Oct. 26, 1926. 1,604,182

J. P. MARKERT

WRAPPER FOR SHINGLE BUNDLES

Filed Dec. 1, 1925 2 Sheets-Sheet 1

Fig. 1

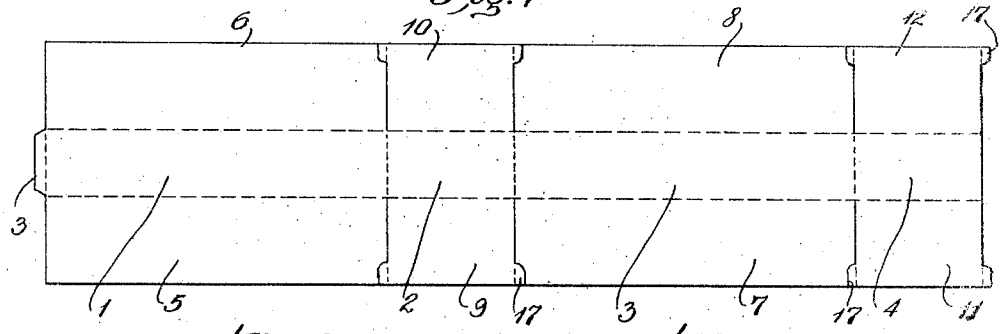


Fig. 2

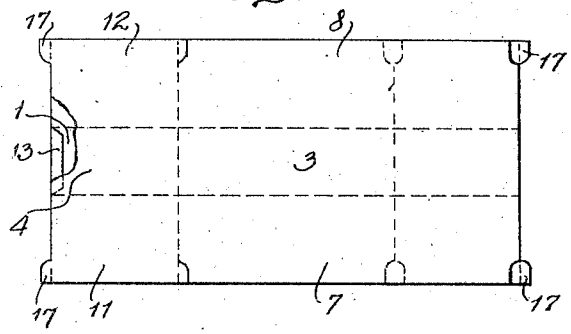


Fig. 3

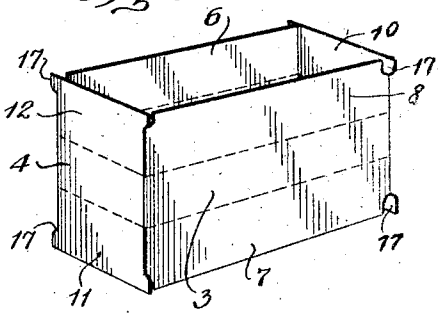


Fig. 4

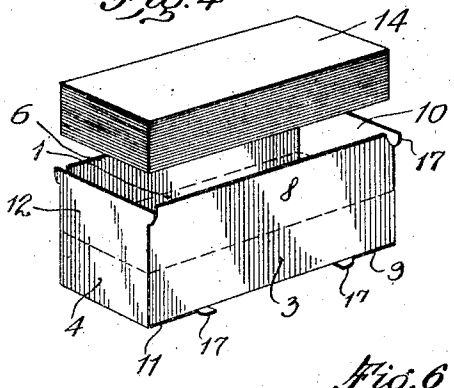


Fig. 5

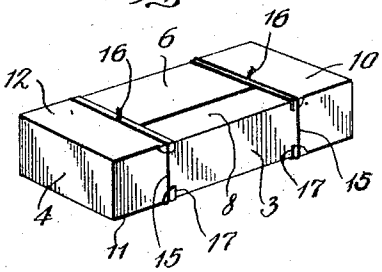
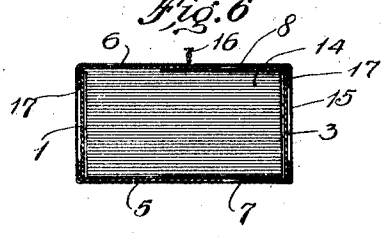


