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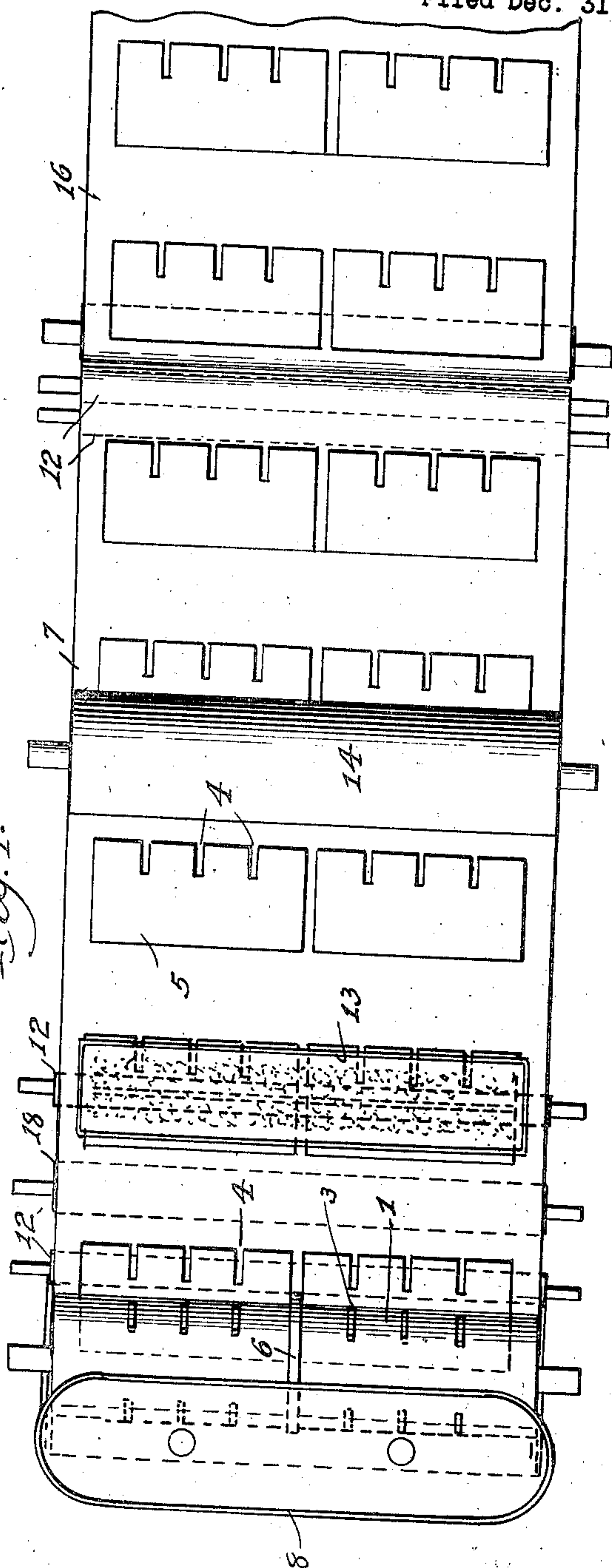
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1,599,512

MACHINE FOR COATING AND SURFACING PREPARED ROOFING

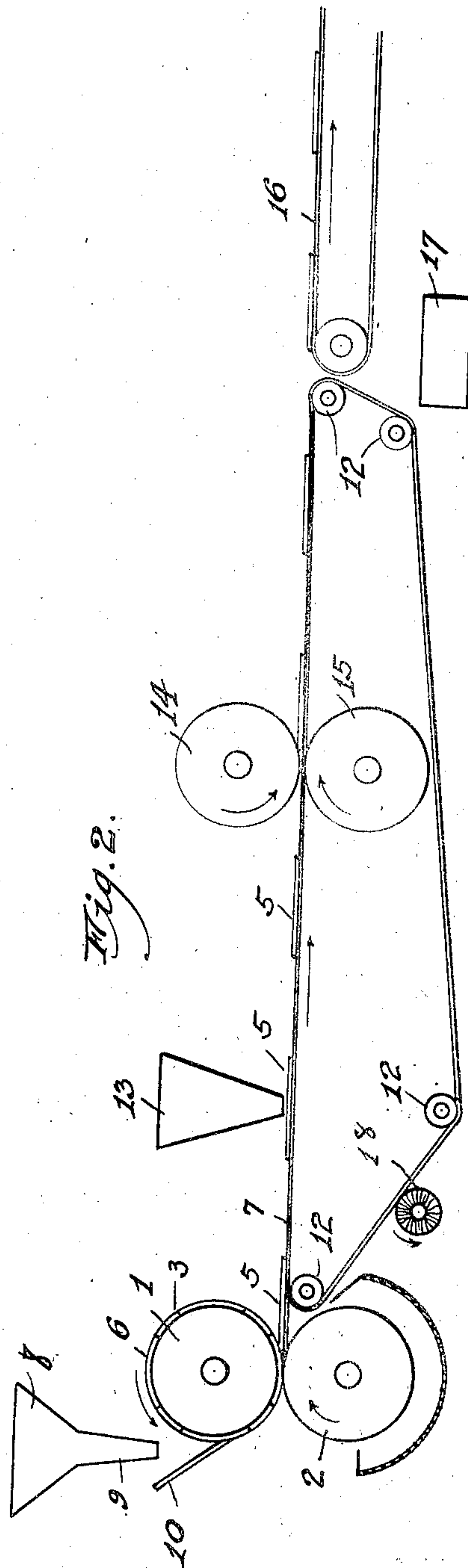
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Fig. 1.



