Sept. 7, 1926. 1,599,026

J. P. MARKERT

BINDER FOR SHINGLE BUNDLES

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Fig. 1.

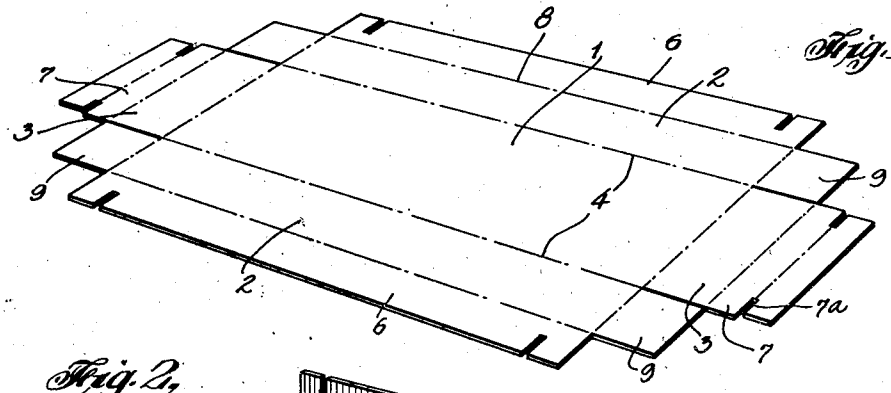


Fig. 2.

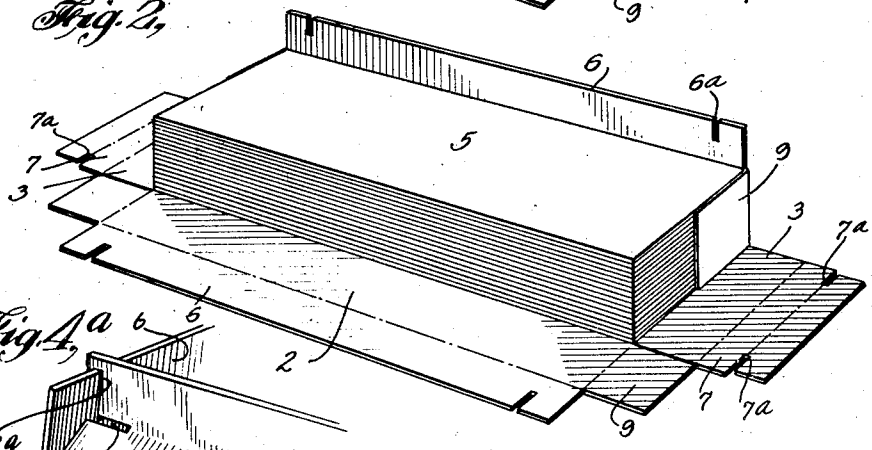


Fig. 4.

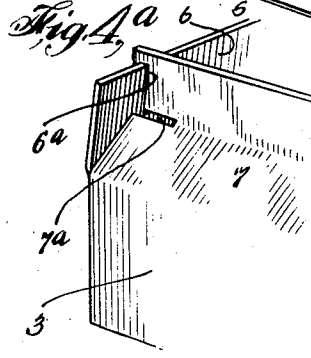


Fig. 3.

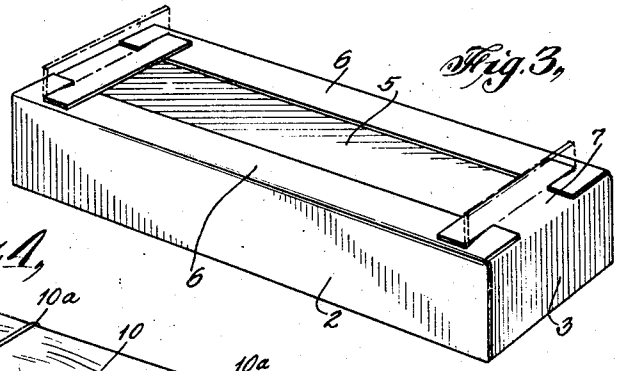
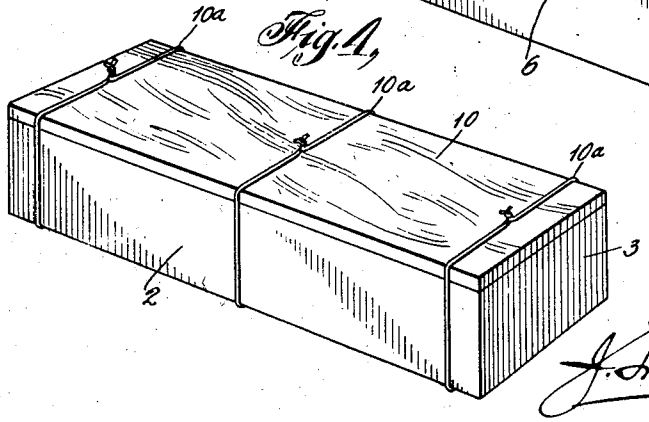


Fig. 4.



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Fig. 5,

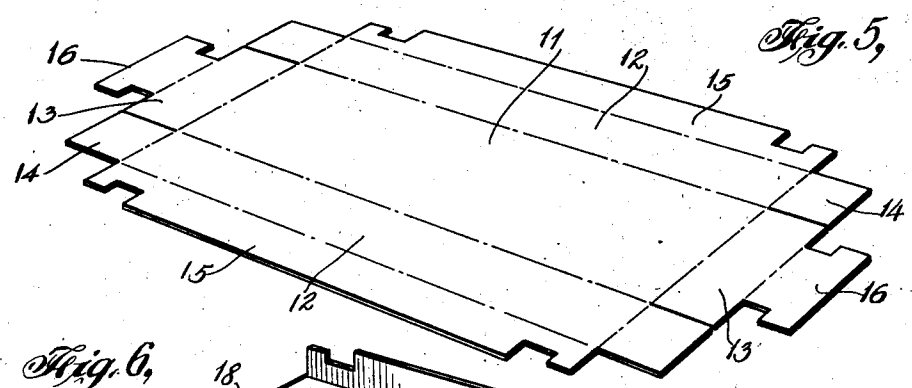


Fig. 6,

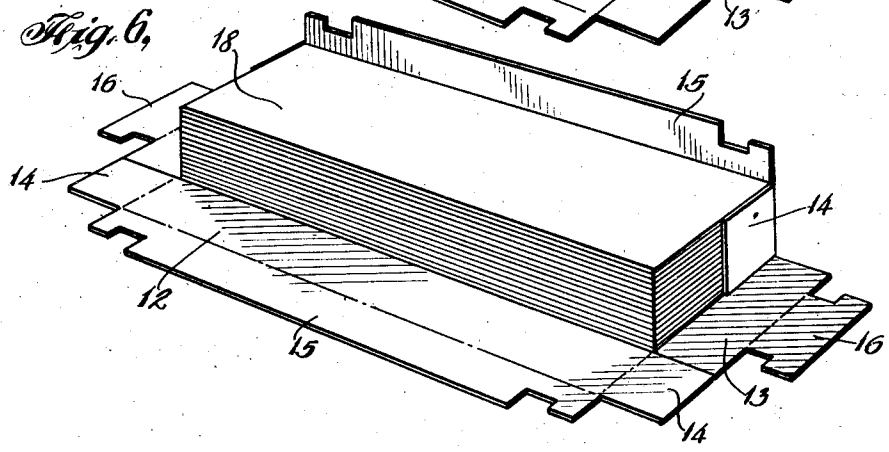


Fig. 7,

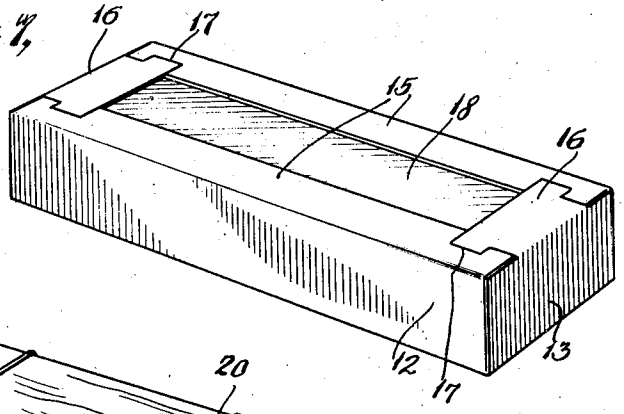
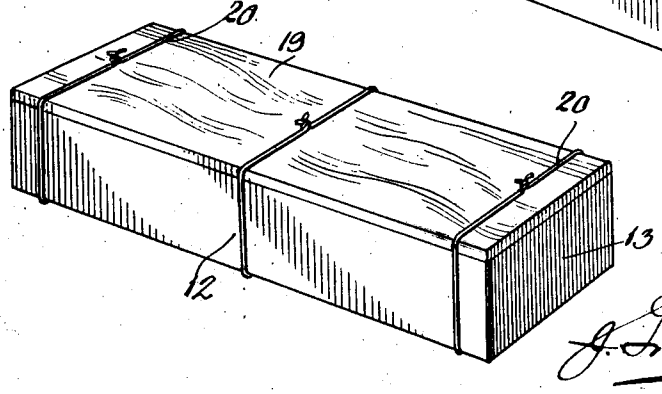


Fig. 8,



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UNITED STATES PATENT OFFICE.