Fig. 6



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1,604,182

WRAPPER FOR SHINGLE BUNDLES

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Fig. 7

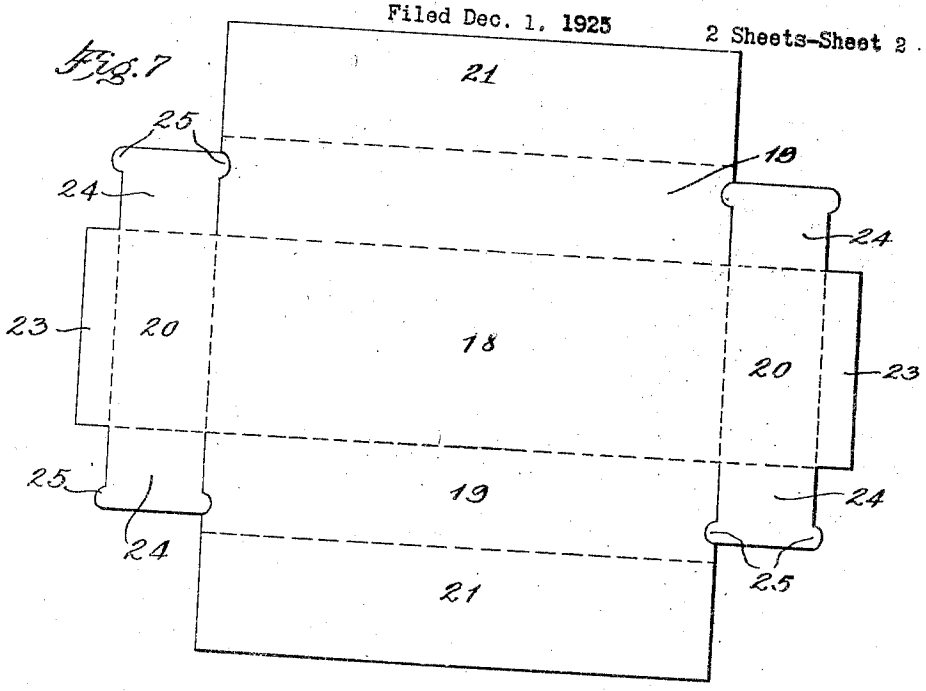


Fig. 8

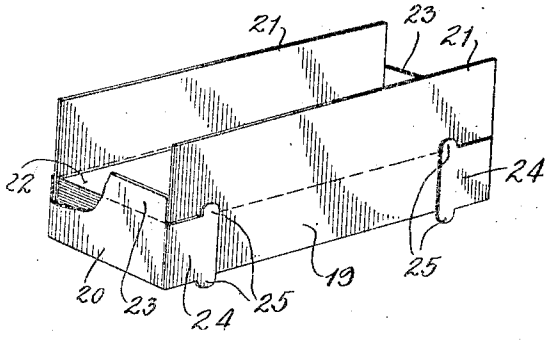


Fig. 9

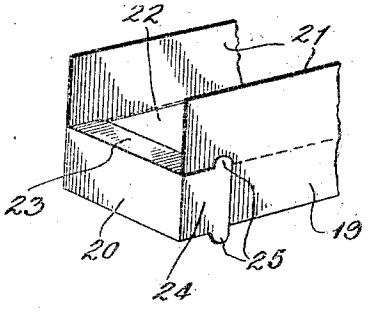
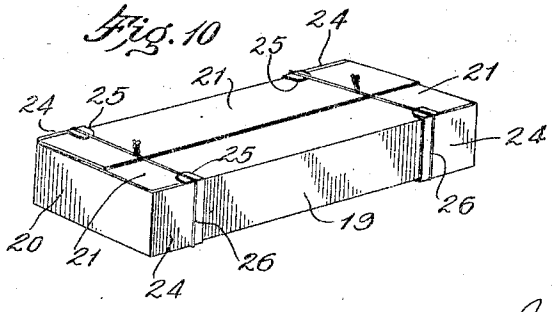


Fig. 10



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Patented Oct. 26, 1926. 1,604,182

UNITED STATES PATENT OFFICE.

JOHN P. MARKERT, OF BROOKLYN, NEW YORK.

WRAPPER FOR SHINGLE BUNDLES.

Application filed December 1, 1925. Serial No. 72,457.

This invention is an improvement in wrappers for shingle bundles, and more particularly in the type of wrapper designed to cover and protect every face of 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, such as wire ties.