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Fig. 2.



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# UNITED STATES PATENT OFFICE.

WALTER H. CADY, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO FLINTKOTE COMPANY,  
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MACHINE FOR COATING AND SURFACING PREPARED ROOFING.

Application filed December 31, 1921. Serial No. 526,329.

This invention relates to a process and machine for coating and surfacing prepared shingles and refers more particularly to a process and apparatus in which prepared roofing in the form of strip shingles may be after they are formed and cut out individually thoroughly coated and surfaced subsequent to their being cut into shingle units.

10 An important object of the invention is the fact that all surface and edges of the strip shingles are completely covered and that any waste material is recovered to be recycled in the covering of other shingles.

15 Fig. 1 is a plan view of the apparatus.

Fig. 2 is a side elevation with a substantial part of the machine omitted for clearness in showing the salient points of the invention.

20 Referring to the drawings, strip shingle blanks cut from prepared roofing material common in the art, are introduced between the rolls 1 and 2, being engaged by the upper roll by lugs 3 positioned thereon in a manner to register with the cut out portions 4 of the strip shingles 5. A central guide 6 in the center of the upper roll 1 serves to properly feed the shingle units and to prevent their lateral displacement as they progress into the endless belt 7. The strip shingles as they are fed between the rolls, are coated with a bituminous mastic substance such as asphalt or other waterproofing substances which are used to coat prepared roofing. The asphaltic coating substance is maintained in a hopper 8 which is positioned over the rolls so that the heated asphaltic coating in a fluid or semi-fluid condition flows down through the funnel-like spouts 9 and collects behind a doctor knife 10 which serves to spread the waterproofing substance evenly over the surface of the roll so that it will be uniformly fed as a coating substance onto a strip shingle. It also prevents the collection of accumulations of the waterproofing substance on the upper roll. Any excess waterproofing substance will be carried off into the lower pan or container which is situated below the lower roll. The endless belt 7 runs over a plurality of spools 12 and passes under a hopper 13 and between pressure rolls 14 and 15, the strip shingles after being coated, while passing between the rolls 1 and 2 progress with the belt un-

til they reach a position beneath the hopper 13. This hopper contains granular surfacing material such as ground slate which is fed onto the adhesive coating surface of the shingle, the excess surfacing collecting upon the belt. The shingles then pass on between the pressure rolls 14 and 15 where the surfacing material is pressed into the coating to form the completed product.

After leaving the pressure rolls, the shingle blanks leave the endless belt and pass onto a receiving belt 16 which conveys them to a refrigerator. Beneath the end of the endless belt 7 is a pan or hopper as shown at 17 in which collects the excess surfacing material which is deposited upon the belt during its passage under the hopper 13. At 18 is situated a cleaning brush which is rotated in a manner to thoroughly clean the surface of the belt prior to its return to receive the coated shingles from the rolls 1 and 2.

The driving mechanism of the respective rolls and spools for running the belts, has been purposely omitted as it forms no part of the invention. It is understood, however, that the rolls must be operated at relative speed so that the strip shingles will be properly fed and progressed at a uniform rate through the process of coating and surfacing.

In this manner strip shingles which have been cut from the prepared roofing sheet may be readily coated and surfaced and all portions of the shingle unit uniformly treated. The lugs 3 on the roll 1 in registering with the cut out portions of the shingle units, keep the cut out portions free of any coating material which would tend to collect as the strip shingles pass through the initial coating stage.

I claim as my invention:

A machine for surfacing individual roofing strips severed from a flexible sheet of roofing, comprising a traveling belt for carrying the separate shingle elements, a coating roll for applying the waterproof bituminous substance to the surface of said elements, having lugs adapted to register with notches in the roofing strips, means for applying a granular surfacing material to the elements while carried by the belt, pressure rolls for impressing a surfacing material into the coating.

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