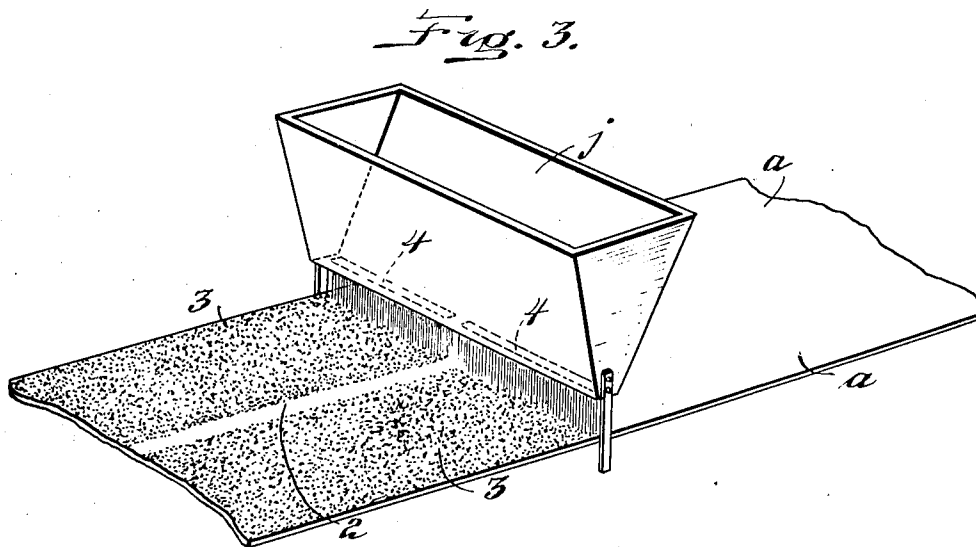
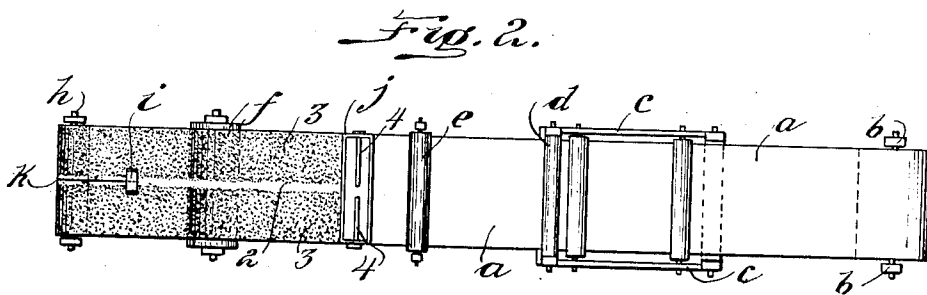
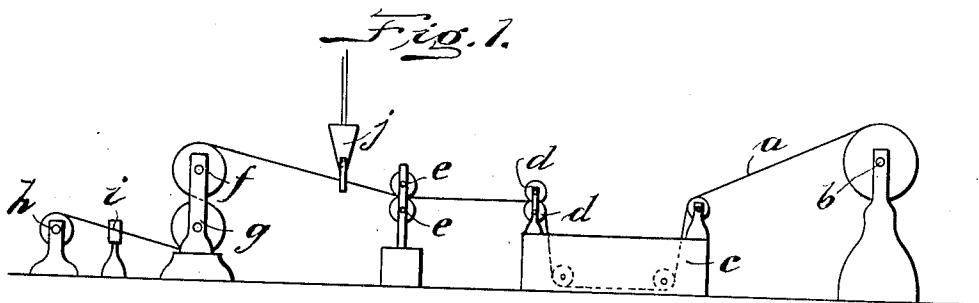


No. 876,010.

PATENTED JAN. 7, 1908.

F. C. OVERBURY.
METHOD OF AND MEANS FOR MAKING ROOFING MATERIAL.
APPLICATION FILED MAR. 25, 1907.



Witnesses
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UNITED STATES PATENT OFFICE.

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METHOD OF AND MEANS FOR MAKING ROOFING MATERIAL.

No. 876,010.

Specification of Letters Patent.

Patented Jan. 7, 1908.

Application filed March 25, 1907. Serial No. 364,480.

To all whom it may concern:

Be it known that I, FREDERICK C. OVERBURY, of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Methods of and Means for Making Roofing Material, of which the following is a specification.

This invention relates to the manufacture of roofing material composed of a flexible strip adapted to be fastened to a roof or other surface, the strip being coated on one side with a powdered or granular mineral, which is caused to adhere to the material which is coated first with a hot adhesive material before the application of the granular coating material. It is customary in making roofing strips of this character, to longitudinally subdivide a web of the flexible material into a plurality of strips, the web being cut or penetrated by a slitting device, which acts on the portion of the web to which the coating has been applied. The ordinary means employed comprise a tank containing a liquid composition, through which the web is passed, the liquid permeating the material of the web, and giving it a suitable waterproof quality, a hopper or reservoir for the granular coating material arranged to sprinkle the same upon the web after it leaves the tank, and a severing or slitting device arranged to make a longitudinal line of division in the coated portion of the web, suitable rolls being employed for storing and permitting the unwinding of the untreated web, for winding up the strips formed by severing the web, and for guiding the material in its course from one end of the machine to the other. Heretofore the coating of granular material has been applied to the web across its entire surface, including the part upon which the slitting device acts. Much difficulty has been experienced owing to the rapid wear of the slitting or cutting edge or edges by contact with the granular material, this being of a gritty nature so that it rapidly dulls a cutting edge.

