L. M. FORD.

CLOSURE.

APPLICATION FILED NOV. 23, 1917.

1,348,857.

Patented Aug. 10, 1920.

Fig. I.

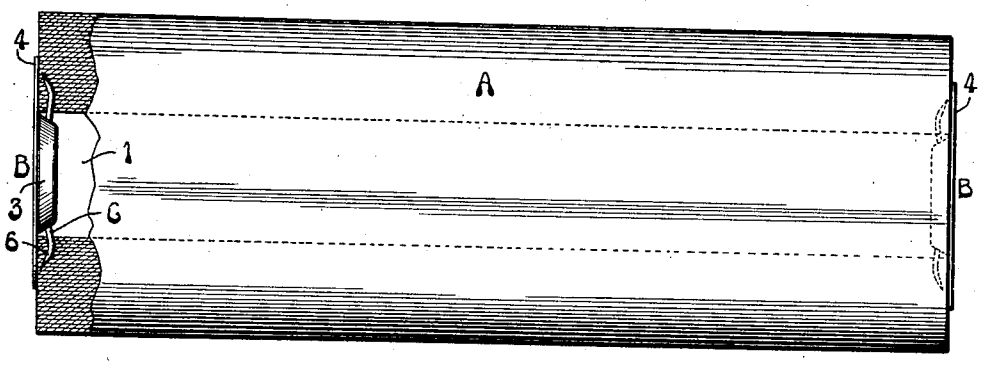


Fig. II.

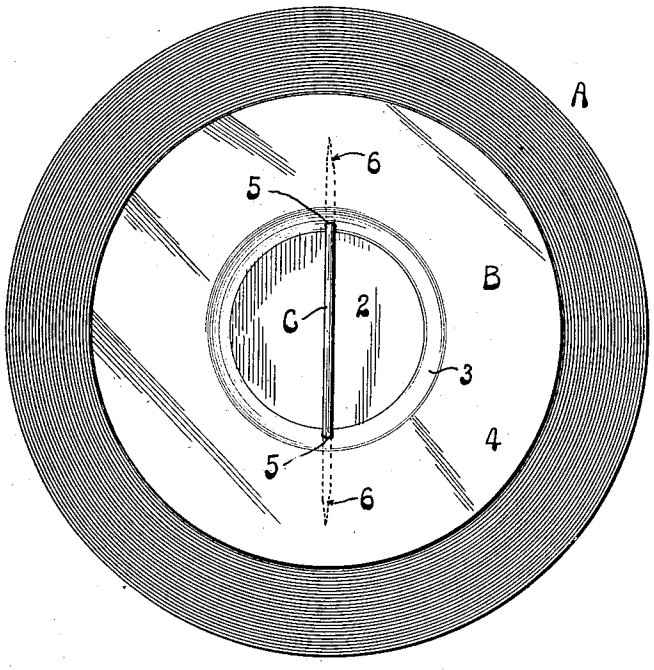
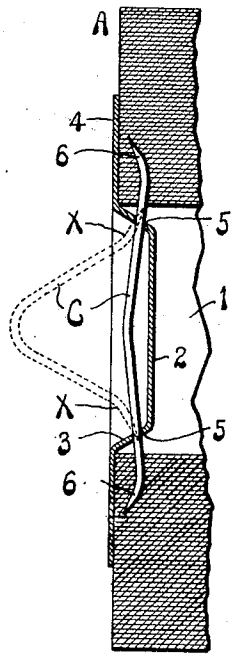


Fig. III.



Inventor:
Louis M. Ford
by Knight & Cook
Att'ys.

UNITED STATES PATENT OFFICE.

LOUIS M. FORD, OF VANDALIA, ILLINOIS.

CLOSURE.

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To all whom it may concern:

Be it known that I, LOUIS M. FORD, a citizen of the United States of America, a resident of Vandalia, in the county of Fayette, State of Illinois, have invented certain new and useful Improvements in Closures, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, forming a part of this specification.

My invention relates to improvements in closures, and more particularly, to means for closing the ends of tubular bodies, such as rolls of roofing or rolls of wrapping paper. The object of the invention is to provide an extremely simple and inexpensive device of this kind, adapted to be attached to a roll of roofing, or the like. Heretofore, hollow rolls of roofing have been used as containers for nails, directions, cement and other articles to be used in laying the roofing, such articles being placed in the central opening in the roll of roofing and confined there by closures at the ends of the roll. The closure herein shown can be easily and quickly applied to and removed from a roll of roofing; its attaching devices do not project from the ends of the roll, and the new article can be made of two simple and inexpensive elements.

With the foregoing and other objects in view the invention comprises the novel construction, combination and arrangement of parts hereinafter more specifically described and illustrated in the accompanying drawings wherein is shown the preferred embodiment of the invention; however, it is to be understood that the invention comprehends changes, variations and modifications which come within the scope of the claim hereunto appended.

Figure I is a side elevation, partly in section, showing a roll of roofing and two of the closures secured thereto.

Fig. II is an enlarged end view of the roll of roofing, showing one of the closures.

Fig. III is an enlarged fragmentary section, taken approximately through the center of the closure.

To illustrate the invention I have shown a roll of roofing A provided with a central opening 1, and closures B at the ends of said opening. Each closure preferably comprises a sheet metal closure member having a central circular web 2, an annular wall 3 extending outwardly from said web 2, and an annular flange 4 extending from said annular wall 3, so as to engage the end face of the roll of roofing. The depressed portion, consisting of the circular web 2 and the annular wall 3, lies within the roll of roofing, and said annular wall 3 is preferably provided with oppositely disposed anchor-receiving openings 5.

The anchor C herein shown is a flexible wire member, spanning the depressed portion of the closure member, extending through the openings 5 in the annular wall 3, and having its ends driven into the roll of roofing. The ends of this anchor are pointed to provide oppositely disposed anchor members 6. The flexible wire anchor is primarily bowed at the middle, as shown by dotted lines in Fig. III, and its end portions can be easily inserted into the oppositely disposed openings 5. To secure the closure, the wire anchor is first inserted into the openings 5, as shown by dotted lines, and the bowed middle portion is then hammered toward the circular web 2 of the closure. This causes the pointed anchor members 6 to move away from each other and enter the roll of roofing, as shown by full lines.

The pointed end portions of the wire anchor are preferably deflected at the points designated by X in Fig. III, to provide diverging anchor members, which will penetrate the roofing material and move to the positions shown by full lines, when the bowed portion of the wire anchor is forced toward the circular web 2. During this bending operation, the closure is forced into firm engagement with the roll of roofing, and it is retained in such engagement by the wire anchor.

It will be observed that the anchor does not project beyond the roll of roofing, and that the middle portion of the anchor is exposed in such a manner that the pointed end portions can be readily forced away from each other as previously pointed out. The pointed end portions can also be readily withdrawn by merely pulling the exposed portion of the anchor from the central depression in the closure member.

I claim:—

In a closure for the central opening in a roll of sheet material, a sheet metal closure member having a central circular web, an annular wall extending outwardly from said circular web and an annular flange extending from said annular wall to engage the

end face of the roll of sheet material, said circular web and annular wall being adapted to lie within the central opening in the roll of sheet material, and said annular wall being provided with oppositely disposed anchor-receiving openings; and a double-pointed flexible wire anchor which is primarily V-shaped with its pointed end portions deflected away from each other to provide diverging anchor members, said diverging anchor members being extended through said oppositely disposed openings so that they may be forced into the roll of sheet material and away from each other in opposite directions by hammering the V-shaped wire anchor.

In testimony that I claim the foregoing I hereunto affix my signature.

LOUIS M. FORD.