

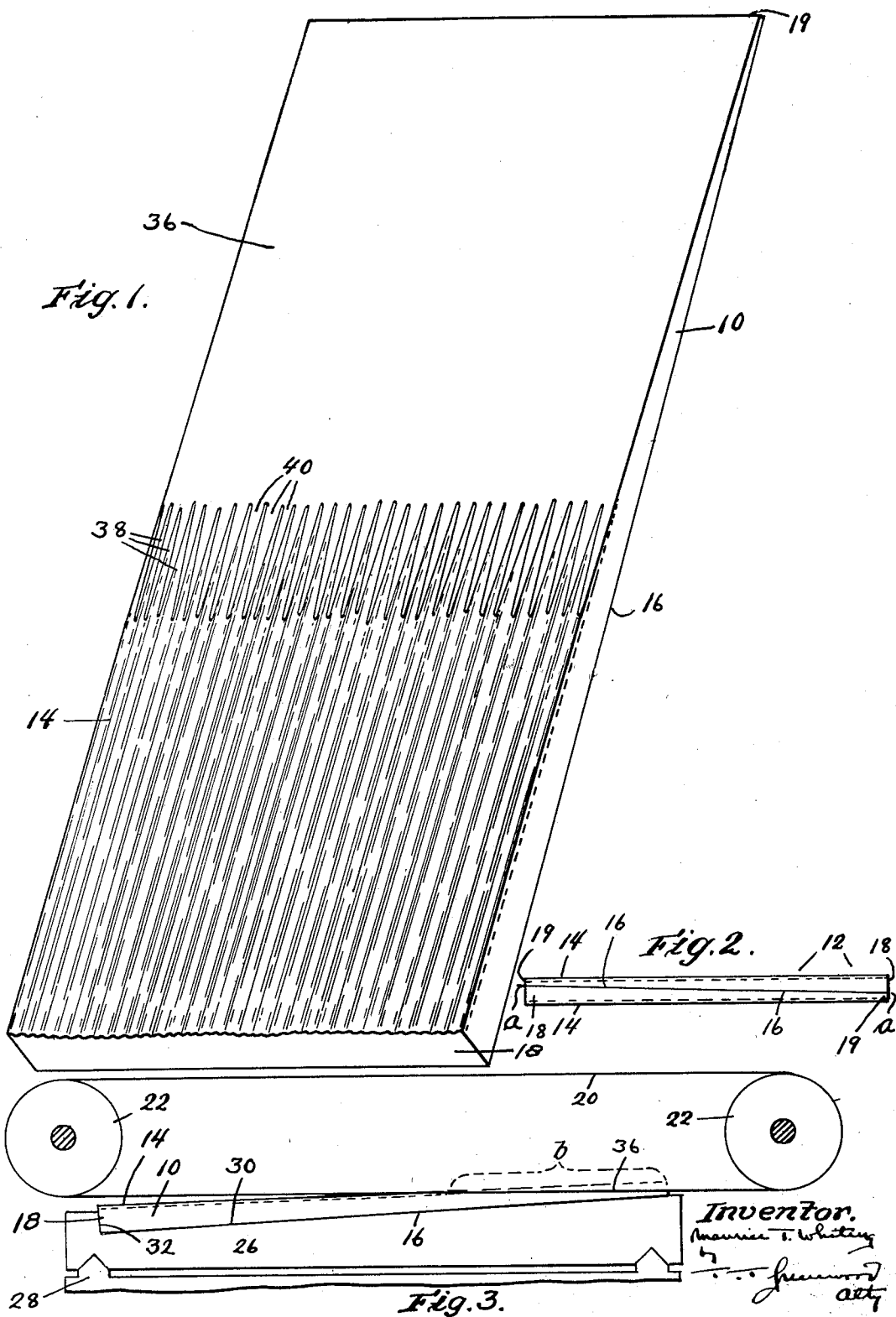
May 15, 1934.

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1,958,774

SPLIT SHINGLE

Filed April 29, 1931



UNITED STATES PATENT OFFICE

1,958,774

SPLIT SHINGLE

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Application April 29, 1931, Serial No. 533,606

2 Claims. (Cl. 108—8)

This invention relates to shingles and particularly to what are termed hand-split shingles.

Split shingles are rived from shakes and have at least one face that presents a naturally-split or rough appearance formed by the alternated grain-ridges and valleys which extend lengthwise of the shingle. The shingle is laid with the split or rough surface uppermost. The opposite or under face of the shingle may be and preferably is smooth as disclosed in the Runkle Patent No. 1,577,935, dated March 23, 1926. Split shingles usually vary somewhat in length. They also vary somewhat in the degree of taper from butt to tip and also in intermediate thickness. In laying the shingles, the shingles of each course usually have the same length of exposed surface and the butts of the shingles of each course are in line so that the tips of the shingles come where they may. As a consequence, the heights, or thicknesses, of the shingles in a course, may be different at the localities where they are overlaid with the shingles of the next upper course, so that the shingles in the upper course are caused to be laid out of level, some shingles being canted in one and some in another direction transversely of their lengths. Such an arrangement not only is unsightly but results in a roof more or less open to air currents which may carry snow in under the shingles to melt and run down into the building since large spaces are left under the shingle courses.

Hence one of the objects of the present invention is the provision of a shingle of the so-called "split" type that overcomes the above-outlined trouble.

A further object of the invention is the provision of a split shingle that has a definite thickness at a definite distance from the butt regardless of the length of the shingle, so that the various courses of shingles can be laid level.

A further object is the provision of a split shingle that has a definite taper at the tip, and a smooth plane upper surface at the taper, so that the shingles of the various courses can be laid level.

