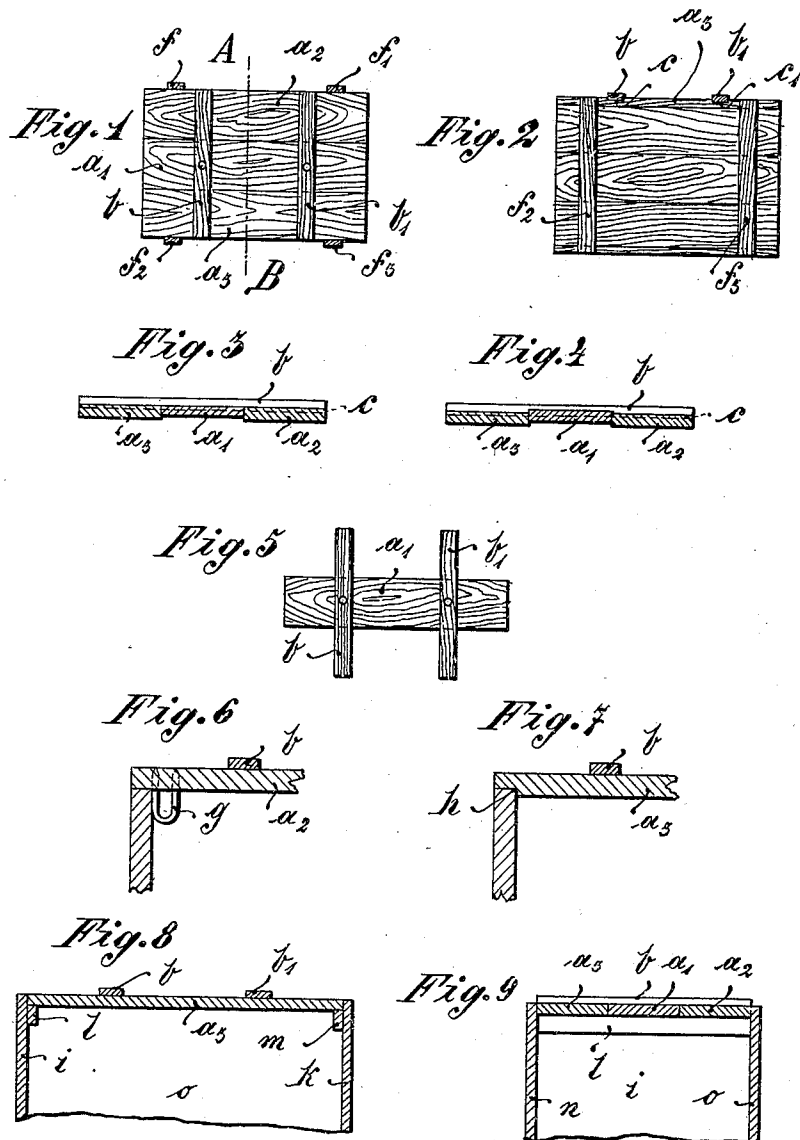


D. OPPENHEIMER.
 PACKING CASE AND THE LIKE.
 APPLICATION FILED DEC. 9, 1904.

945,582.

Patented Jan. 4, 1910.



WITNESSES:

Paul Lange.
[Signature]

INVENTOR:

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UNITED STATES PATENT OFFICE.

DANIEL OPPENHEIMER, OF MAINZ, GERMANY.

PACKING-CASE AND THE LIKE.

945,582.

Specification of Letters Patent.

Patented Jan. 4, 1910.

Application filed December 9, 1904. Serial No. 236,186.

To all whom it may concern:

Be it known that I, DANIEL OPPENHEIMER, privatier, a subject of the German Emperor, and resident of 6 Bonifaciusplatz, in Mainz, in the Grand Dukedom of Hesse, German Empire, have invented certain new and useful Improvements in Packing-Cases and the Like, of which the following is a specification.

My invention relates to a lid for packing cases, boxes and the like, which constitutes an effective closure.

Numerous closures for packing cases have already been invented, but being for the most part expensive, complicated or insecure, the old plan of nailing down the lid is still almost everywhere retained. Nailing, however, soon destroys a case, so that after being used a few times such cases are no longer fit for packing purposes. Nailed cases, moreover, can very readily be tampered with, as after extraction of articles, the lid can be easily secured again. These disadvantages are entirely overcome by means of this invention, which is illustrated in the drawing.

