A. L. WEIS.

OPEN END FIBER CONTAINER.

APPLICATION FILED JUNE 8, 1918.

1,432,932.

Patented Oct. 24, 1922.

4 SHEETS—SHEET 1.

Fig. 1.

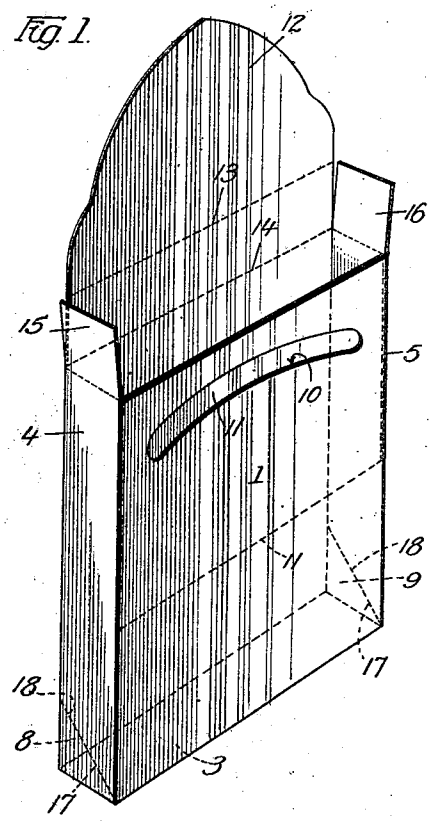


Fig. 2.

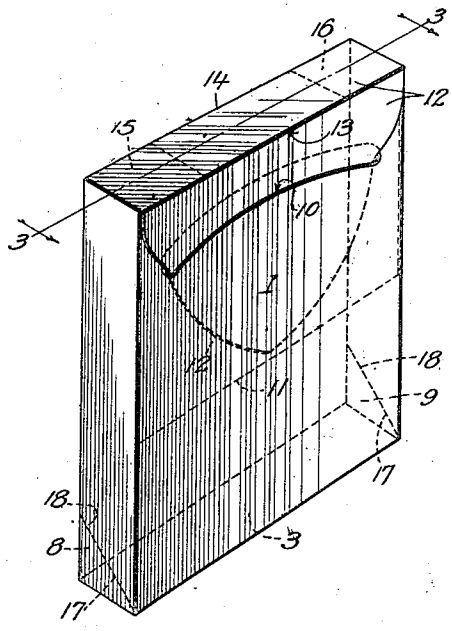
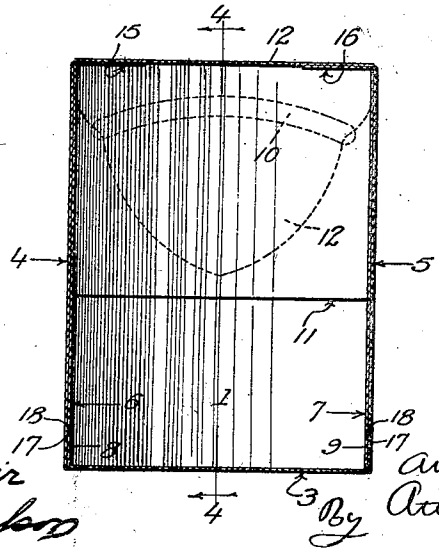


Fig. 3.



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4 SHEETS—SHEET 2.

Fig. 4.

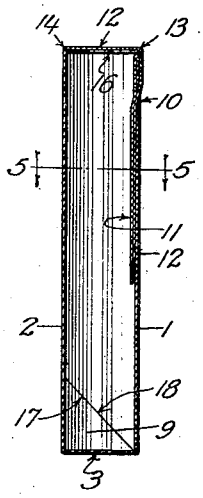


Fig. 5.

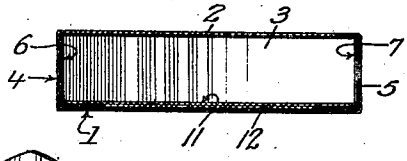
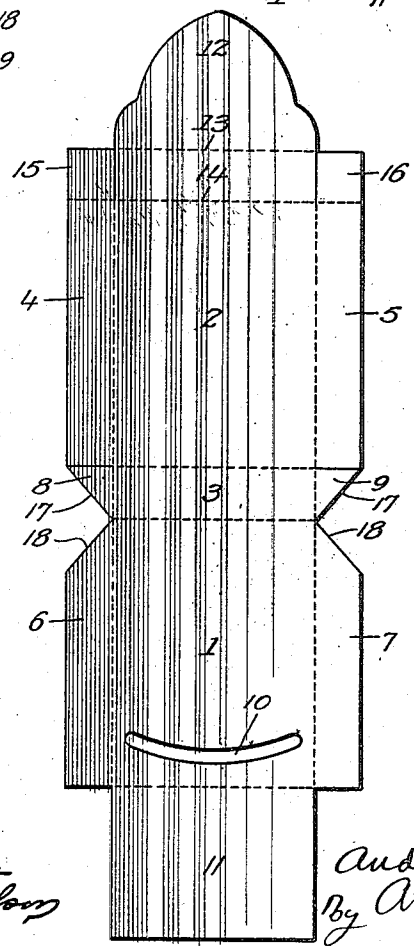


