

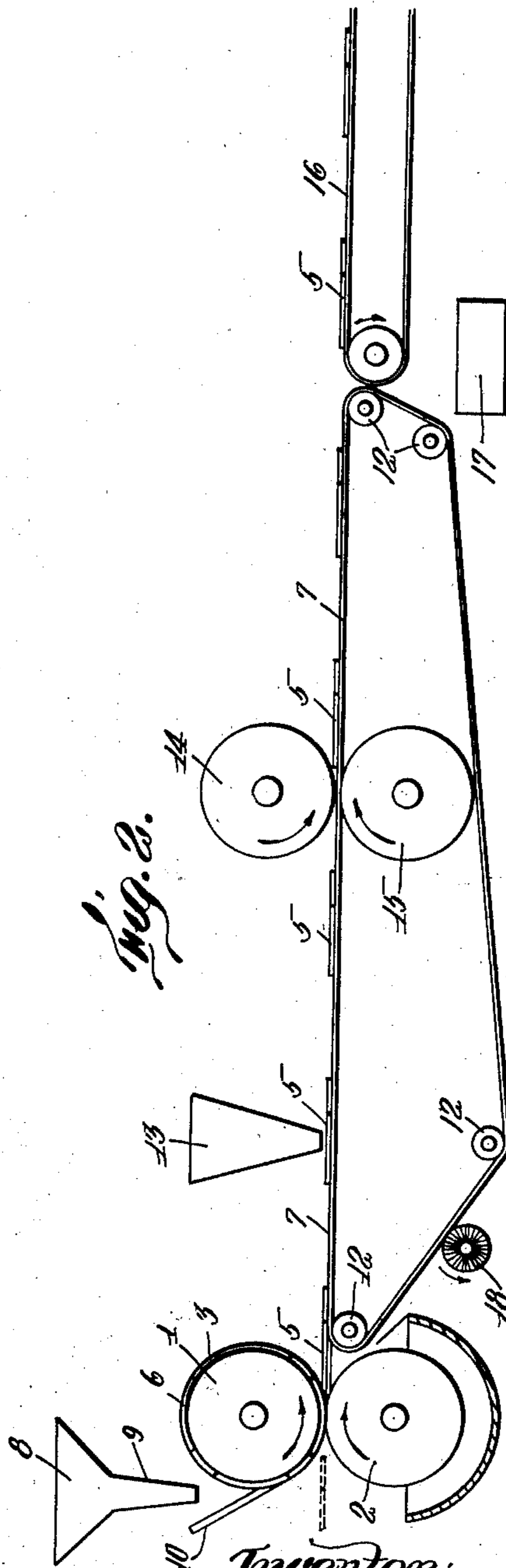
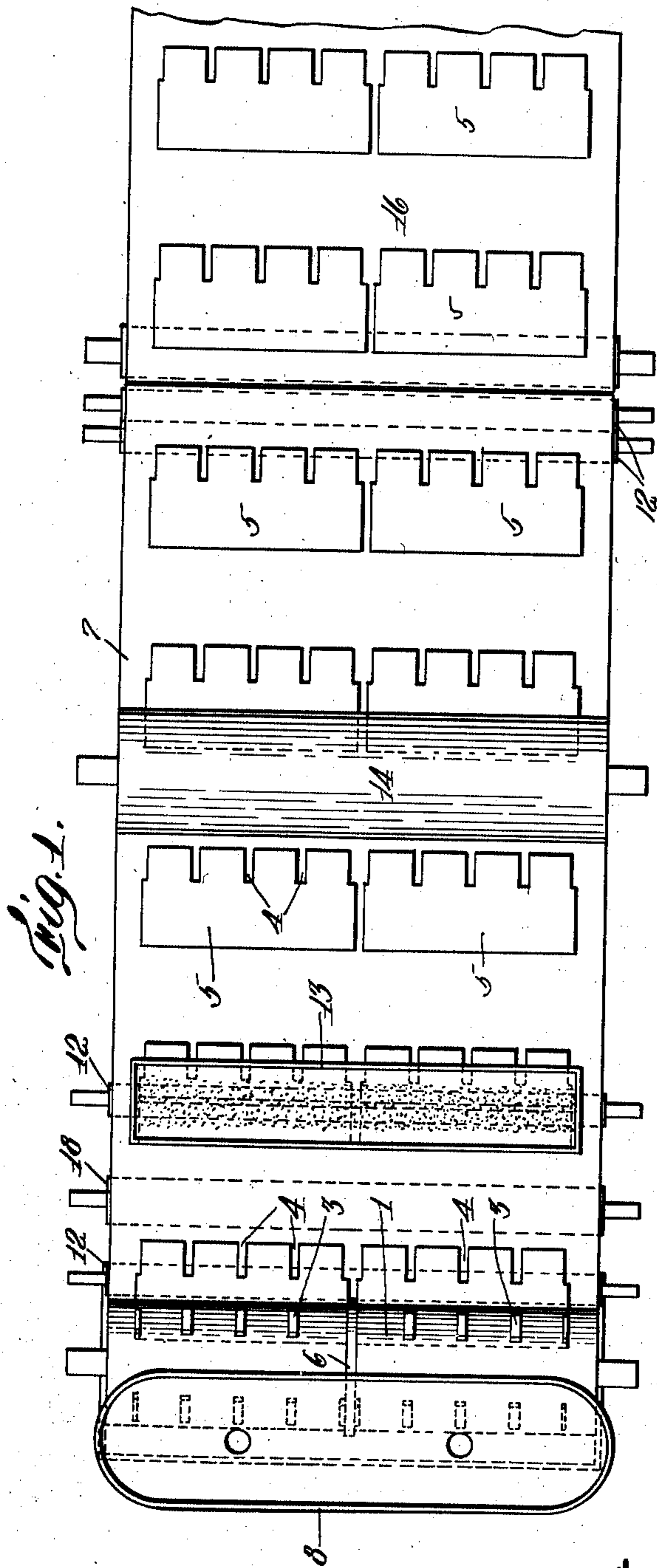
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PROCESS FOR COATING AND SURFACING PREPARED ROOFING

