B. G. CASLER.

ROOFER'S SPREADING TOOL FOR FORMING CEMENT JOINTS.

APPLICATION FILED OCT. 31, 1914.

1,141,103. Patented June 1, 1915.

Fig. 1.

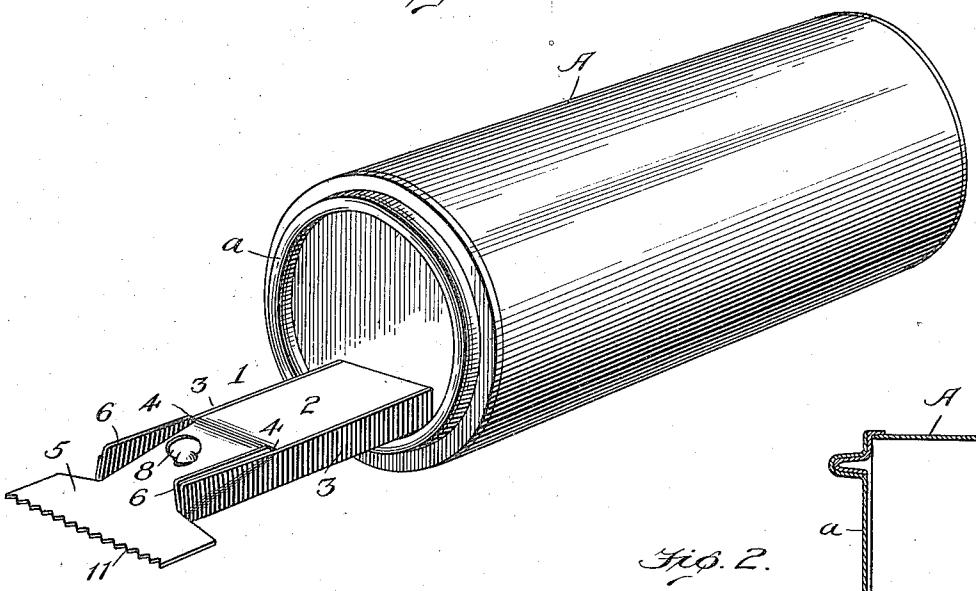



Fig. 2.

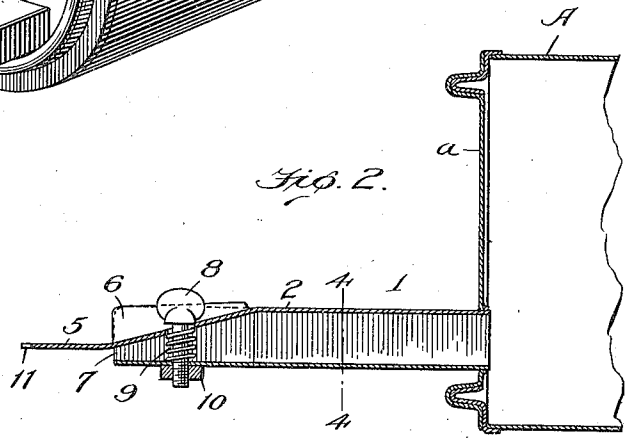
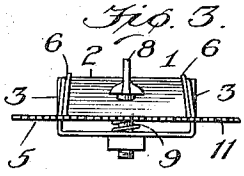



Fig. 3.



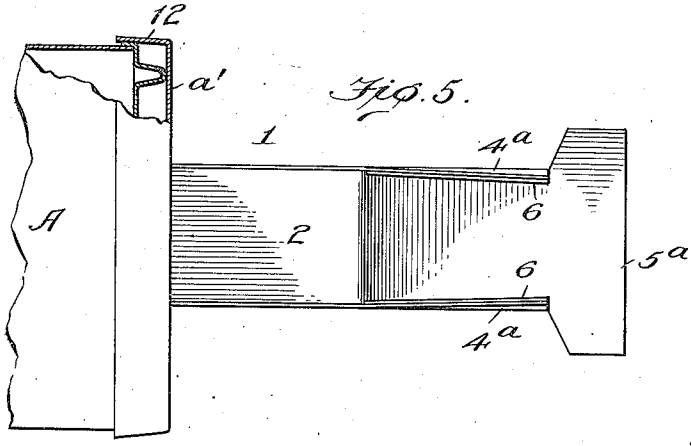




Fig. 5.