Fig. 6.



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4 SHEETS—SHEET 3.

Fig. 7.

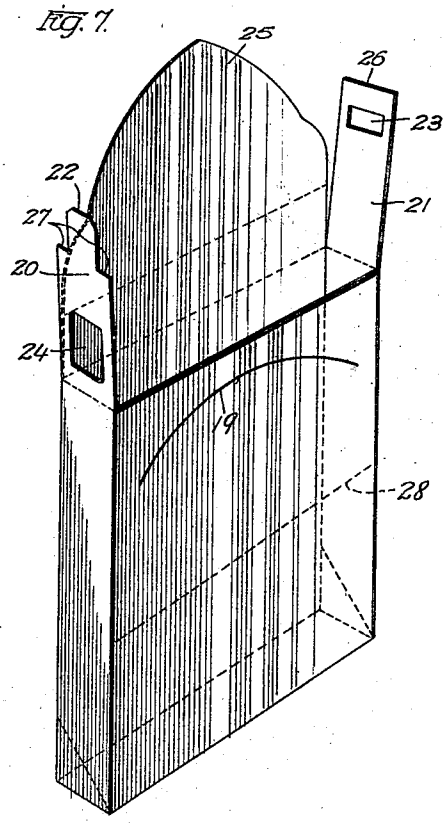


Fig. 8.

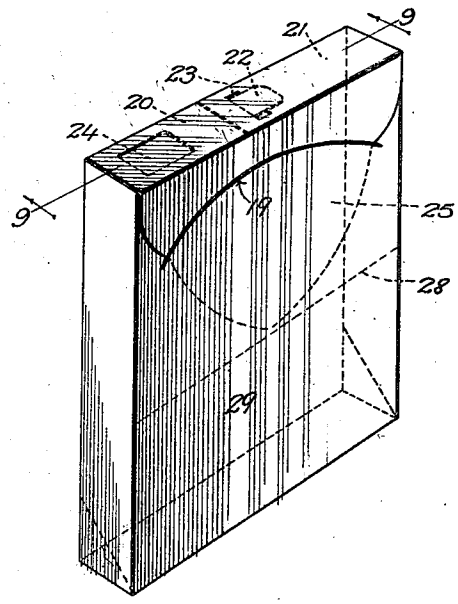
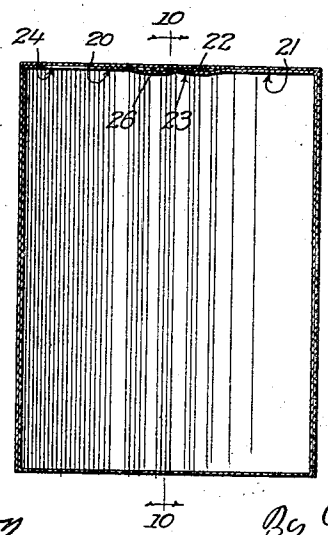


Fig. 9.



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4 SHEETS—SHEET 4.

Fig. 10.

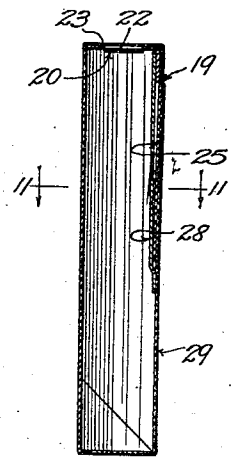


Fig. 11.

