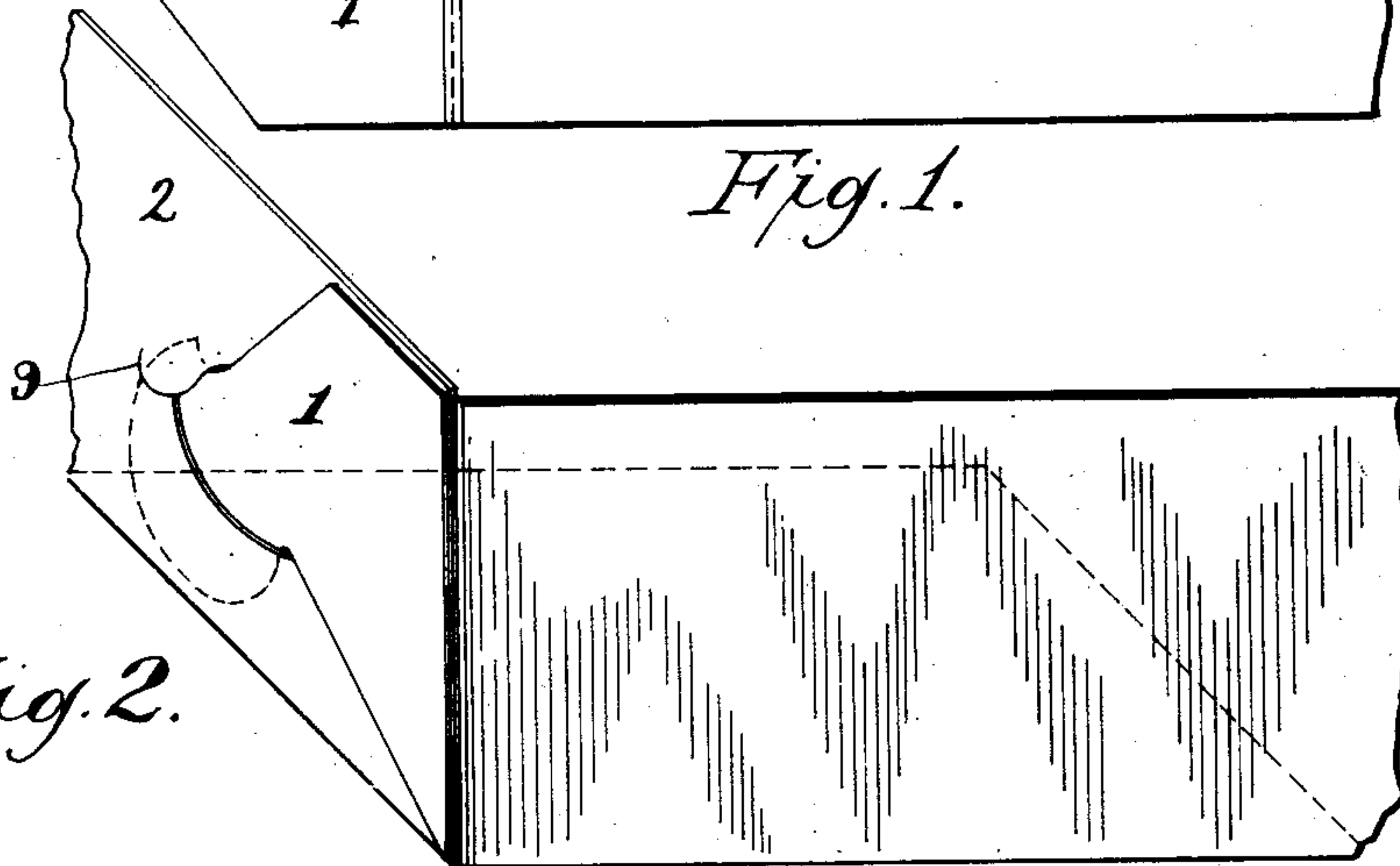


Fig. 2.

