June 10, 1930. W. S. SMITH 1,763,269

PREPARATORY PROCESS IN THE MANUFACTURE OF RESAWN SHAKE SHINGLES

Filed June 14, 1929

Fig. 1.

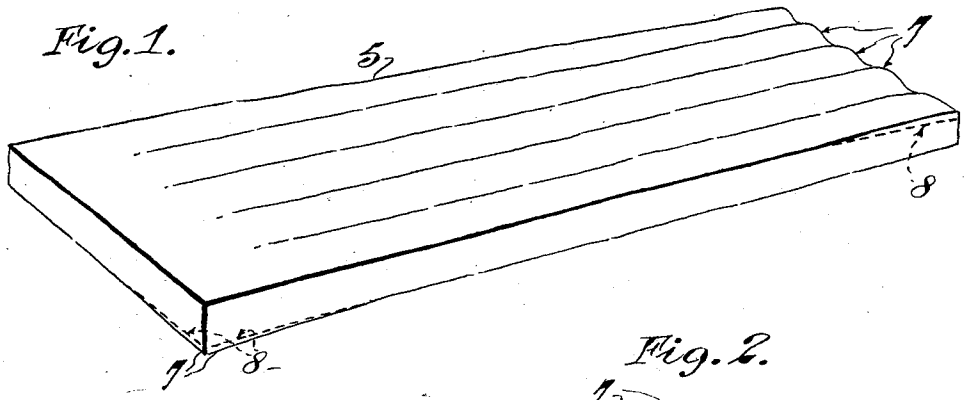


Fig. 2.



Fig. 3.

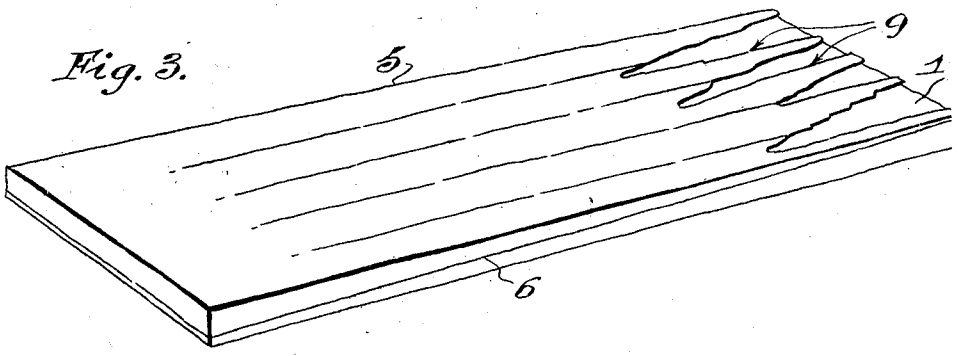


Fig. 4.

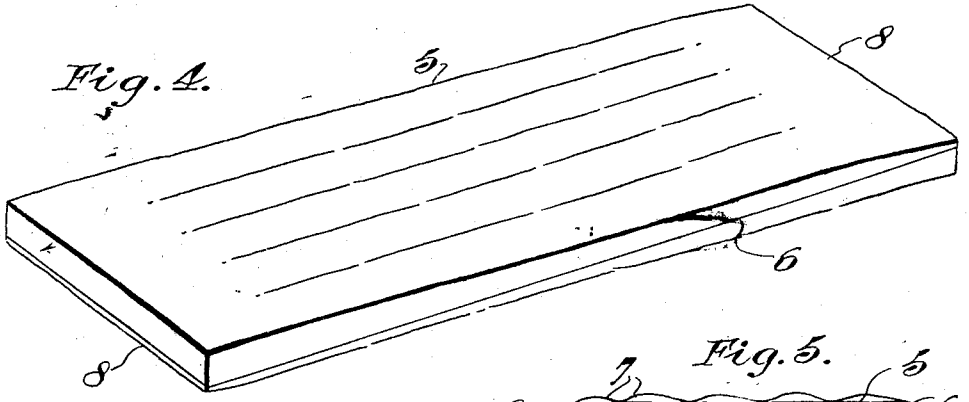
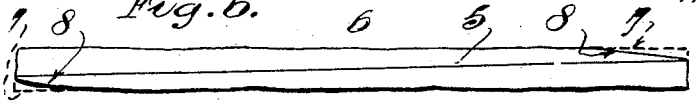


Fig. 5.

Fig. 6.



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UNITED STATES PATENT OFFICE

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PREPARATORY PROCESS IN THE MANUFACTURE OF RESAWN SHAKE SHINGLES

Application filed June 14, 1929. Serial No. 370,903.

This invention relates to a conservation process in the manufacture of re-sawn shake shingles which, under the methods usually in vogue, lead to a large percentage of waste of high class cedar, its object being to prepare the shingle shakes for the usual manufacturing operation which converts a shake shingle into two commercial shingles each of which has one of its surfaces showing the natural split grain and the other a saw-cut appearance, and by such preparation to effect a large salvage of material usually wasted.

In following out the quite usual operation in which the natural surface is retained along with the advantags of a mechanical surface and the constructive conveniences which follow therefrom, it occurs that owing to the frequency of "winds" in the cedar shakes, that is to say, to irregularities in the growth of the cedar which produce twists and curves in the lie and direction of the grain, it is found in practice that when an inter-surface saw-cut is made in the shake one of the resulting shingles will be irregular in length or thickness and is thus wasted, or necessitates a further operation to reduce the whole to a common size, thus in either case creating much loss.

It is this very serious inefficiency that my invention is designed to eliminate by entirely cutting out all necessity for the accidental production of any shakes except those of correct standard size and so effecting in the aggregate an enormous conservation of costly timber.

The improvement is provided by a very simple preliminary operation which hitherto has never been employed in the manufacture of re-sawn shake shingles and is the means of securing a decided increase in the conservation of the raw material employed.

Before putting the inter-surface saw-cut through the natural shingle shake—whereby two effective shingles are produced—a truing-up cut is made on the flat surface of the shake transversely across that end which is to form the tapered end of the shingle. This is effected by giving to the shake surface during its passage through the surfacing machine a slight angularity in reference to its direction of traverse in regard to the surfacing operation, whereby the latter removes from the shake an acute angled portion—usually of irregular external form. The operation is repeated on the diagonally opposite portion of the shake.

This preliminary process leaves the shake with two true edges so that a saw-cut may be taken at a definite measurement therefrom, with the consequence that both the tapered ends of the shingle are of uniform thickness and the possibility of a cut intercepting the side surface at an irregular line instead of producing a square ended shingle is entirely avoided, because the square end of each is definitely retained to any required size and has a normal thickness throughout its width.

The purpose, character and effect of the said process is more clearly described by the aid of the drawings accompanying and forming a part of this application, and in which:

Figure 1 is a perspective view of a shake preparatory to re-sawing and showing the irregularity of the contour by which the wastage is caused.

Figure 2 is an end view of the same looking at the end opposite to that where the frow was applied in splitting the shingle, i. e. looking from right to left in Figure 1.

Figure 3 is a perspective view of the same shake but with the diagonal saw-cut dividing the shake into two shingles wherein it is seen that because of the irregular contour at the right hand end the saw has intersected the top surface at an irregular line and wastage of the top shingle occurs.

Figure 4 is a perspective view of the same shake shown in Figure 1 after my process has been applied.

Figure 5 is an end elevation of the shake shown in Figure 4.

Figure 6 is a side elevation of the shake shown in Figure 4.

In these drawings the original or natural shake is indicated by the numeral 5; the inter-surface saw-cut is shown by 6.

In consequence of an irregular surface contour having engaged the guides of the operating machine, the cut has intercepted the shake on its top surface at the irregular line 9 in-

stead of at the end 10, thus one-half of the shake has been wasted.

The irregular acute angled end portion to be removed by the preparatory process is shown at 7, leaving the true edge surface 8 for engaging the saw fence and guide-members so that a shingle may be cut with any desired thickness at the end and with the certainty of completing the saw-cut at an equally true line.

The plane of the preliminary saw-cut or truing up of the shake by the surfacing machine is also indicated by the line 7. If the frow end of the shake is not true a preliminary truing of that end as at 7 at the left in Figure 6 may also be given. However, it is usually unnecessary at the frow end to give the preliminary truing treatment.

Having now particularly described my invention, I hereby declare that what I claim and desire to be protected in by Letters Patent, is:

A preliminary process in the manufacture of re-sawn shake shingles and comprising, the method hereinbefore described in which the natural surface shake from which by a single inter-surface saw-cut two re-sawn or commercial shake shingles are produced, is subjected to a preliminary truing process by which a very acute angular cut is taken off the side and transverse edge of that portion of the shake end which is to form the thin end of the shingle, and then by reversing the shingle to perform a similar operation on the diagonally opposite portion of the shake, for the other shingle.

In testimony whereof I affix my signature.

WILLIAM S. SMITH.