My invention has for its object to obviate this difficulty, and to this end it consists in an improved method of and means for making improved strips, the said method and means involving the longitudinal interruption of the coating to form a narrow longitudinal uncoated portion between the edges of the web, the said portion being the part of

the web on which the slitting device acts, so that the slitting or cutting edge is not dulled or impaired by contact with the granular coating material.

Of the accompanying drawings, forming a part of this specification,—Figure 1 represents a side elevation showing, in a somewhat conventional form, an apparatus suitable for use in carrying out my invention. Fig. 2 represents a top plan view of the same. Fig. 3 represents a perspective view of a portion of the apparatus and a portion of a web undergoing treatment.

The same letters of reference indicate the same parts in all the figures.

In the drawings, *a* represents a web of flexible material suitable for covering roofs and other surfaces of buildings, the web being accumulated in the form of a roll on an unwinding mandrel or drum *b*, and conducted therefrom by suitable guide rolls through a tank *c* containing a liquid preparation of any suitable nature, the preparation being adapted to impart a waterproof quality to the material of the web, and to cause the adhesion of the granular coating material thereto. The web after leaving the tank *c*, passes between suitable pressure rolls *d d* and *e e*, then over cooling drums *f g* to a winding arbor or reel *h*, a slitting device, represented conventionally at *i*, being employed to slit or sever the web longitudinally prior to its accumulation upon the winding reel.

j represents a hopper or reservoir located above a portion of the web, and extending crosswise of the same, the reservoir being preferably located between the pressure rolls *e* and the cooling rolls *f g*. The reservoir is adapted to distribute upon the upper surface of the web, a granular coating material, the latter adhering to the previously treated surface.

In carrying out my invention I provide means for interrupting the crosswise continuity of the coating to give the web a bare or uncoated portion 2 extending lengthwise of the web, the coating being thus divided into two longitudinal portions 3 3. The uncoated portion 2 registers with the slitting device *i* so that the cutting edge encounters only the uncoated portion 2, and is not subjected to contact with the granular coating material; hence a longitudinal slit or cut *k* is formed by the slitting device at the longitudinal center of the uncoated portion 2, as in-

5 indicated in Fig. 2, the web being thus divided
 into a plurality of roofing strips, which are
 wound together on the winding reel *h*, and
 are separable from each other. The means
 10 here shown for depositing the coating material
 in the manner described to form the un-
 coated portion 2, comprise two slots 4 4 in
 the bottom of the hopper, said slots being in
 alinement with each other, and separated by
 15 an intermediate closed portion of the said
 bottom, so that the coating material falls in
 two thin streams or sheets, and is deposited
 upon the material to form the two strips 3 3,
 as indicated in Fig. 3.
 20 It will be seen from the foregoing that pro-
 vision is made for cutting or slitting the strip
 without injury to the slitting device by con-
 tact with the granular coating material;
 hence the durability of the slitting device is
 25 greatly prolonged by my invention. Suit-
 able guides should be provided to prevent
 edgewise displacement of the strip, and to
 preserve the desired relation between the un-
 coated portion 2 and the slitting device.
 30 My invention is not limited to the described
 means for interrupting the transverse con-
 tinuity of the coating, it being obvious that
 various other means may be employed for
 this purpose, such, for example, as a roller
 35 supported by the hopper *j*, and bearing upon
 the web at such point as to divide the stream
 of coating material falling from the hopper,
 into two parts, leaving the part 2 uncoated.
 A narrow strip of paper or other flexible
 40 material of the width of the uncoated por-
 tion 2, may be mounted upon a reel at one
 side of the hopper, and deposited upon the
 web in such manner as to cover the portion 2
 at the point where the web passes under the
 45 hopper, thus preventing the coating mate-
 rial from touching the portion 2. A suitable
 scraper may be employed to remove the coat-
 ing from the portion 2, thus interrupting the
 transverse continuity of the coating by a de-
 nuding operation.

The apparatus here illustrated is shown

simply for purposes of illustration, and it is
 to be understood that my invention is not
 limited to the organization of means here
 shown for treating the web in the manner 50
 described.

It is obvious that a plurality of uncoated
 portions 2 may be formed on the web, in case
 it is desired to subdivide the web into more
 than two strips. 55

I claim:

1. A roofing strip machine, comprising
 means for successively applying an adhesive
 and a longitudinally interrupted granular
 coating to a web of roofing material, a nar- 60
 row longitudinal portion of the web being left
 uncoated, and web slitting means arranged
 to act on the said uncoated portion.

2. A roofing strip machine comprising
 means for successively applying an adhesive 65
 and a plurality of independent longitudinal
 granular coatings to a web of roofing mate-
 rial, said coatings being separated by a nar-
 row uncoated portion of the web, and means
 for slitting the web along the said uncoated 70
 portion.

3. That improvement in the method of
 making coated roofing strips, which consists
 in successively applying an adhesive and a
 longitudinally interrupted granular coating 75
 to a web of flexible roofing material, to form
 a narrow longitudinal uncoated portion, and
 slitting the web along said uncoated portion.

4. That improvement in the method of
 making coated roofing strips which consists 80
 in successively applying an adhesive and a
 plurality of longitudinal granular coatings to
 a web of roofing material, said coatings being
 separated by a narrow longitudinal uncoated
 85 portion of the web, and then slitting the web
 along said uncoated portion.

In testimony whereof I have affixed my
 signature, in presence of two witnesses.

FREDERICK C. OVERBURY.

Witnesses:

CHAS. E. TOLHURST,
 C. P. PERHAM.