

Aug. 17, 1926

W. E. NELSON

1,596,680

METHOD OF FORMING REVERSIBLE SHINGLES

Filed June 8, 1925

3 Sheets-Sheet 1

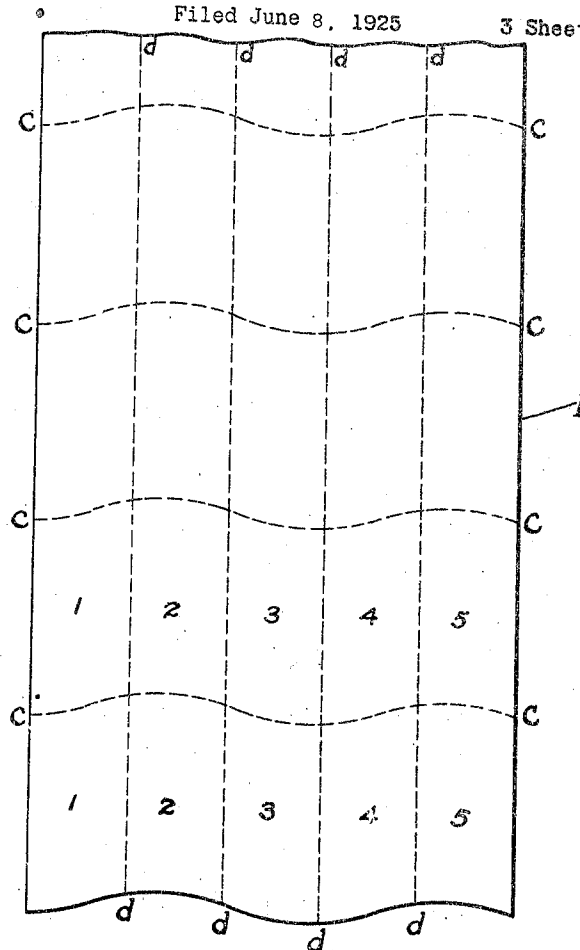


FIG. 1

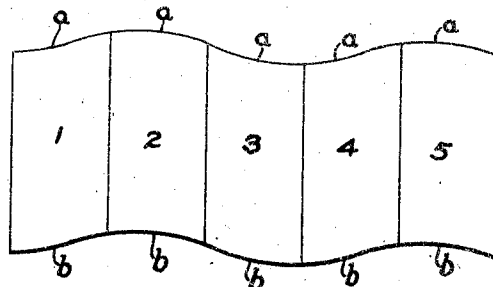


FIG. 2

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3 Sheets-Sheet. 2

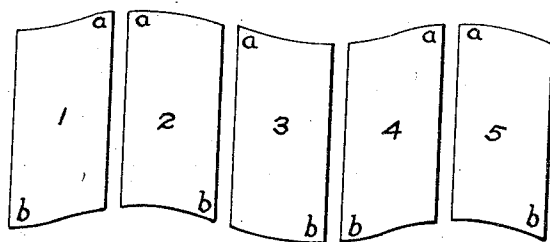


FIG. 3

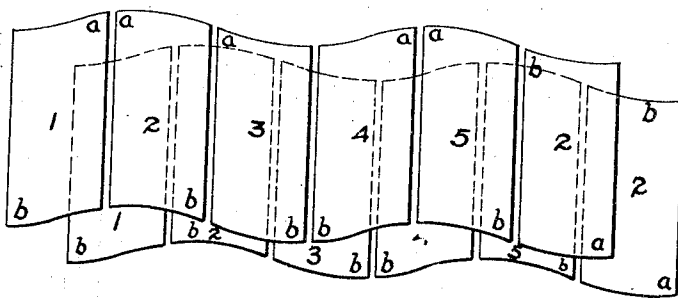