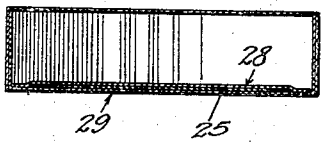
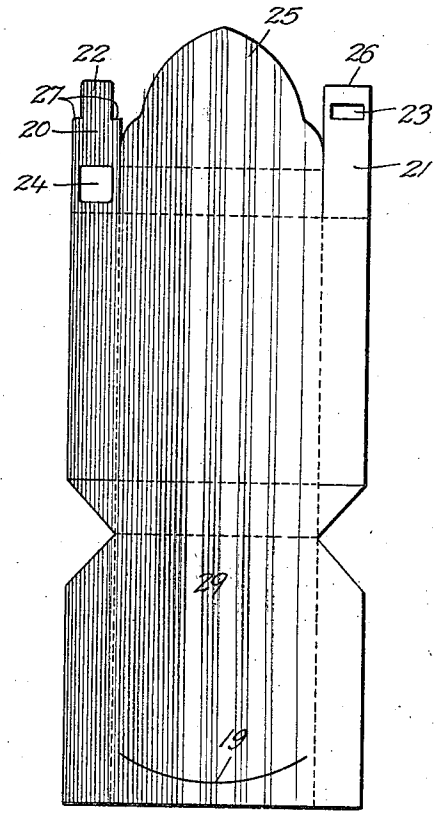


Fig. 12.



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Patented Oct. 24, 1922. 1,432,932

UNITED STATES PATENT OFFICE.

ANDREW L. WEIS, OF MONROE, MICHIGAN, ASSIGNOR TO THE WEIS FIBRE CONTAINER CORPORATION, OF MONROE, MICHIGAN, A CORPORATION OF SOUTH DAKOTA.

OPEN-END FIBER CONTAINER.

Application filed June 8, 1918. Serial No. 238,975.

To all whom it may concern:

Be it known that I, ANDREW L. WEIS, a citizen of the United States of America, and resident of Monroe, Michigan, have invented a certain new and useful Improvement in Open-End Fiber Containers, of which the following is a specification.

This invention relates to containers made of sheet material, such as paper or other sheet material made of fiber, and more particularly to those which are flat and rectangular and of a size and shape to hold tobacco and to be carried in the pocket.

Generally stated, the object of the invention is to provide a novel and improved construction whereby the entire end of the container may be opened, not only for the purpose of filling the container, but also for the purpose of removing the contents, such as tobacco or other substances, and whereby the open end of the container may be effectually closed to keep the contents from spilling out when the box is carried in the pocket.

It is also an object to provide certain details and features of construction and combinations tending to increase the general efficiency and desirability of a tobacco box or fiber container of this particular character.

To these and other useful ends the invention consists in matters hereinafter set forth and claimed and shown in the accompanying drawings, in which—

Fig. 1 is a perspective of a fiber container embodying the principles of the invention, showing the upper end thereof open.

Fig. 2 is a similar view showing said upper end closed.

Fig. 3 is a vertical section on line 3—3 in Fig. 2.

Fig. 4 is a vertical section on line 4—4 in Fig. 3.

Fig. 5 is a horizontal section on line 5—5 in Fig. 4.

Fig. 6 is a plan view of the blank in which said fiber container is made.

Fig. 7 and Fig. 8 are views similar to Figs. 1 and 2, showing different forms of the invention.

Fig. 9 is a vertical section on line 9—9 in Fig. 8.

Fig. 10 is a vertical section on line 10—10 in Fig. 9.

Fig. 11 is a horizontal section on line 11—11 in Fig. 10.

Fig. 12 is a plan view of the blank from which the fiber container shown in Figs. 7 to 11 inclusive is made.

As thus illustrated, and referring to Figs. 1 to 6 inclusive, the invention comprises a blank, shown in Fig. 6, having front and rear side sections 1 and 2, a bottom section 3, and flaps 4, 5, 6, 7, 8, and 9 flexibly united to the edges of said side and bottom sections. The section 1 has a curved slot 10 and an end flap 11, and section 2 has a flap 12 flexibly united therewith, and provided with a score line or crease 13, so that the rectangular portion 14 of this flap will serve as the top wall of the box or container when closed. The flaps 4 and 5 have small rectangular extensions 15 and 16 which also form a part of the top of the box or container.

When the blank is folded, the bevelled edges 17 of the flaps 8 and 9 are brought into engagement with bevelled edges 18 of the flaps 6 and 7, so that the flaps 6 and 8 are in the same vertical plane, and whereby the flaps 7 and 9 are in the same vertical plane, and the flaps 4 and 5 are then glued or otherwise secured to the outer surfaces of the flaps 6, 7, 8, and 9, thus forming the two-ply narrow side walls of the box. This results in a box or container such as the one shown in Fig. 1, and the flap 11 is folded downward inside of the box so that a pocket is provided which can be entered through the slot 10, and whereby the contents of the box cannot escape through this slot. To close the box or container the flaps 15 and 16 are folded down on the tobacco or other contents, and the flap 12, which is preferably tapered for this purpose, is bent over and inserted downward through the slot 10, thereby bringing the rectangular portion 14 into position to extend flatwise across the top of the box, upon the flaps 15 and 16, thus tightly closing the box or container. In this way the box or container is closed by the folding over and insertion of a flap through a slot in the side of the box, but without any danger of the contents being allowed to escape through said slot.