Figure 1 is a plan, and Fig. 2 an elevation of a packing-case with lid according to this invention. Fig. 3 is a section on the lines A—B of Fig. 1. Fig. 4 is a like sectional view illustrating a modification of the invention. Fig. 5 is a plan of the central board of the lid, together with the slats secured to it. Fig. 6 is a vertical section of a portion of a packing-case provided with a lid of a construction somewhat differing from that shown in Fig. 1. Fig. 7 is a like view, illustrating another modified construction of the lid. Fig. 8 is a vertical section of a portion of a case provided with a lid of still another modified construction. Fig. 9 is a vertical section taken at right angles to Fig. 8.

The lid of the case is formed of a number of boards $a^1 a^2 a^3$. One of these, preferably the center one a^1 , is provided with two cross-bars or slats b, b^1 , secured to it. The length of the slats is equal to the breadth of the boards $a^1 a^2 a^3$ together. The boards $a^2 a^3$ which are not united with the slats are furnished with grooves $c c^1$, into which the slats $b b^1$ fit. The central board a^1 , to which the slats $b b^1$ are rigidly connected, is secured in suitable manner to the sides of the case, if desired in such manner as to be readily removable. Since the slats fit into the grooves $c c^1$, the boards $a^2 a^3$ will be thus prevented

from sliding longitudinally. To prevent their sliding in transverse direction, slats $f f^1, f^2 f^3$, are secured to the sides of the case, in such manner that their ends protrude above. Or instead of these latter slats, stops or projecting portions may be provided on the underside of the boards $a^2 a^3$, in such position as to bear directly against the inside walls of the case.

The arrangement may be such, that to prevent any possibility of shifting, the slats $b b^1$ of the board a^1 press firmly down upon the boards $a^2 a^3$ when the board a^1 is secured to the sides of the case. On this case the boards $a^2 a^3$ must be made thicker than the board a^1 (as shown in Fig. 3); or the board a^1 must be deeply grooved at the places where the slats $b b^1$ are applied, (as shown in Fig. 4).

If desired, longitudinal and transverse sliding of the boards $a^2 a^3$ may be prevented by staples g (Fig. 6), or any other like suitable devices, being provided on the underside, in such manner as to butt against the inner walls of the case. The grooves $c c^1$ can then be dispensed with, the slats $b b^1$ lying directly upon the boards $a^2 a^3$. Or longitudinal sliding may be prevented by the ends of the boards $a^2 a^3$ being rabbeted at h , as shown in Fig. 7, so that a shoulder is presented to butt against the side of the case. Or the longitudinal and transverse sliding may be prevented by the boards being inserted into the case, so as to lie flush with the sides, as shown in Figs. 8 and 9, fillets or strips $l m$ being provided on the sides $i k$ to support the boards. In this case the sides $i k$ prevent longitudinal sliding and the sides $n o$ transverse sliding.

It must be understood that I in no wise desire to restrict myself to the precise details of construction shown, as these may be greatly varied. In particular, the number of boards forming the lid may be any desired, and likewise the number of slats may be other than that shown.

The new closure while being exceedingly simple enables cases to be used and reused a very large number of times.

Having thus described my invention, I claim as new:

1. In a case, box or like receptacle, the combination of a lid comprising a board, means rigidly connecting the latter with the said receptacle, cross bars rigidly secured to the said board, a number of disattached

other boards adapted to be placed aside each other and to lie under the said cross bars, and means, fitted to the receptacle, engaging the second said boards, substantially as described.
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2. A lid for cases, boxes, and like receptacles, comprising a board, means for rigidly connecting the latter with the said receptacle, cross bars rigidly secured to the
10 said board, a number of disattached other boards adapted to be placed aside each other

and to lie under the said cross bars, the second said boards having grooves adapted to receive the said cross bars, substantially as specified.
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In witness whereof I have hereunto signed my name this 14th day of November 1904 in the presence of two subscribing witnesses.

DANIEL OPPENHEIMER.

Witnesses:

KONRAD SCHEID,
WALTER HAUSING.