Another object is a process of making a split shingle in such manner that successive courses of such shingles can be laid level on a roof.

A yet further object is generally to improve the construction of split shingles.

Fig. 1 is a perspective view of a shingle embodying the present invention.

Fig. 2 is a view of a split shake and illustrating the manner of cutting it to form two split shingles each having a smooth plane bottom surface and a naturally split top surface.

Fig. 3 is a diagrammatic view of a machine for making the shingles embodying the present invention.

The split shingle embodying the present invention has the general characteristic of the shingle illustrated in the above named Runkle patent and is intended as an improvement thereon. The shingle 10 is formed from a rectangular slab 12, see Fig. 2, which is split or rived from a log or shake of wood of suitable length and thus has naturally split opposed surfaces 14 which present alternate grain-ridges and valleys that extend lengthwise of the shake. The shake is then sawn along the diagonal line *a-a* thereby severing the shake into two shingles 10, each having an upper face 14 that is rough and an under face 16 that is smooth and level. The shingle tapers from the thick butt 18 to the thin tip 19. Due to variations in the wood and sometimes the winding of the grain of the various shakes, the shingles formed from the shakes, ordinarily, neither are uniform in taper from butt to tip nor have the same thickness at the same distance up from the butt. Consequently, when laid in courses, the shingles of an upper course are caused to be canted sidewise or out of level when the underlying shingle of the lower course is thicker or thinner than its neighbors at its point of contact with the upper shingles.

In accordance with the present invention, the shingles are "levelled" or so made that all have the same thickness the same distance up from the butt; and also have a tapered tip portion that has the same degree of taper in all shingles of approximately the same length and has a smooth and plane upper surface at the taper. This result is effected by the mechanism diagrammatically illustrated in Fig. 3. The levelling mechanism comprises essentially a saw, herein shown as a horizontal band saw 20 passed about the wheels 22 and disposed above a table 26 which is movable on ways 28 transversely of the line of movement of the lower pass of the saw. The table has an inclined face 30 upon which the level bottom face 16 of the shingle is supported and an upstanding ledge 32 that is engaged by the butt of the shingle and so holds the shingle definitely in a predetermined angular position with respect to the saw. This angle is intended to be constant for all shingles of about the same length levelled by the apparatus, as is also the distance from the saw to the inclined face 30. The relation between the saw and the inclined face is such that a considerable length of the tip part of the shingle as the length *b*, Fig. 3, upstands above the saw and

is thus cut off the shingle, thereby providing the shingle with a smooth upper face 36. This face, in all shingles of the same length, presents a constant angle with the bottom face.

5 It will be appreciated that shingles of about the same length, such as will be laid on some particular roof, will have the same angles between the plane top and bottom faces, while a shingle of considerably different length may have a different
10 angle.

The smooth face extends from the tip of the shingle to any desired point on the upper surface 14 of the shingle but preferably to a point close to the upper limit of exposure of the shingle, or close
15 to the butt of the shingle in the next upper course.

That is, practically all of the length of the shingle that is intended to be under or sheltered by an upper shingle is embraced by the levelled face 36, the split surface of the shingle running
20 under the upper shingle preferably only sufficiently to conceal the levelled surface. The construction thus provides a level upper face against which the upper shingle can and is adapted to bear. Since the angle of taper of the levelled
25 part of the shingle is the same in all shingles, regardless of variations in lengths of the shingles, and consequently the thickness of the shingle in the levelled portion is constant in all shingles, at the same distance from the butts, the levelled faces
30 36 of all the shingles in the same course will lie in a common plane thereby providing a level support for the shingles of the next upper course. The weather and sheltered faces 14 and 36 respectively of the shingle make an obtuse angle
35 between them and different acute angles with the bottom face 16, as will be apparent from Fig. 3, the angle between the bottom and sheltered faces being greater than between the bottom and weather faces, since the sheltered face is only a
40 part of the length of the tapered shingle.

In forming the levelled face 36, the saw runs out of the grain ridges and valleys of the split surface of the shingle so that that part of the face that

adjoins the split surface has ridges 38 that have smooth inclined tops, and valleys 40 lying between the ridges. These valleys and ridges underlie the next upper shingle and so provide drainage and ventilation for the confronting faces of the shingles, which promotes the effective life thereof. 80

I claim:

1. A shingle having a bottom face that is continuously plane and levelled from butt to tip and a top face that consists of a naturally-split unlevel weather face and a smooth levelled sheltered face, the length of the weather face being approximately the length of the shingle that is adapted to be exposed to the weather and the length of the sheltered face being approximately the length of the shingle that is adapted to be covered by a superimposed shingle, the sheltered face being at least as long as the weather face, and the weather and sheltered faces making an obtuse angle with each other and different acute angles with the bottom face and the thickness of the shingle through the sheltered face portion at a predetermined distance from the butt being predetermined. 85 90 95

2. A series of shingles that have the same length from butt to tip and each having a bottom face that is continuously plane and levelled from butt to tip and a top face that consists of a naturally-split unlevel weather face and a levelled sheltered face, the length of the weather face being approximately the length of the shingle that is adapted to be exposed to the weather and the length of the sheltered face being approximately the length of the shingle that is adapted to be covered by a superimposed shingle, the sheltered face being at least as long as the weather face, and the weather and sheltered faces making an obtuse angle with each other and different acute angles with the bottom face, the thickness of all the shingles being the same distance from the butt so that, when the shingles are laid in a course with the butts in line, the sheltered faces lie in the same plane. 100 105 110 115

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