FIG. 4

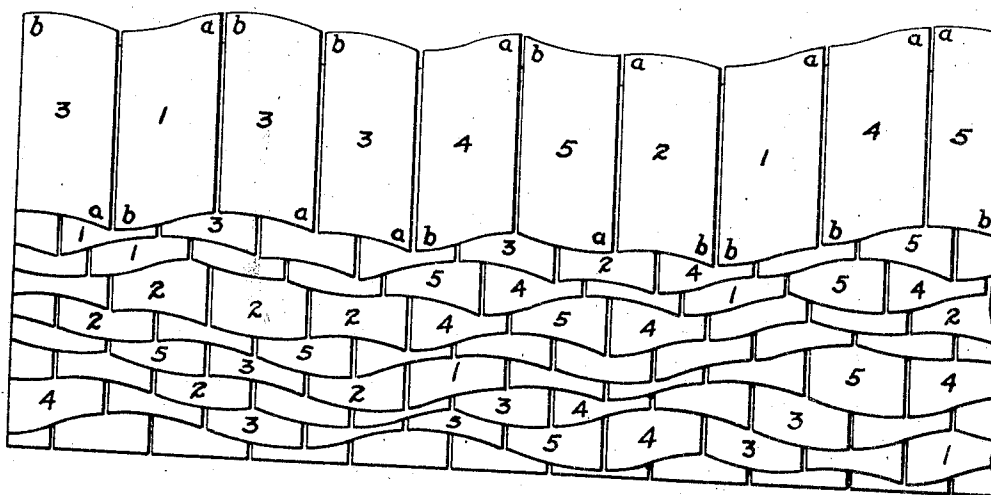


FIG. 5

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3 Sheets-Sheet 3

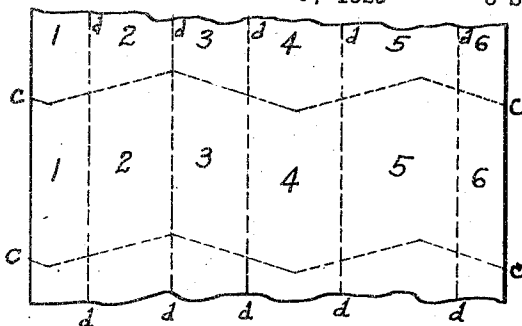


FIG. 8

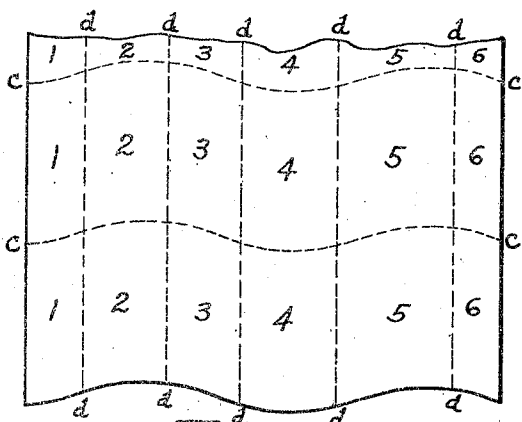


FIG. 6

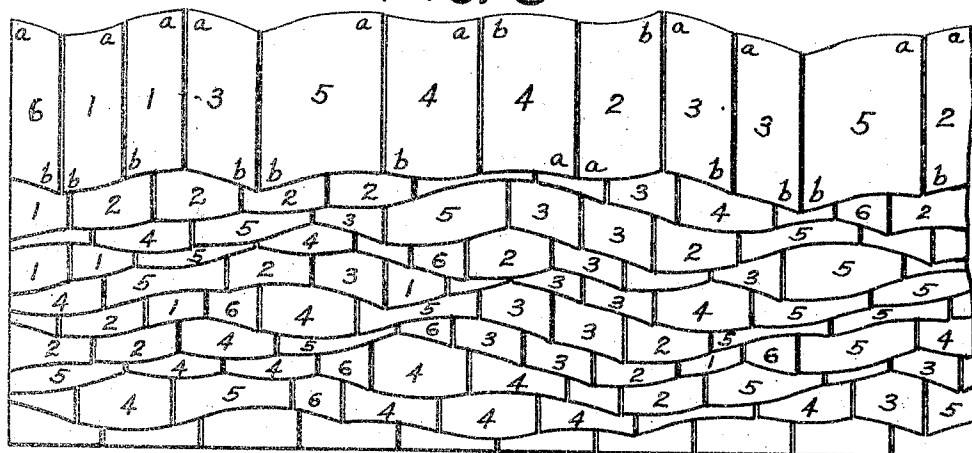


FIG. 7

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UNITED STATES PATENT OFFICE.