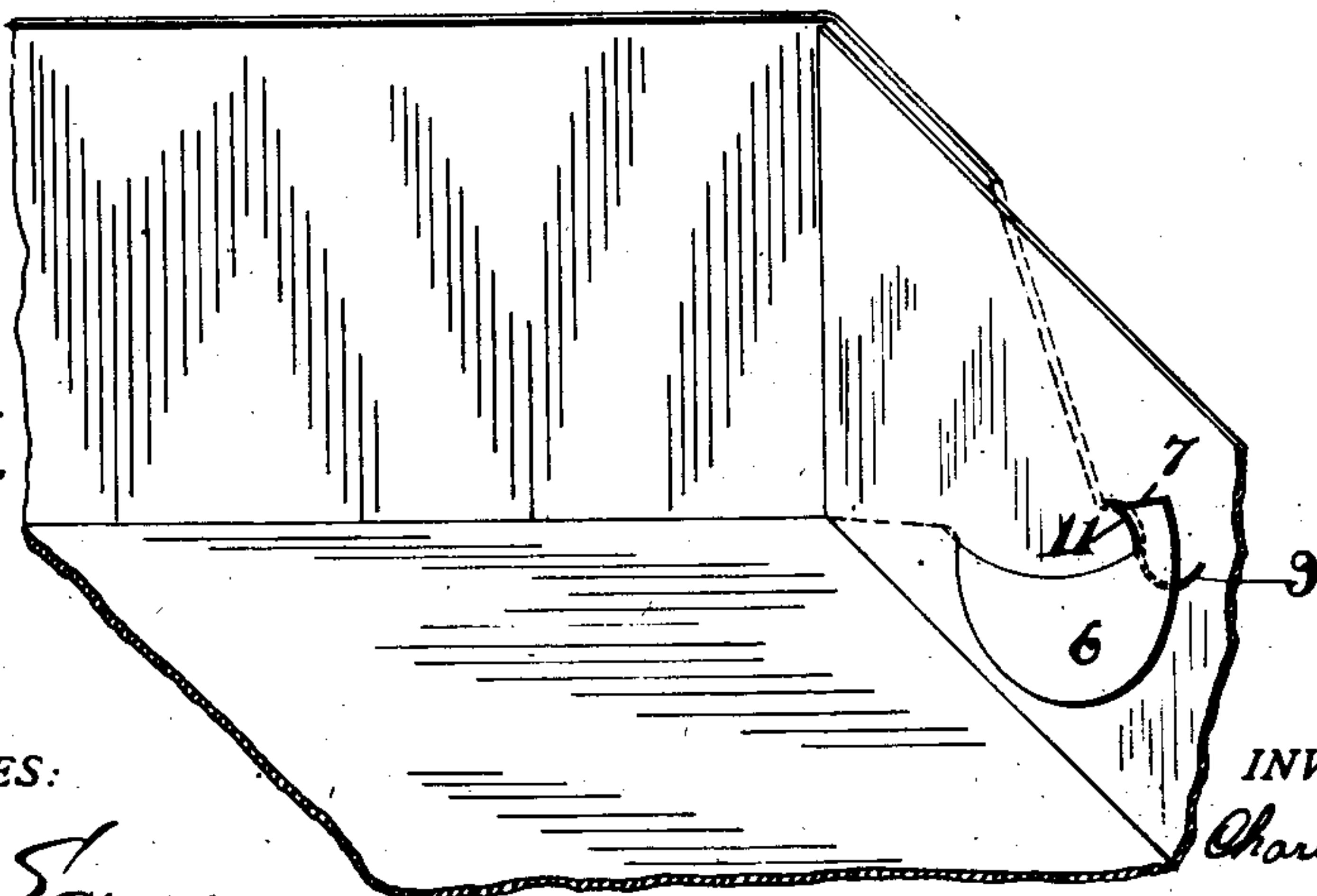


Fig. 3.