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# UNITED STATES PATENT OFFICE

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## PROCESS FOR COATING AND SURFACING PREPARED ROOFING

Application filed March 19, 1926. Serial No. 95,820.

This application is a continuation of appli-  
cation Serial No. 526,329, filed December 31,  
1921, now Patent No. 1,599,512, Sept. 14,  
1926, as to all subject matter common to both.

5 The invention relates to a process and ma-  
chine for coating and surfacing prepared  
shingles and refers more particularly to a  
process and apparatus in which prepared  
roofing in the form of roofing units, such for  
10 example as strip shingles, may be thoroughly  
coated and surfaced subsequent to their being  
cut into shingle units.

15 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.

Figure 1 is a plan view of the apparatus.

20 Figure 2 is a side elevation with a sub-  
stantial part of the machine omitted for clear-  
ness in showing the salient points of the in-  
vention.

Referring to the drawings, strip shingle  
blanks cut from prepared roofing material  
25 common in the art, such as sheets of unsatu-  
rated felt or sheets of saturated felt which  
have been coated with asphalt and surfaced  
with crushed slate or other crushed mineral  
material, are introduced between the rolls 1  
30 and 2, being engaged by the upper roll by  
lugs 3 positioned thereon in a manner to regis-  
ter with the cut-out portions 4 of the strip  
shingles 5. A central guide 6 in the center of  
35 the upper roll 1 serves to properly feed the  
shingle units and to prevent their lateral dis-  
placement as they progress onto the endless  
belt 7 which may be made of any suitable ma-  
terial. The strip shingles as they are fed be-  
40 tween the rolls are coated over all their sur-  
faces and edges with a molten bituminous mas-  
tic substance, such as asphalt, or other water-  
proofing substances which are ordinarily used  
to coat prepared roofing. The asphaltic coat-  
45 ing substance is maintained in a tank 8 which  
is positioned over the rolls so that the heated  
asphaltic coating in a fluid or semi-fluid con-  
dition flows down through the funnel-like  
spouts 9 and collects behind a doctor knife 10  
50 which serves to spread the waterproofing sub-  
stance evenly over the surface of the roll so

that it will be uniformly fed as a coating sub-  
stance onto a strip shingle. It also prevents  
the collection of accumulations of the water-  
proofing substance on the upper roll. Any  
excess waterproofing substance will be car-  
55 ried 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 pres-  
60 sure rolls 14 and 15, the strip shingles after  
being coated, while passing between the rolls  
1 and 2, progress with the belt until they reach  
a position beneath the hopper 13. This hop-  
per contains granular surfacing material,  
65 such as ground slate, which is fed onto the ad-  
hesive coating on the upper surface and all  
the edges of the shingle, the excess surfacing  
collecting upon the belt. The shingles then  
pass on between the pressure rolls 14 and 15  
70 where the surfacing material is pressed into  
the coating to form the completed product.

After leaving the pressure rolls, the  
shingles leave the endless belt and pass onto  
a receiving belt 16 which conveys them to a  
75 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 situ-  
80 ated 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  
85 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  
90 process of coating and surfacing.

In this manner, strip shingles which have  
been cut from the initial sheet may be readily  
coated and surfaced, all portions of the  
95 shingle unit receiving a complete coating of  
the mastic, an outer layer of crushed slate  
being partially embedded in the coating on  
one face and the edges of each shingle. The  
lugs 3 on the roll 1 in registering with the cut-  
100 out portions of the shingle units keep the cut-



out portions free of excess coating material which would tend to collect and form a web across the cut-outs as the strip shingles pass through the initial coating stage. The lugs, being covered with coating material from the container 8 and being somewhat smaller than the cut-outs, carry sufficient coating material into the cut-outs to coat their edges thoroughly. The films of coating material on the rolls 2, 3, meet around the outer edge of the shingle and thus complete the encasing of the unit with an envelope of coating material over its entire surface, and this coating is surfaced with the slate or other grit.

I claim:

1. The process of treating individual shingle units cut from prepared roofing and having butt and adjacent side edges which includes the successive steps of coating all portions of the units uniformly with waterproofing bituminous material and applying granular surfacing material to the units in a continuous operation.

2. The process of treating individual shingle units cut from prepared roofing and having butt and adjacent side edges, which process includes the successive steps of coating portions of the unit including the butt and side edges with bituminous material and applying granular surfacing material to the units in a continuous operation.

In testimony whereof I have affixed my signature.

WALTER H. CADY.

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