Referring to Figs. 7 to 11 inclusive, the construction is similar to that previously

described, except that in this case a narrow slot 19 is employed in place of the wider slot 10, and with the further difference that the flaps 15 and 16, previously described, are omitted, and in their place longer flaps 20 and 21 are employed. The flap 20 has a tongue 22 at its end, and the flap 21 has a transverse slot 23 at the end thereof, and these two flaps are long enough to come together, so that the tongue 22 will be inserted in the slot 23 when the two flaps are folded downward. Also, the flap 20 has an opening 24 through which to pour the contents of the box. With this construction, the box is fully closed by the insertion of the flap 25, which is similar to the flap 12 previously described, into the slot 19, but in opening the box the entire contents is not exposed by the withdrawal of this flap from said slot, inasmuch as the flaps 20 and 21 extend across the top of the box. However, when the flap 25 is raised, the tobacco or other contents can then be poured out through the opening 24 in a manner that can be readily understood. It is obvious, of course, that the tongue 22 may extend under the end of the flap 21 and then upward through the slot 23 as shown, or that it may extend over the end of the flap 21 and then downward through said slot, so that the extreme end of the tongue will be below the flap 21, if such is necessary or desirable. The proportions are such, it will be seen, that the end edge 26 of the flap 21 is against the shoulder edges 27 at the base of the tongue 22 when the two flaps are interlocked. In other respects this box or container is like the one shown in Figs. 1 to 6 inclusive, and is made by folding the blank in substantially the same manner; and it will also be seen that the contents cannot escape through the slot 19, as it practically has no width, being simply formed by a single cut in the sheet material, so that the pocket flap 11 previously described is not necessary; but to guard against such accidental discharge of the tobacco or contents, a rectangular sheet of paper 28 is glued or otherwise secured around its edges to the inner surface of the wall 29 in which the narrow slot 19 is formed, so that a pocket is provided into which the flap 25 may slide readily downward inside of the box, even when the latter is solidly filled with tobacco or other substances.

As shown and described, therefore, in either form of the invention, the open upper end of the box or container has a cover flap which can be folded downward and inserted through a slot in the front side wall of the box, in order to close the top, when it is desired to carry the box or container in the pocket. This slot, as shown and described, may be either simply a narrow slit or a wide slot, but in either case it is a slot of such size and shape and location that it will receive the tapered end portion of the top flap which forms a part of the closure. Preferably, this slot, whether it be a relatively wide slot or simply a narrow slit, is curved so that its ends extend downwardly in order to facilitate insertion of the tapered flap downward therein. The entire box or container is made of a single blank formed from paper or other suitable sheet material.

What I claim as my invention is:—

1. In a box, the combination of side walls and a bottom, the front side wall having a slot therein below the upper edge thereof, a top closure comprising pouring means, a flap adapted to be bent over across the open upper end of the box and over said pouring means and edge and then downward for insertion through said slot, and an inner wall secured around its edges to said front wall back of said slot to form a pocket for the inserted end portion of said flap, so that the tongue of the flap does not come in contact with the contents of the box.

2. A box as specified in claim 1, said top closure being adapted to fold down upon the contents of the box below said flap, so that the bottom of the flap does not come in contact with the contents of the box.

3. A box as specified in claim 1, said sides and bottom and closure being all formed from a single one-piece blank made of sheet material.

4. A structure as specified in claim 1, said top closure comprising a pair of flaps formed with an interlocking tongue and slot, with an opening through which to pour the contents of the box, when said closure is raised, these two interlocking flaps being below the said top flap which engages said first slot when the box is closed.

5. In a box, top flaps to fold down upon the contents of the box, a rigid front wall having a slot which is formed with its middle higher than the opposite ends thereof, so that the ends of the slot extend downward, and a top closure adapted to extend over said flaps and having a tapered tongue for insertion through said slot to extend downward inside said front wall, and means inside the box to prevent said tongue from engaging the contents of the box.

Signed by me at Monroe, Michigan, this 4th day of June, 1918.

ANDREW L. WEIS.