WILLIAM EDWIN NELSON, OF MINNEAPOLIS, MINNESOTA.

METHOD OF FORMING REVERSIBLE SHINGLES.

Application Filed June 9, 1925. Serial No. 35,695.

This invention relates to improvements in prepared roofing shingles, and particularly to improvements in shingles that are used to obtain a thatch effect upon a roof and to do this by means of shingles that are single, independent and reversible.

The invention consists generally in the method of forming single, reversible shingles from prepared roofing material, as hereinafter described, and particularly pointed out in the claims.

In the accompanying drawings forming part of this specification,

Figure 1 is a plan view of a sheet of roofing material, the dotted lines thereon indicating the manner of cutting the same to produce my improved shingle.

Figure 2 shows a strip severed from the main sheet of roofing material, and longitudinally divided to provide a series of shingles—in this instance 5—cut across the width of the sheet;

Figure 3 is a view similar to Figure 2, showing the individual shingles slightly separated as they would be in laying the same upon a roof;

Figure 4 is a similar view showing two rows of shingles placed one over the other;

Figure 5 is a view showing a portion of a roof covered with my improved shingles;

Figure 6 is a view showing the manner of cutting the roofing sheet to produce shingles of different widths;

Figure 7 is a view showing a portion of a roof as it will appear when covered with the shingles of different widths illustrated in Figure 6;

Figure 8 is a view showing the shingles formed by a series of similar, transverse, broken lines.

In the drawings, 1 represents a sheet of prepared roofing material of any suitable thickness, width and length, the length of the material being usually very much greater than the width, so that the material may be produced in the form of a roll from which it is drawn as it is passed through the machine to form the shingles.

In producing the shingles herein shown and described, I sever the sheet 1 crosswise by curved scores or cuts $c-c$, as shown in Figures 1 and 6 of the drawings, or by

broken straight cuts $c-c$ as shown in Figure 8 of the drawings, and I simultaneously sever the sheet lengthwise by the straight scores or cuts $d-d$, the scores or cuts $c-c$ are preferably in the form of compound and somewhat irregular curves as shown in Figures 1 and 8, although these cuts or scores may be in broken straight lines as shown in Figure 8. In every instance the lines of the cutting or scoring are preferably substantially parallel to one another so that the single shingles in each longitudinal row are duplicates one of another, but the shingles in any one longitudinal row preferably differ from the shingles in each of the other longitudinal rows. For convenience, I have numbered the shingles of one transverse row with the figures 1, 2, 3, 4 and 5 in Figures 1 and 6, and with the figures 1, 2, 3, 4, 5 and 6 in Figure 8, and I have lettered one end of each of the shingles with the letter a and the other end with the letter b .

The longitudinal cuts or scores as shown in Figures 1-5 may all be equally spaced so that the shingles will all be of the same width and substantially the same length. I may, however, arrange the longitudinal cuts or scores at unequal distances apart as shown in Figures 6, 7 and 8 whereby some of the shingles will be of greater width than others. In this instance, as in the other construction shown, the shingles in each longitudinal row will all be duplicates one of another while the shingles in each transverse row may differ materially in width.

It will be seen that by cutting the shingles by this method I produce single, independent shingles, with complementary curved or irregular ends, and as shown in Figures 1-5, the shingles will all be of the same width and the same length but the ends of each shingle crosswise of the sheet will differ from the ends of every other shingle crosswise of the sheet, and the ends of each shingle in a longitudinal row will be the same as the ends of every other shingle in the same longitudinal row.

In laying the shingles they may be secured upon the roof, if desired, in regular lines, each shingle projecting the same distance from the overlying shingle, but I pre-

fer to lay the shingles with irregularly projecting butts as illustrated in Figures 5 and 7 of the drawings, where some of the shingles project greater or less amounts than other shingles on the same roof, thereby producing what is commonly called, a thatch effect, as illustrated in Figures 5 and 7.

To increase this irregularity, any shingle may be turned end for end or reversed when placed on the roof, it being only necessary that the corners of the shingles in the same course come substantially opposite each other, as illustrated in Figures 4, 5, and 7.