This manner of packing provides ample protection for two opposite faces of the bundle, and prevents loss and displacement of the individual shingles. It does not however protect the side and end faces, of the bundle, which are constituted by the edges of the shingles, and injury is liable to occur from contact with sharp corners, due to carelessness in handling during transportation.

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

Another object is to provide in a wrapper of a size to cover all of the faces of the bundle, means integral with the wrapper for reinforcing the corners of the bundle at the points crossed by the tie wires, thereby to prevent cutting of the wrapper and the shingles.

Another object is to provide a wrapper of the character specified, cut or otherwise formed from a web of suitable stock, with a minimum of waste.

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 claims appended hereto, it being understood that various changes in the form, proportion, size and minor details of construction within the scope of the claims, may be resorted to without departing from the spirit of the invention.

In the drawings:

Fig. 1 is a plan view of a wrapper constructed in accordance with the invention in flattened condition.

Fig. 2 is a plan view of the blank with the ends connected to form a species of carton.

Fig. 3 is a perspective view of the carton.

Fig. 4 is a similar view showing the bottom flaps folded, and the shingle bundles about to be inserted.

Fig. 5 is a perspective view of the wrapped bundle.

Fig. 6 is a transverse vertical section of Fig. 5.

Fig. 7 is a plan view of an alternate form of wrapper in flattened condition.

Fig. 8 is a perspective view of the wrapper formed into a carton about a shingle bundle, and with the top flaps open, parts being broken away.

Fig. 9 is a perspective view of one end of Fig. 8 with the end top flaps folded.

Fig. 10 is a perspective view of the wrapped bundle.

In the embodiment of the invention shown in Fig. 1, the improved wrapper, which is cut or otherwise formed from a web of suitable stock includes four major portions indicated at 1, 2, 3 and 4 respectively. The portions 1 and 3 are designed to cover the sides of the bundle, while the portions 2 and 4 are designed to cover the ends, and each of the major portions has oppositely extending flaps for lapping upon the upper and lower faces of the bundle.

The portions 1 and 3 have flaps 5—6 and 7—8 respectively, while the portions 2 and 4 have flaps 9—10, 11—12 respectively. One of the major portions, 1 in the present instance, has an extension 13 at its free end to be attached to the outer end of the major portion 4 to connect the blank into a frame, which may be collapsed or flattened as shown in Fig. 2 for shipment or storage, or set up into the condition of Fig. 3, that is in carton shape. It will be understood that the major portions 1, 2, 3 and 4 are of a width corresponding to the depth of the shingle bundle, and they are of a length corresponding to the faces of the bundle which they are designed to cover.

Referring to Fig. 3 it will be noticed that when the frame is expanded as shown in Fig. 3, it forms an open frame with four flaps at each end, and the flaps at each end are adapted to be folded upon each other. In packing the shingles, the bottom flaps 5, 7, 9 and 11 are first folded, the flaps 5—7 being folded together, after which the flaps 9—11 are folded onto the flaps 5—7. The shingles indicated at 14 are placed in the open carton so formed, after which the flaps 6—8 are folded down upon the upper

face of the bundle, and the flaps 10—11 upon the flaps 6—8.

It will be evident from the description that so packed, every face of the shingle bundle, sides, ends, top and bottom is covered. The tie wires indicated at 15, usually two in number with shingles of usual size, are placed around the ends of the wrapped bundle, the ends of the wires being twisted together as shown at 16. The applying of the wires is usually done by machinery, and it will be evident that there is great liability to cutting of the wrapper by the wires and to consequent injury to the shingles in the bundles. This may occur from either tight wrapping, or by handling of the bundle by means of the wires. Injury might also result from relative movement of the bundle, and the tie wires, due to loose or careless application of the wire.

In order to reduce the liability of injury to the wrapper, and to the shingles by the tie wires to a minimum, I provide reinforcing means for each tie wire at each corner of the bundle crossed by the wire, the said reinforces lapping about the corners, and being integral with the wrapper so that there is no possibility of displacement of the reinforces.

With this object in view I provide each of the flaps 9, 10, 11 and 12 with a tab 17 at its outer corners. The tabs 17 of the flaps 9 and 10 are taken from the material of the flaps 5, 6, 7 and 8. The tabs 17 of the flaps 11 and 12 are taken from the flaps 7 and 8, and from the body of the web from which the blank is cut. The tabs 17 are of a width sufficient to allow them to lap upon the major portions 1 and 3, when the wrapper is folded about a bundle, and they are sufficiently long to extend on both sides of the wire as shown in Fig. 5.

When the flaps 9 and 11 are folded down upon the flaps 5 and 7, the tabs 17 extend out laterally from the bundle, and when the flaps 10 and 12 are folded down, the flaps 17 at the top of the blank also stand out from the bundle. The tabs will be pressed down into place by the operation of placing the tie wires, and they provide an efficient reinforce at each corner of the bundle for each tie wire.

The tabs are integral with the flaps and if desired they may be set off from the flaps by crease lines between the tabs and the flaps. The flaps 5, 6, 7, 8, 9, 10, 11 and 12 are set off from the major portions 1, 2, 3 and 4 by crease lines as shown. The blank including the crease lines and the separating cuts may be completed in a single operation, the crease lines being formed at the same time as the cuts. There is no waste in stock since the tongue 13 of each blank may be formed from the material between the tabs 17 at the free ends of the flaps 11 and 12 of the preceding blank, which would otherwise be cut away and discarded.

In the embodiment of the invention shown in Figs. 7 to 10 inclusive, the blank includes a body portion 18 having side flaps 19 and end flaps 20, and each of the flaps 19 is provided at the edge remote from the body with a wing or extension 21 of the same length as the flap, and of approximately the same width.

The extensions 21 have an aggregate width greater than that of the body 18 so that when they are folded down upon a bundle 22 of shingles resting on the body 18, they will lap upon each other as shown in Fig. 10. Each of the flaps 20 has a relatively narrow tab portion 23 which is adapted to be folded in beneath the flaps 21 thereby to temporarily hold the ends 20 in upright position during the application of the tie wires.

At each end, each flap 20 is provided with a wing 24 of a length to extend to and beyond the adjacent tie wires, when the wing is folded upon the end of the adjacent side flap 19. These wings have integral tabs 25 at their free corners, which are adapted to lap about the corners of the bundle, and upon the body and the adjacent flap 21 at the positions to be occupied by the tie wires. Thus there is provided a reinforcing tab on each corner of the bundle for each tie wire 26. In cutting the improved blank, crease lines are provided outlining the flaps 19—20 the wings 21—24 and the tabs 23—25. These crease lines are made at the same time that the blank is cut.

It will be evident from the description that in both embodiments of the invention, the reinforcing tabs are integral with the blank or wrapper. This construction is that forming the subject matter of my prior application Ser. No. 741,918, filed Oct. 6th, 1924, but in the present instance the tabs normally stand out from the blank in a partially free or separated relation, so that it is not necessary to manipulate them in any manner during the wrapping. When the wrapper has been applied, the tabs normally extend beyond the corners, in position to move naturally into their destined relation, when the tie wires are applied.

I claim:

1. A wrapper of flexible material for shingle bundles and the like, including a body portion and side and end flaps, the wrapper including the body and the flaps of a shape and aggregate size to engage all of the faces of the bundle when the wrapper is folded thereabout, the members of one pair of flaps having integral tabs so disposed that when the wrapper is folded about the bundle, the tabs will lie in sets, each set in a selected plane transverse to the bundle to provide reinforcements for tie wires.

2. A wrapper of flexible material for shingle bundles and the like, including a substantially rectangular body portion side flaps and end flaps, the wrapper including the flaps of a shape and aggregate size to completely enclose a bundle of a selected number of shingles, the end flaps provided with integral tabs so positioned with respect thereto that when the wrapper is folded about the bundle the tabs will lie in sets in selected planes transverse to the bundle at the four corners thereof with each tab extending beyond the corner of the bundle and lapping upon the adjacent face thereof, each set near one end of the bundle thereby to provide reinforcements at the four corners of the bundle for a tie wire at each end of the bundle.

Signed at New York city, in the county of New York and State of New York, this 30th day of Novbr. A. D., 1925.

JOHN P. MARKERT.