WITNESSES:

*Robert T. Spear*  
*John E. Seely*

INVENTOR.

*Charles F. Raynaud*

BY

*Spear & Seely*

ATTORNEYS.

# UNITED STATES PATENT OFFICE.

CHARLES F. RAYNAUD, OF SAN FRANCISCO, CALIFORNIA.

## FOLDING PAPER BOX.

No. 871,767.

Specification of Letters Patent.

Patented Nov. 19, 1907.

Application filed February 23, 1906. Serial No. 302,531.

*To all whom it may concern:*

Be it known that I, CHARLES F. RAYNAUD, citizen of the United States, residing at San Francisco, in the county of San Francisco and State of California, have invented certain new and useful Improvements in Folding Paper Boxes, of which the following is a specification.

This invention relates to corner-locks for paste-board boxes or for their covers. In such constructions it is desirable to provide a safe and secure lock which cannot become self-disengaged and can only be actually disengaged with considerable difficulty and by intention. As a matter of fact such corner-locks are intended for permanent engagement, although of course it is possible to disconnect them.

The present invention has particular reference to the form of the slit by which one member of the two corners is interlocked and engaged with the other. This slit is of peculiar shape, one feature being that it is formed entirely upon curved lines so that a hook of curved shape will readily enter it and become interlocked. It has certain other peculiarities of curvilinear shape which constitute positive locking means at both ends of the hook and which will be better understood by reference to the following description in connection with the accompanying drawings:

Figure 1 shows a flat surface which includes the two members of a box-corner or of a box-cover corner before they are interlocked; Fig. 2 is a perspective showing similar parts after being folded and having their corners interlocked; Fig. 3 is also a perspective but shows the interior of the corner and the inside appearance of the lock.

In these drawings, 1 and 2 may be considered two members of a box blank foldable upon the lines 3, 4 and 5 so as to assume the shape of Fig. 2. Of course Fig. 1 shows the surface which after folding becomes the interior of the box.

The member 1 which I will call the extremity of the side of the box is cut and shaped so as to form the curved head 6 having the shoulder 7 all forming a hook. This hook folds around the corner upon the line 4, the side folds upwardly upon the line 3 and the end 2 or adjacent side as it might cor-

rectly be termed, folds upwardly upon the line 5. In this member 2 is formed the peculiar slit which forms the principal feature of my invention. It is in reality a double slit formed entirely in curved lines, and of a shape which I consider to be the best for the convenient engaging and at the same time secure interlocking of the folded corner members. The main portion 8 of the double slit is formed on a plain direct curve which is substantially the arc of a circle whose length is properly calculated to receive the greater part of the head or hook. At one end of this curved slit, which is the end approached by the shoulder 7 is the intersecting slit formed on a double reverse curve 9, 11 somewhat in the shape of the letter S. When the interlocking takes place the shouldered portion of the hook can enter freely into the curve 9, but is then immediately drawn back into the curve 11, producing an absolutely effective lock which cannot become disengaged excepting by intention.

The advantage of the peculiar curved slits employed by me lie in the ease with which the curved hook can be engaged with such slits, the consequent saving of time in box making and the security of the corner-lock produced. Practically a double lock is produced by the engagement of both back and front edges of the hook with the two curved slots; and the additional strength acquired by means of such double lock gives the box a longer life and makes it of more permanent value.

What I claim is:

In a corner-lock for boxes and covers, the combination of a member having a tongue, a shoulder or hook upon one side of said tongue and a second member having first, an arc-shaped slit to receive the main body of the tongue, and secondly a slit formed on a double reversed curve; said second slit intersecting the arc-shaped slit and lying on both sides of one end of said slit.

In testimony whereof I affix my signature, in presence of two witnesses, this 15th day of February 1906.

CHARLES F. RAYNAUD.

Witnesses:

F. M. BARTEL,  
M. R. SEELY.