

(No Model.)

P. LINDEMEYER, Jr.
PAPER BOX.

No. 528,639.

Patented Nov. 6, 1894.

Fig. 1.

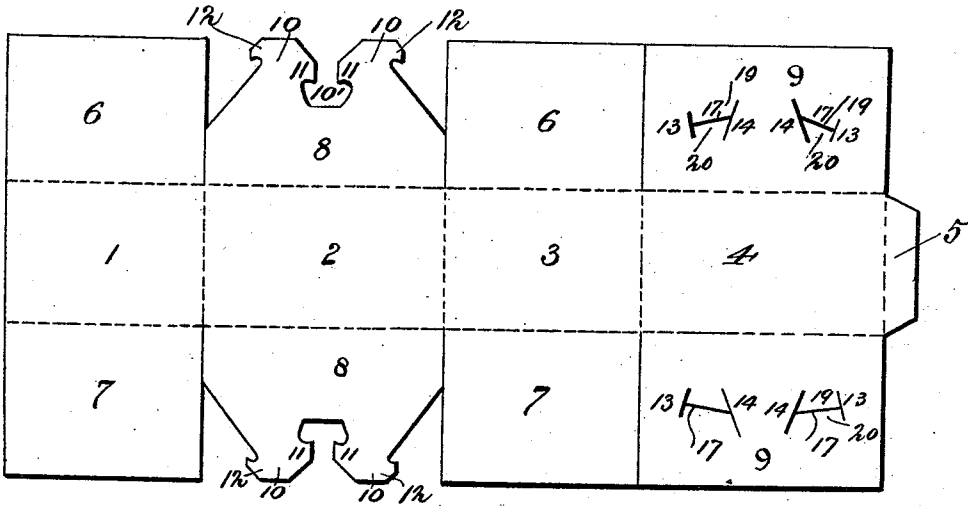


Fig. 2.

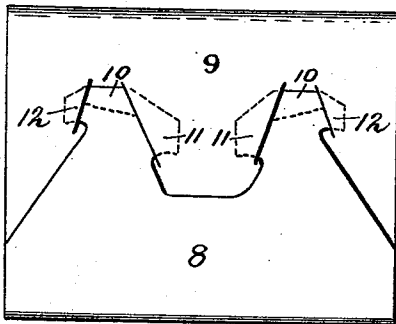


Fig. 3.

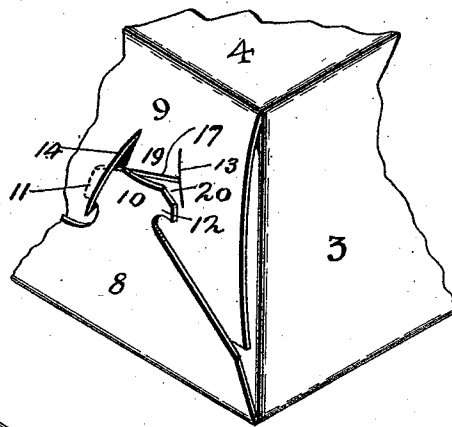
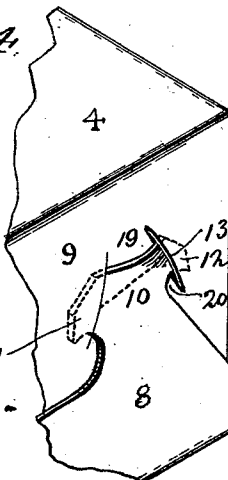


Fig. 4.



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PAPER BOX.

SPECIFICATION forming part of Letters Patent No. 528,639, dated November 6, 1894.

Application filed August 27, 1894. Serial No. 521,380. (No model.)

To all whom it may concern:

Be it known that I, PHILIP LINDEMEYER, Jr., a resident of Jersey City, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Paper Boxes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

The invention relates to paper boxes closed and secured by overlapping parts provided with locking hooks situated on heads and made to engage with corresponding slits; and its object is to provide interlocking parts that can be conveniently connected and that will securely hold the folded parts tightly closed; and the invention consists in the construction hereinafter described and particularly pointed out.

In the accompanying drawings Figure 1 is a blank suitable for making the box, the dotted lines indicating the situation of the several folds in the completed article and the interiorly situated full lines indicating cuts or slits. Fig. 2 is a plan showing the exterior folded laps locked together. Fig. 3 is a partial isometric view on an enlarged scale showing the larger hook of the fastening entered in its slit; and Fig. 4 is a like view showing both hooks entered in their respective slits.

