F. G. SARGENT.

ENDLESS CONVEYER.

APPLICATION FILED MAY 11, 1911.

1,011,251.

Patented Dec. 12, 1911.

Fig. 1.

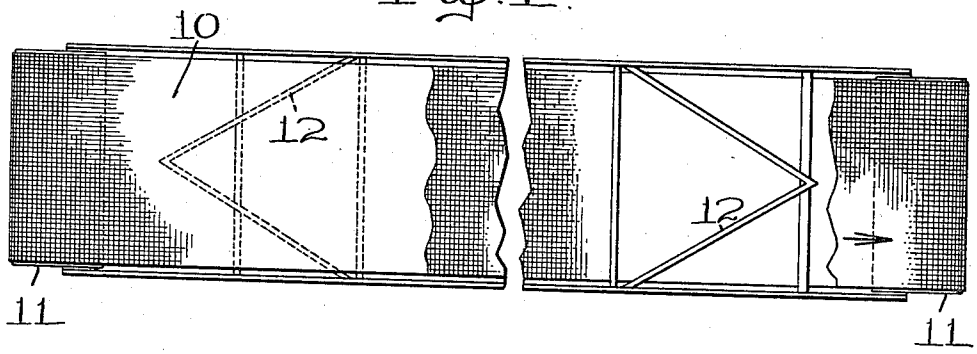


Fig. 2.

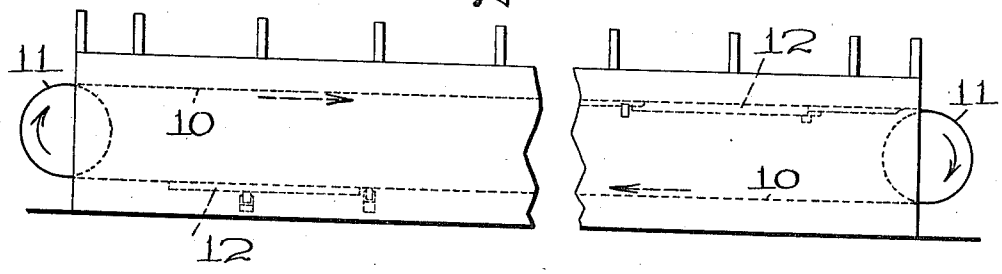
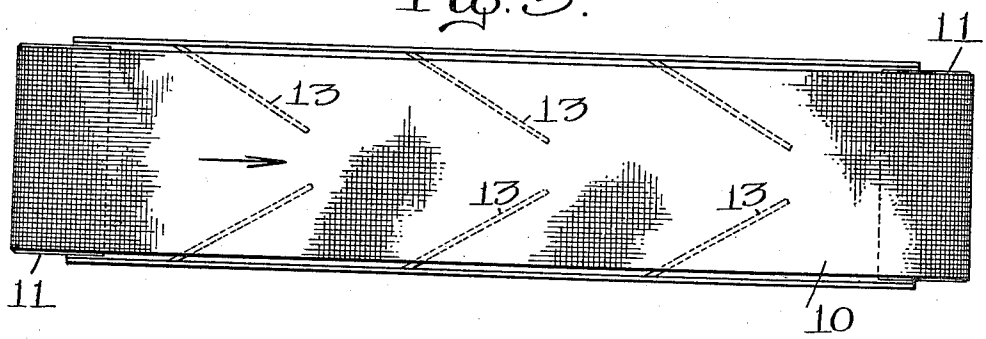


Fig. 3.



Witnesses:
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UNITED STATES PATENT OFFICE.

FREDERICK G. SARGENT, OF WESTFORD, MASSACHUSETTS, ASSIGNOR TO C. G. SARGENT'S SONS CORPORATION, OF GRANITEVILLE, MASSACHUSETTS, A CORPORATION OF MASSACHUSETTS.

ENDLESS CONVEYER.

1,011,251. Specification of Letters Patent. Patented Dec. 12, 1911.

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To all whom it may concern:

Be it known that I, FREDERICK G. SARGENT, a citizen of the United States, residing at Westford, in the county of Middlesex and State of Massachusetts, have invented a new and useful Endless Conveyer, of which the following is a specification.

This invention relates to endless or apron conveyers and particularly to a guide therefor for keeping the apron or conveyer in the center of the drums over which it runs.

The invention is capable of application to endless or apron conveyers in general, but it is particularly adapted for the wire cloth aprons used in drying wool and the like.

Considerable difficulty has been encountered in this type of machines owing to the fact that it is difficult to set the drums perfectly level and parallel and that even when this is done some aprons get stretched or distorted, so that one side is longer than the other, which causes them to run out of the center line of the drums.

The principal object of this invention is to provide simple and convenient means for preventing such action.

Reference is to be had to the accompanying drawings, in which—

Figure 1 is a plan of an endless conveyer constructed in accordance with this invention. Fig. 2 is a side elevation of the same; and Fig. 3 is a plan showing a slight modification.

In the form shown in Figs. 1, and 2, the endless wire cloth apron 10 is supported and driven by a pair of drums or rolls 11. Just below each strand of the apron is a guide 12 comprising two opposite members located symmetrically and centrally with respect to the center line of the apron, making equal and opposite angles therewith, and converging toward each other at one end. In this case these two members meet at the center. It will be noticed that the guide which supports the upper strand has its angle extending in one direction, while that supporting the lower strand of the apron extends in the other. This is because the two strands of the apron move in opposite directions, and to provide for guiding each of them independently of the other. It is to be observed that the point of the guide extends in the direction in which the apron moves. Now it will be seen that if the apron runs out of the center of this converging guide there will be more friction on one side than on the other and the wedge action will tend to carry the apron back. It always has a tendency to keep the center of the apron in line with the apex of the angle between the side members.

In the form shown in Fig. 3, the guides 13 have converging side members but they do not meet at the center. They extend in the same direction however, as in Figs. 1 and 2 and a plurality are located along the same strand of the apron.

While I have illustrated and described certain preferred forms in which the invention can be carried out, I am aware that further modifications can be made therein by any person skilled in the art without departing from the scope of the invention as expressed in the claims. Therefore I do not wish to be limited to all the details of construction herein shown and described, but

What I do claim is:—

1. The combination with an endless conveyer comprising rolls and an apron passing over the same, of means for engaging the underside of a strand of said apron between the rolls for keeping the apron centered on the rolls, said means comprising a plurality of guides arranged in separated pairs located opposite each other with respect to the center line of the apron, those on opposite sides being at equal and opposite angles to the center line and in the same plane.

2. The combination with an endless conveyer, of two guides in planes parallel with the conveyer, one engaging each strand thereof and each located centrally with respect to the strand which it engages, each guide comprising a pair of converging side members and arranged with its apex pointing in the direction of motion of the strand which it engages.

3. The combination with a traveling conveyer, of a guide therefor in a plane parallel with the conveyer and comprising converging side members engaging the under surface of the upper strand of the conveyer, and having its apex pointing in the direction of motion of the conveyer.

4. The combination with a conveyer, of a

plurality of parallel guide members arranged along each side thereof in contact therewith and in a plane parallel therewith but spaced from each other, those on each side being directly opposite those on the other side and at the same angle to the direction of motion of the conveyer.

In testimony whereof I have hereunto set my hand, in the presence of two subscribing witnesses.

FREDERICK G. SARGENT.

Witnesses:

OSBORN H. CILLEY,

WILLIAM F. SARGENT.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."