Fig. 4.

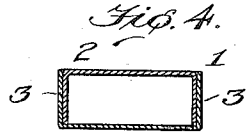
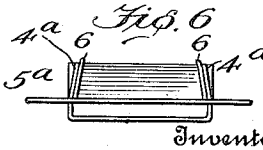



Fig. 6.




Witnesses

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# UNITED STATES PATENT OFFICE.

BENJAMIN G. CASLER, OF TONAWANDA, NEW YORK.

## ROOFER'S SPREADING-TOOL FOR FORMING CEMENT JOINTS.

1,141,103. Specification of Letters Patent. Patented June 1, 1915.

Application filed October 31, 1914. Serial No. 869,616.

*To all whom it may concern:*

Be it known that I, BENJAMIN G. CASLER, a citizen of the United States, residing at Tonawanda, in the county of Erie and State of New York, have invented certain new and useful Improvements in Roofers' Spreading-Tools for Forming Cement Joints; 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 appertains to make and use the same.

My invention relates to the construction of a tool for spreading liquid cements, and is especially adapted for the use of roofers in laying and forming the lap joints of ready roofing material.

Sheets of saturated and asphalt-coated felt having a fireproof and wear resistant surface of grit or its equivalent are now well known as an article of trade under the term "ready roofing material".

It is the custom of manufacturers of such ready roofing material to supply and ship with each roll of the ready roofing material a can or package of liquid cement for each square of ready roofing, to be used by the roofer in laying and forming the lap joints in roof construction.

The common practice of the roofer is to pour the liquid cement from the can on the fabric where required and to thereafter spread and even it over the surfaces to be cemented by the use of a brush, a trowel, or its equivalent, all of which results in wastefulness and a comparatively poor joint unless the roofer is more than ordinarily skillful in the practice of his calling.

The object of my present invention is to supply to the craft a tool for effecting a graduated and controlled delivery of the liquid cement and combined therewith a means for effecting and controlling the spread of the liquid cement so delivered, whereby unskilled labor may be employed in the successful laying of ready roofing, and the labor of a skilled operator greatly reduced and facilitated.

To this end my invention, generally stated, involves a roofer's tool having a conduit member for the passage of a liquid cement, said conduit member terminating in a spreader for distributing the liquid cement, the exit of the conduit adjacent to the spreader being so constructed as to permit of the expansion or contraction of the outlet to control the quantity of the liquid cement delivered to the spreader, said conduit member being provided with means for attachment to a liquid cement container.

There are other features of invention involving particular combinations of elements, and particular features of elemental construction all as will hereinafter more fully appear.

In the drawings chosen for the purpose of illustrating my invention, the scope whereof is pointed out in the claims, Figure 1 is a perspective view of a roofer's tool embodying my invention shown in connection with a shipping can for liquid asphalt cement; Fig. 2 is a longitudinal sectional view of the tool and a portion of a shipping can; Fig. 3 is an end view of the tool showing the serrated spreader attachment; Fig. 4 is a transverse sectional view of the conduit member or channel of the tool taken on the line 4—4 Fig. 2. Fig. 5 is a plan view of a modified or an elemental and simplified form of the tool; and Fig. 6 is an end view of the modified form of tool with an edge view of the spreader shown in Fig. 5.

Like symbols refer to like parts wherever they occur.

In the drawings, A indicates a can or container for the liquid cement, and *a* the removable cap or closure therefor. The can and its closure may be of any desired form or size, but for purposes of illustration I have selected a small can of a character in common use for shipping liquid cement with "ready roofing fabrics", because the same is capable not only of serving as the reservoir of the tool but also as a handle therefor.

The head *a* of the can to which the tool is shown as attached in the principal figures of the drawing is one identical with the proper head of the can of that construction, but as there are various forms of cans and can closures it may be found desirable to use simply a cap or closure having a flaring lip or flange rim 12 as indicated in the modification shown in Fig. 5 of the drawings.