Numerals 1, 2, 3 and 4 indicate those portions of the blank which when properly bent and secured constitute what may for the purpose of description be called the sides and ends of the box.

5 is an overlapping portion which is adapted to be cemented to the part 1 and secure these several parts together to form what may be called the body of the box.

The parts 6 of the blank when suitably folded overlap and close what may be called the top and the parts 7 when folded constitute the bottom of the box. These are each covered exteriorly by the parts 8 which are folded one upon the other at each end in a direction at right angles to the direction of the folded parts 6 and 7.

The parts named are in common use and more particular description is unnecessary.

The laps 8 are provided with fastenings or heads having hooks and the laps 9 with head-

receiving slits of novel form and arrangement as will be hereinafter pointed out.

10 denotes heads having inner hooks 11 and outer hooks 12.

13 and 14 denote slits cut in an underlying lap, said slits being obliquely arranged with respect to each other and with respect to the length of the box. They are of unequal lengths, one of each pair being about double the length of the other and they have their ends which approach each other situated in an imaginary line parallel to the corner edge of the box. The slits 14 and 13 are adapted respectively to receive the hooks 11 and 12 when the latter are suitably bent and inserted and they are then filled by said hooks the edges of the latter being in close proximity to the ends of the slits. This close fitting of the hooks is well adapted to hold them securely and to prevent their being accidentally forced out of place or withdrawn by pressure either from within or without the box. It is obvious that such close fitting hooks cannot be inserted in the slits without bending the paper, either of the hooks or of the edges of the slits, or of both.

As boxes of this character are made of stock approximating paper board or paste board in character which, though having a considerable weight, is comparatively weak, it is difficult and often impracticable to enter hooks of the same general character and use as those herein described without breaking the same. The hooks are liable to be so far broken and weakened along the line of bending as to impair their holding capacity and their edges are also liable to be torn by the operation in entering them and the slits are even more liable to be lengthened by tearing.

To overcome the evil above named and secure close fitting locks capable of easy and speedy manipulation I provide locks and slits of the form, situation and arrangement set forth. These slits are connected at or near their centers by obliquely disposed transverse slits 17 which together with slits 13 and 14 form loose flaps 19 and 20. The construction is such that the hooks can be easily entered without bending them to an extent liable to break them or impair their stiffness. The hook 11 may be entered first, the head as a whole being suitably bent for

the purpose. Such bending brings the point of the hook near the junction of the slits 17 and 14 and as the flaps 19 and 20 formed by the slits readily yield under the pressure of the hook it can be pushed into slit 14 with comparatively little bending and without endangering the integrity either of the hook or of the underlapped portion at the ends of said slit 14. The hook 11 having been entered the small hook 12 is slightly bent and its point depressed upon the flaps 19 and 20 which give way and permit the bent hook to be flattened and slipped into its seat. The relative arrangement of the various parts is such that when either hook is about to be pushed into place it strikes the outer edge of flaps 19 and 20 which freely yield to permit the entry of the hook without breaking or tearing of the paper and the hooks and adjacent parts when entered in slits 13 and 14 fill them and are securely held against accidental removal. The slit 17 provides that the head or fastening may lie more flatly than would otherwise be the case. It also obviates the use of a tool such as a knife or paper cutter which is often required to open single straight slits sufficiently to permit a hook to enter. Simple pressure applied adjacent to slit 17 will separate the cut edges along the slits 13 and 14 so that the use of a tool for the purpose is not required.

The hooks 11 and 12 are not necessarily made in the precise form shown nor need they

be of unequal size. Neither is it in practice essential that they be entered singly since the whole head can be suitably held and bent so that points of both hooks may be simultaneously depressed upon the flaps 19 and 20 and then pushed into their respective slits.

Having thus described my invention, what I claim is—

1. In a paper box a locking device consisting of the folded overlapping portions, one provided with slits 13 and 14 connected by slit 17 and the other with one or more heads having hooks 11 and 12 adapted to fill said slits 13 and 14 all substantially as set forth whereby the hooks can be easily entered without breaking or tearing the paper whereby they are adapted to fill the hook receiving slits.

2. A blank for a paper box consisting of parts adapted to be folded to constitute the inclosing walls of the same and overlapping interlocked parts, one provided with slits 13, 14 and 17 and the other with hooks 11 and 12 adapted to fill the hook receiving slits, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

PHILIP LINDEMeyer, JR.

Witnesses:

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