JOHN P. MARKERT, OF BROOKLYN, NEW YORK.

BINDER FOR SHINGLE BUNDLES.

Application filed November 28, 1924. Serial No. 752,701.

This invention is an improvement in binders for shingle bundles and the like and with respect to its more specific features in binders for entirely enclosing the bundle.

Shingles of composition material are usually shipped in bundles of a selected number, and the bundles are bound between boards of a suitable size and character, the bundle including the boards being bound with flexible strands, as for instance wire.

With this arrangement however, there is no protection for the edges of the shingles, which are liable to injury from the sharp corners of other freight, or from careless handling in transportation.

An object of the present invention is to provide a binder of a simple and inexpensive character, by means of which the bundle may be entirely enclosed.

Another object is to provide in such a binder a wrapper to cover five faces of the bundle, and a cover for the remaining face, the wrapper so constructed and arranged that it may be folded about the bundle and so held by mechanism peculiar to itself which is permanently held against release by the placing of the cover.

Another object is to provide a binder including a wrapper in the form of a blank cut or otherwise formed to shape capable of being stored in a flat condition, and to be shaped about the bundle as a form.

Another object is to provide a self-locking wrapper which when folded about the bundle will be self retained in place, until binding strands can be set and tightened.

With these and other objects in view, the invention consists in the construction and novel combination of parts fully described hereinafter, illustrated in the accompanying drawings, and pointed out in the claim appended hereto, it being understood that various changes in the form, proportion, size and minor details of construction, within the scope of the claim, may be resorted to without departing from the spirit of the invention.

In the drawings:

Fig. 1 is a plan view of the blank from which the wrapper is formed.

Fig. 2 is a perspective view showing the wrapper with a bundle in place, and one flap folded.

Fig. 3 is a similar view showing the wrapper completely folded with the portions thereof interlocked.

Fig. 4 is a similar view showing the completed bundle.

Fig. 4ª is a perspective view showing the wrapper interlocking means.

Figs. 5, 6, 7, and 8 are views similar to Figs. 1, 2, 3, and 4, showing an alternate form of the invention.

In the embodiment of the invention shown in Figures 1 to 4ª inclusive, the improved binder includes a wrapper covering five sides or faces of the bundle and a part of the sixth, and a cover board which completes the covering. The wrapper is self-supporting and self-locking in folded condition, having means to interengage and interlock on the sixth face of the bundle, to temporarily hold the wrapper folded, and permanently secured in interlocked relation by the placing of the cover board.

The wrapper which is of any suitable material as for instance paper board, is formed from a blank cut or otherwise brought to shape, the material being suitably slit or notched, and creased or scored, on certain selected lines, to provide a blank of the character desired.

As shown the blank includes a body 1, having at its edges side and end flaps 2 and 3 and the material is creased or scored between the flaps and the body as indicated at 4 to provide defining lines upon which the flaps may fold. Each of the flaps 2 and 3 is of greater width than the height of the bundle 5 for which the wrapper is intended, so that when the bundle is laid on the body 1 of the blank, as indicated at Fig. 2, and the flaps 2 and 3 are folded against the sides and ends of the bundle, marginal extensions 6 and 7 of the respective flaps 2 and 3, will extend above the top or sixth face of the bundle. The material is creased or scored as indicated at 8 between the marginal extensions and the bodies of the flaps 2 and 3 to provide defining lines, upon which the marginal extensions may fold.

The marginal extensions 7 of the flaps 3, that is the excess in width of the said flaps over the height of the bundle 5 are notched as shown at 7ª, the notches being opposite, in alinement, and on the middle line of the said excess portion. The material of the blank is creased or scored along the said

middle line, the crease or score connecting the notches 7^a. Each of the marginal portions 6 of the side flaps is notched near its ends as indicated at 6^a, and the notches 6^a and 7^a are so related, that when the flaps and marginal extensions are folded about the bundle, as shown in Fig. 3, the notches 6^a will register with the notches 7^a and will interengage.

Preferably end wings 9 are provided at the ends of the side flaps, for folding across the ends of the bundle beneath the end flaps. The material of the blank is creased or scored between the wings and the side flaps as shown, to provide defining lines upon which the said wings will fold, the said lines being continuations of the fold lines 4, between the end flaps and the body.