A very decided thatch effect may be produced by the method of laying the described shingles, as illustrated in Figures 5 and 7 of the drawings, the irregularity of the shingles being very greatly accentuated by reversing a considerable number of the shingles and by irregularly placing the different shingles produced from a single cross and longitudinal cutting of the sheet. For instance, in the illustration in Figure 5, there is in the uppermost row, reading from left to right, first the shingle 3 of Figure 4 reversed; the second is shingle 1; the third and fourth are both shingles 3 reversed; the next is shingle 4; the next shingle 5 reversed; shingles 2, 1 and 4 come next in order, and then shingle 3 reversed.

Some of the other shingles illustrated in Figure 5 are numbered to correspond with the numbering in Figure 4, and it will be seen that an infinite variety of patterns of roof may be obtained by the use of these reversible shingles having the irregularly curved ends.

In Figures 6, 7 and 8 I have illustrated the method of forming the independent reversible shingles, but, as here illustrated, the shingles are not all of the same width. I have, in Figures 6 and 8, numbered the shingles transversely of the sheet with the numbers 1, 2, 3, 4, 5 and 6, the shingles numbered 1 and 6 being quite narrow, the shingle numbered 5 being widest of those illustrated and the others of intermediate width. The same arrangement of irregular widths is illustrated in Figure 8. In Figure 7 I have shown a portion of a roof made up from the shingles of different widths produced by cutting the sheet illustrated in Figure 6. In laying the roof illustrated in Figure 7, the thatch effect illustrated in Figure 5 is also obtained and the irregularity is made somewhat greater by having shingles of different widths which may be arranged irregularly as illustrated.

It will be seen that if the sheet from which the shingles are formed is provided with a square end the first row of shingles will have one end straight clear across. After that all of the shingles cut from the strip will have both ends irregularly curved, or of irregular

broken lines as shown in Figure 8, one end being the complement of the other and there will be no waste in cutting the sheet.

I may, if preferred, use sheets of different colors in forming the shingles, and the different colored shingles may be grouped in any preferred way upon a roof to get any desired color effect.

I do not limit myself to any particular width or length of shingle, nor to any particular irregular curve or broken line for the end of each shingle. Each shingle, however, is provided with ends that are irregularly curved or broken and are complementary.

The end lines of each shingle are in every instance preferably substantially parallel or similar to each other although the ends of the different shingles may vary one from another as illustrated and described.

I do not, in the present application, claim the constructional details or contour of the shingles, but I reserve the right, however, to file a supplemental application covering the shingles, and, which will be a division of the present application.

I claim as my invention:

1. The method of forming single, independent and reversible shingles from a sheet of prepared roofing material, which consists in severing the sheet crosswise along equally spaced, similar, irregular lines, and severing it longitudinally along equally spaced, parallel, straight continuous lines.

2. The method of forming single, independent and reversible shingles from a sheet of prepared roofing material which consists in severing the sheet crosswise along equally spaced, similar, irregular lines and severing it longitudinally along parallel straight continuous lines.

3. The method of forming single, independent and reversible shingles from a sheet of prepared roofing material which consists in severing the sheet crosswise along equally spaced, similar, curved lines and severing it longitudinally along parallel straight lines.

4. The method of forming single, independent and reversible shingles from a sheet of prepared roofing material, which consists in severing the sheet crosswise along equally spaced, similar, curved lines, and severing it longitudinally along equally spaced, parallel, straight lines.

5. The method of forming single, independent and reversible shingles from a sheet of prepared roofing material, which consists in severing the sheet crosswise along equally spaced, similar, compound, curved lines, and severing it longitudinally along equally spaced, parallel, straight lines.

6. The method of forming single independent shingles from a sheet of prepared roofing material, which consists in severing the sheet longitudinally along parallel

lines and severing the sheet crosswise along two spaced parallel lines and also irregularly severing the sheet crosswise intermediately of said crosswise parallel lines.

and severing the sheet crosswise along two spaced parallel lines and also curvedly severing the sheet crosswise intermediately of said crosswise parallel lines. 10

8 7. The method of forming single independent shingles from a sheet of prepared roofing material, which consists in severing the sheet longitudinally along parallel lines

In witness whereof, I have hereunto set my hand this 3rd day of June, 1925.

WILLIAM EDWIN NELSON: