

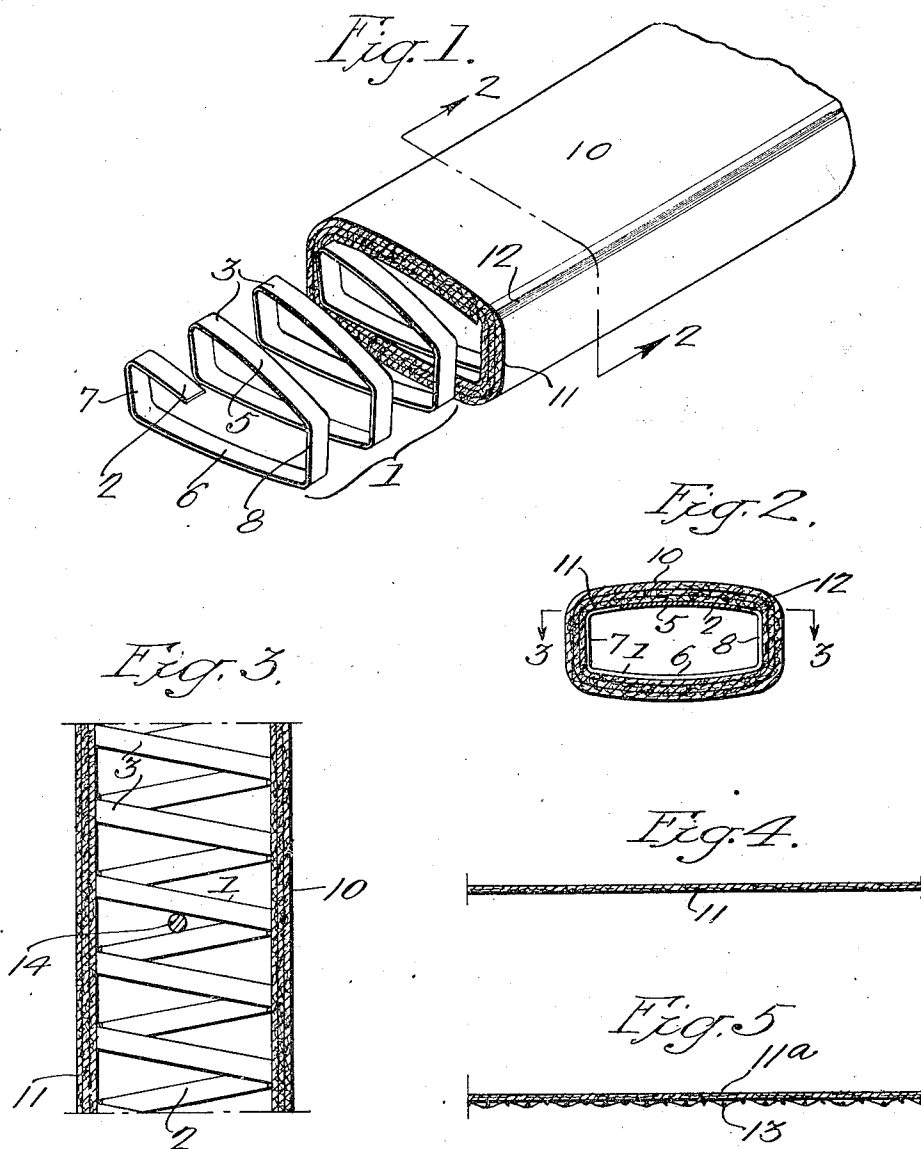
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SEALING STRIP

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SEALING STRIP

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This invention relates to sealing elements adapted for use in drying apparatus, of which the walls and roof of the drier are composed of stationary and removable panels of a type substantially the same as that illustrated in U. S. Letters Patent to Walter M. Schwartz, No. 1,652,055, dated December 6, 1927.

Panels of this type are usually provided with channels adjacent their edges, and in these channels are placed sealing strips composed of cork. Cork seals, while they are very resilient and efficient in operation, are subject to some faults, for example, they are combustible, they harden with age, crumble with usage, and at times the particles of crumbled cork are carried into the drier and mixed with the material being dried therein, which is objectionable.

The object of this invention is to provide a non-combustible sealing strip which will have a degree of resiliency substantially equal to that of the cork strip, but which will not harden with age or crumble under the conditions of use.

Other objects of the invention and the construction thereof will be hereinafter described in detail, reference being had to the accompanying drawings, of which:

Fig. 1 is a perspective view of a sealing strip made in accordance with the principles of my invention, a portion of the outer casing of the strip being removed for the purpose of illustration;

Fig. 2 is a transverse sectional view on the line 2—2, Fig. 1;

Fig. 3 is a longitudinal sectional view on the line 3—3, Fig. 2;

Fig. 4 is a sectional view of a sheet of non-combustible material employed in the manufacture of the sealing strip; and

Fig. 5 is a view similar to Fig. 4 illustrating an alternative form of sheet.

A sealing strip made in accordance with the principles of my invention comprises a resilient core 1, which consists of a strip 2 of flat resilient metal, bent in a manner to form a series of convolutions 3. The helical core thus formed is flattened or shaped into a sub-

stantially rectangular form in a direction transversely of the sealing strip.

As shown in Figs. 1 and 2, the helical core 1 comprises relatively long sides 5 and 6 which are joined together at their opposite ends by comparatively short sides 7 and 8. As shown in Fig. 2, the longer sides 5 and 6 are bowed outwardly in opposite directions from each other, while the sides 7 and 8 are substantially straight and parallel to each other.

Around the helical core 1 is provided a resilient heat-resisting and non-combustible covering or casing 10 which is composed in the present instance of a sheet of asbestos 11, wound about the core 1 in superimposed layers, as illustrated in the drawing, the outer end 12 of the sheet being secured to the underlying layer in any suitable manner, by an adhesive which will not be affected by heat, such for example as silicate of soda.

If desired, the plain asbestos sheet 11 may be replaced by a similar sheet 11^a having a backing 13 of open mesh fabric secured to the sheet by a heat-resisting adhesive such as silicate of soda, said fabric being adapted to reinforce the sheet so that the sheet may be more easily handled without tearing while undergoing the wrapping operation.

As shown in Figs. 1 and 3, the convolutions 3 of the helical core 1 are spaced apart in such a manner that securing bolts or screws 14 may be readily passed through the sealing strip at desired places. The convolutions may be readily separated or moved apart with respect to each other by any suitable instrument forced through the outer casing 10 of the strip to provide the necessary openings in the strip to receive the securing elements.

Under conditions of use the sealing strips are placed in the channels formed at the edges of the panels, as illustrated in the above mentioned patent, and when the panels are placed and secured in position to form the wall or roof of the drier the bowed sides 5 and 6 of the helical core will be moved toward each other and the strip being thereby held under compression, the compressed resilient core will tend at all times to expand the sealing strip into efficient sealing

contact with the surfaces with which the strip is engaged.

I claim:

5 1. A sealing strip comprising a strip of metal formed into a series of convolutions to produce a helical resilient core, and a resilient casing surrounding said helical core.

10 2. A sealing strip comprising a strip of metal formed into a series of convolutions shaped in a manner to produce a substantially rectangular helical core, and a resilient casing surrounding said core.

15 3. A sealing strip comprising a strip of metal formed into a series of convolutions shaped in a manner to produce a substantially rectangular helical core having a pair of relatively short and substantially parallel sides, and a pair of comparatively longer sides substantially parallel to each other, and a resilient casing surrounding said core.

20 4. A sealing strip comprising a strip of metal formed into a series of convolutions shaped in a manner to produce a substantially rectangular helical core having a pair of relatively short and substantially parallel sides, and a pair of comparatively longer sides bowed outwardly and in opposite directions with respect to each other, and a resilient casing surrounding said core and conforming to the external shape of said core.

25 5. A sealing strip comprising a strip of metal formed into a series of convolutions shaped in a manner to produce a substantially rectangular helical core having a pair of relatively short and substantially parallel sides, and a pair of comparatively longer sides bowed outwardly and in opposite directions with respect to each other, and a sheet of asbestos wrapped in superposed layers about said core and conforming to the external shape of said core.

30 6. A sealing strip comprising a resilient core and a resilient casing composed of a sheet of asbestos wrapped in superposed layers about said core, and means for reinforcing said asbestos sheet.

35 7. A sealing strip comprising a resilient core and a resilient casing composed of a sheet of asbestos having a reinforcing mesh fabric secured thereto and wrapped in superposed layers about said core.

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