In applying the wrapper, the bundle 5 of shingles or the like is laid on the blank within the fold lines 4. The side flaps are then turned up as indicated in Fig. 2, and the wings 9 are folded across the ends of the bundle. The end flaps are now folded, and the marginal portions of the said flaps are bent over above the sixth or upper face of the bundle, bending on the lines 8.

That part of the marginal extensions of each flap 3 outside of the fold defining line connecting the notches 7^a is bent upwardly at a right angle to the remaining portion as shown in Fig. 4^a. When so bent, the notches 6^a slip easily into interengagement with the notches 7^a, and the parts of the marginal extensions of the flaps 3 outside of the fold defining line connecting the notches 7^a are then turned down flat upon the bundle as shown in Fig. 3.

With the parts so arranged, the wrapper is held in folded condition, the marginal extensions of the flaps interlocking on the sixth face of the bundle to hold the wrapper so folded. When the cover board 10, which may be of any suitable material, but is preferably of greater thickness than the material from which the wrapper is formed, is placed on the sixth face of the bundle upon the marginal extensions of the wrapper, it being understood that the cover board is of the same area and shape as the body 1 of the wrapper, the interlocking parts of the wrapper will be firmly clamped in interlocking relation between the cover board and the bundle. The parts are bound together by the usual binding strands 10^a of wire or the like. These wires may be as many and placed as desired, the arrangement depending upon the size and shape of the bundle.

In the embodiment of the invention shown in Figs. 5 to 8 inclusive, the wrapper comprises a body portion 11 having side flaps 12, and end flaps 13, which are of a width somewhat greater than the adjacent faces of the bundle, that is the sides and ends thereof.

Each of the side flaps is of a length somewhat greater than the length of the body, to provide wings 14, which when the wrapper is placed are folded across the ends of the bundle beneath the end flaps.

Both end and side flaps are as before stated of greater width than the height of the bundle, so that when folded up against the sides and ends of the bundle, portions thereof indicated at 15 and 16 respectively will extend above the top or upper face of the bundle, and these portions 15 and 16 when bent over upon the upper face of the bundle provided extensions cover the margin of the bundle as shown in Fig. 7.

In order to temporarily hold the wrapper folded the edges of the portions 15 are notched near each end as shown at 17, and the portions 16 of the end flaps are made substantially T-shaped as shown, the stems of the T of a width equal to the distance between adjacent edges of the portions 15, so that the said stems will fit between such portions.

The cross-bars of the T fit at their ends within the notches 17, and it will be evident that when the wrapper is folded about the bundle of shingles indicated at 18, in the manner shown in Fig. 7, the tongues constituted by the ends of the T cross bars will engage within the notches, and will temporarily hold the parts in place, so long as the portions 15 and 16 are in substantially the same plane. When however, the portions 15 and 16 are moved relatively to each other out of the same plane, the tongues will be disengaged from the notches.

The binder is completed by a cover 19, which may be of the same material as the wrapper or heavier as may be desired. This part is of the same area as the face of the bundle which it is intended to cover. When the cover is placed on the top of the bundle, the edges thereof will engage the portions 15 and 16, holding them in the same plane, and when the binding strands 20 are placed about the bundle the engagement between the tongues and the notches is maintained until the strands and the board are removed.

It will be evident that the shape of the tongues and notches is immaterial. Neither is a close fit between the tongues and notches essential. Any arrangement which will hold the wrapper in the manner shown during the placing of the cover and the binding wires, and which will be locked against displacement by the cover will serve the purpose.

It will be evident from the description, that the improved binder comprises a wrapper which covers five faces of the bundle, and a part of the sixth, and a cover board for clamping the edges of the wrapper on the sixth face. The said portions of the wrapper have interlocking means to hold

the wrapper folded. In both instances the interlocking means is notched in the portions of the wrapper which lap upon the sixth face.

With the above described arrangement, a binding strand extending longitudinally of the bundle is not necessary, because the end flaps of the wrapper are held against displacement by their locking engagement with the side flaps.

I claim:

A wrapper for bundles of shingles or the like formed from a single blank of semi-flexible material to provide a bottom portion corresponding in area to the bottom face of the bundle, with side and end flaps of a size to cover corresponding side and end faces of said bundle, said side flaps having end portions foldable upon the end faces of said bundle under said end flaps, each of said flaps being provided with a marginal extension foldable upon the top face of said bundle along the edge thereof only, said extensions having interengaging notches to preliminarily secure them in folded positions, and a rigid coverboard approximating in area the top face of said bundle and bound thereto over the interengaged extensions to permanently hold them in place and give stability to the entire structure.

Signed at New York, in the county of New York and State of New York this 26th day of November A. D. 1924.

JOHN P. MARKERT.