1 indicates the conduit member or channel which leads from the container A or closure *a* thereof, to the spreader that projects from the upper wall of the conduit member 1 at its outlet. The connection between the upper, or top wall 2 of the conduit member and the side walls 3 thereof terminates at 4 and from said point to the expanded extremity of top wall 2 where it constitutes the

spreader member 5 the top wall is provided at each side with vertically disposed flanges 6, and is depressed between the side walls 3, 3 of the conduit member. Owing to this construction of the delivery end of conduit member 1 an easy and efficient way of controlling the size of the outlet 7 of the conduit is obtained, and the construction of the tool simplified, as by simply depressing or raising the top wall 2 adjacent to the spreader 5 and bending inward the side walls 3, 3 of the conduit member forward of the point 4 the size of outlet 7 may be adjusted to control the quantity of liquid cement delivered beneath the spreader member 5. As the outlet 7 is unobstructed it is preferable that the spreader 5 should extend laterally beyond the side walls of the conduit and be serrated to obtain uniform distribution of the cement after it leaves the exit of the conduit.

Where the cross-sectional area of the conduit member 1 is large and the metal walls thereof more or less stiff, the adjustment of the outlet 7 may be facilitated by using a set screw and spring, and a simple form thereof is shown in the principal figures of the drawing, where a thumb screw 8 is passed through a slot in the top wall 2 of the conduit member 1, through a coiled spring 9 interposed between the top and bottom walls thereof, and into a nut 10 secured by solder or otherwise to the under side of the bottom wall of said conduit member 1.

In order to obtain the equal and uniform distribution of the liquid cement by the spreader 5 it is preferred to form the free edge of the spreader with teeth or serrations as indicated at 11 in the principal figures of the drawing, but an efficient roofer's tool for most uses will be obtained by using a plain or straight edge spreader $5^a$ and depending on the curved or bent side walls $4^a$ for adjustment of the delivery end of the conduit as indicated in Fig. 5 of the drawings. The coned cap or closure $a'$ with flaring rim 12 shown also in Fig. 5 of the drawings will be found an efficient means for attaching the conduit member 1 of the tool to the liquid cement receptacle.

Having thus described my invention, what I claim and desire to secure by Letters Patent is:

1. A roofer's tool for spreading liquid cement, said tool having a conduit the side walls and top wall thereof being disconnected adjacent to its exit, the top wall of said conduit being extended beyond the exit and constituting a spreader integrally connected with the top wall.

2. A roofer's tool for spreading liquid cement, comprising a conduit which terminates in a spreader having a serrated edge, the exit of the conduit being adjustable as to its cross-sectional area and located below the spreader termination of the conduit.

3. In a roofer's tool for spreading liquid cement, the combination with a conduit which terminates in a spreader integrally connected with the top wall thereof, and whose top and side walls are disconnected adjacent to the spreader, of means for adjusting the top wall with relation to the bottom of the conduit at the exit of the conduit and maintaining a constant area of the exit after adjustment thereof.

4. In a roofer's tool for spreading liquid cement, the combination with a conduit which terminates in a spreader and whose top and side walls are disconnected adjacent to the spreader, of a thumb screw and spring for adjusting the top wall with relation to the bottom wall at the exit of the conduit.

5. A roofer's tool for spreading liquid cement, said tool having a conduit the top and side walls thereof being disconnected adjacent to the exit of the conduit, the top wall having vertically disposed flanges which engage the side walls of the conduit.

6. A roofer's tool for spreading liquid cement, said tool having a conduit the top and side walls thereof being disconnected adjacent to its exit, the top wall of the conduit having vertical flanges which engage the side walls of the conduit, said top wall being extended laterally beyond the side walls and in advance of the exit constituting a spreader for the liquid cement.

7. A roofer's tool for spreading liquid cement, said tool having a conduit the side walls and top wall thereof being disconnected adjacent to its exit, the top wall of said conduit being depressed between the side walls where disconnected therefrom and being extended beyond the exit of the conduit to constitute a spreader integrally connected with the top wall of the conduit, and the side walls being vertically convergent where disconnected from the top wall of the conduit.

In testimony whereof I affix my signature, in the presence of two subscribing witnesses.

BENJAMIN G. CASLER.

Witnesses:

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KATHERINE E. SMITH.