

(No Model.)

E. DEMING.

BELTING.

No. 316,756.

Patented Apr. 28, 1885.

Fig 1

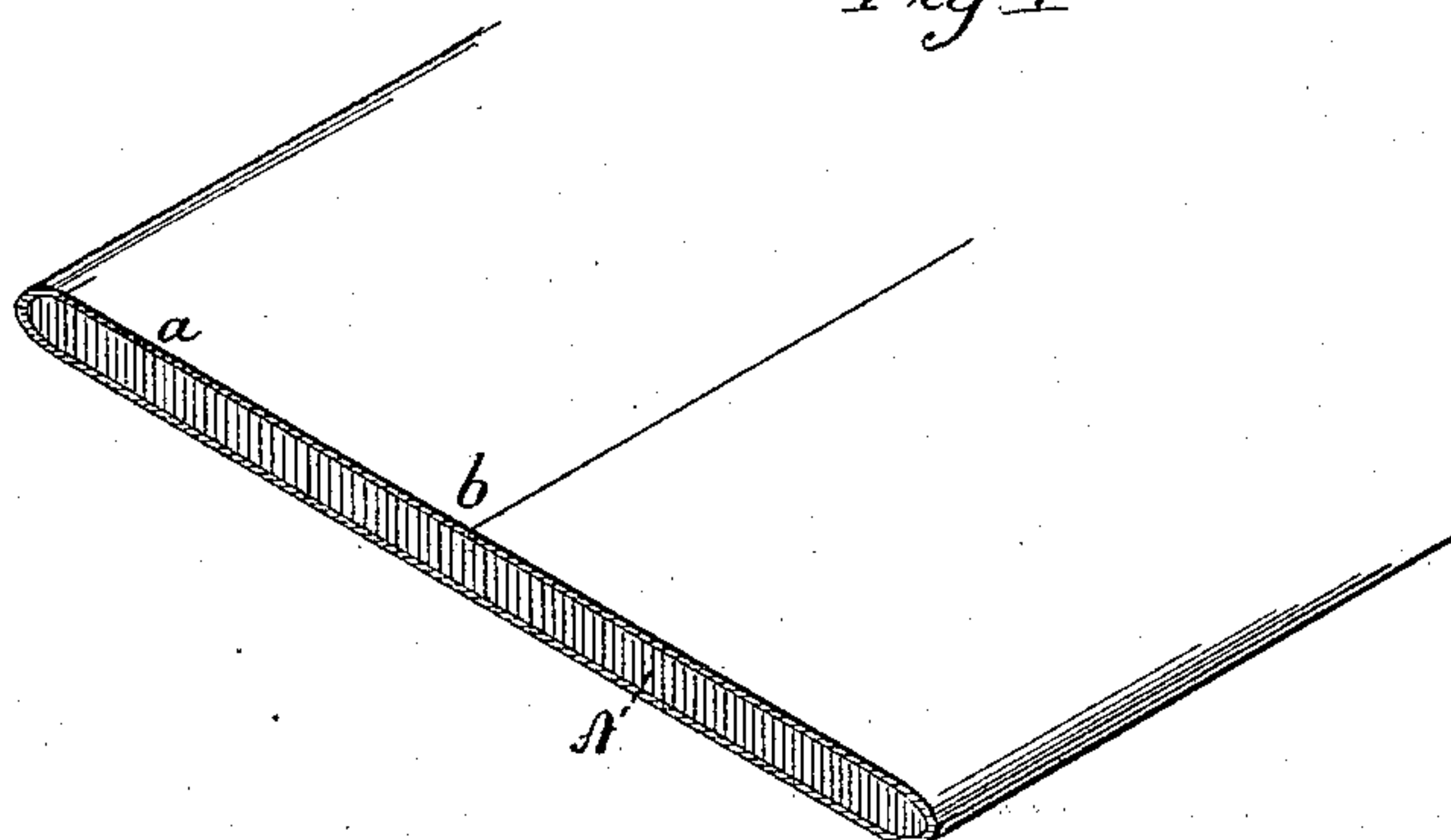


Fig 2

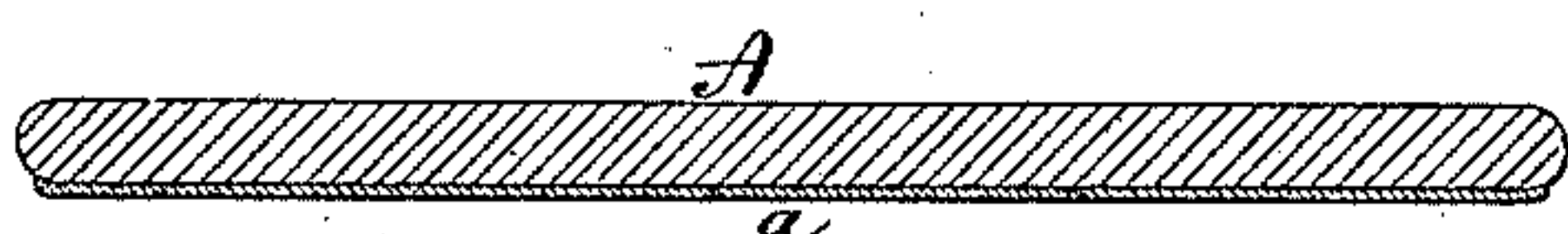
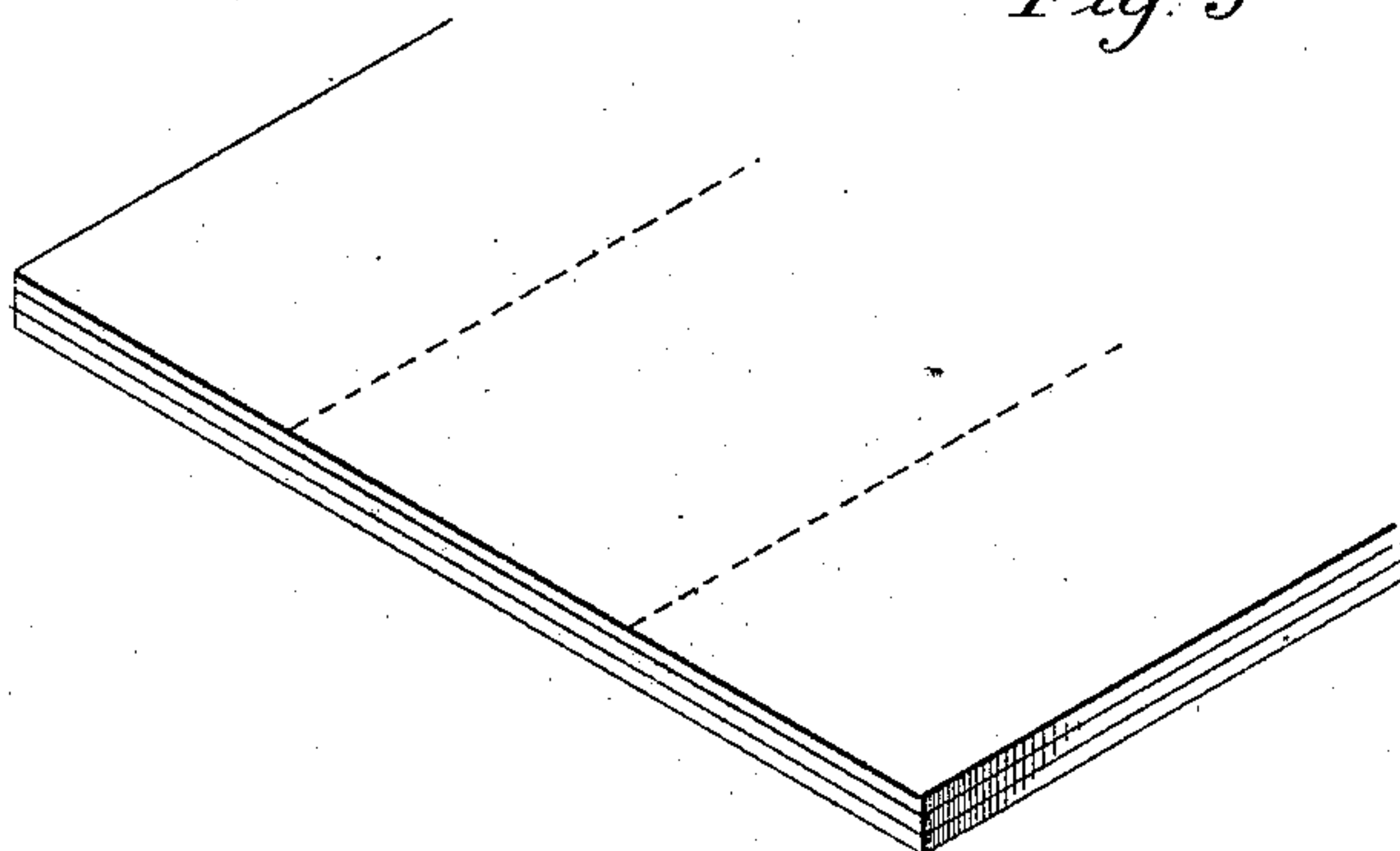


Fig 3



Witnesses.
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UNITED STATES PATENT OFFICE.

ERNEST DEMING, OF MIDDLETOWN, CONNECTICUT.

BELTING.

SPECIFICATION forming part of Letters Patent No. 316,756, dated April 28, 1885.

Application filed March 2, 1885. (No model.)

To all whom it may concern:

Be it known that I, ERNEST DEMING, of Middletown, in the county of Middlesex and State of Connecticut, have invented new Improvements in Belting; and I do hereby declare the following, when taken in connection with accompanying drawings, and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a perspective view of a piece of belting complete, showing a transverse section thereof; Figs. 2 and 3, modifications in construction.

This invention relates to an improvement in that class of belting which is woven in the required width, and commonly called "woven belting." While for many purposes this belting serves a very good purpose, it does not possess that adhering quality to cling to the pulley which leather or similar material has, hence is liable to slip. Otherwise than this clinging quality, the woven belt is a good substitute for leather belting, and is produced at a very much less cost. To obviate this difficulty, leather has been glued upon the working-surface of the woven belting, so as to give to it strong adhering properties, the leather being very much thinner than for a belt of the same capacity when made entirely from leather. While this gives to the woven belting an adhering quality it adds so greatly to the cost of manufacture as to give it little preference over leather, because of its comparative cost.

The object of my invention is to provide the woven belting with a surface having the appearance and adhering properties of leather, whereby that clinging capacity of leather is attained and without very materially adding to the cost of manufacture; and it consists in applying to a woven fabric body a covering of woven material, the surface of the covering coated with a composition which gives to that surface the clinging properties of leather, and as more fully hereinafter described.

In carrying out my invention I first weave the body of the belting in the usual manner,

A representing the body. This body is then stretched. The covering is a light woven fabric, one surface of which is coated with a composition of which oil is the base. This may be oil with lamp-black added sufficient to give it a pasty consistency, and then spread upon the fabric in a "McIntosh spreader," or otherwise, or instead of lamp-black litharge or any suitable material of similar character may be employed, and coloring-pigments may be added, the composition being mixed to the pasty consistency, or such as will readily spread upon the surface of the fabric. This fabric, when dried, is calendered and then applied to the stretched woven belt, the coated side out, and it is best done by coating a strip in width sufficient to entirely surround the belt. (Represented as *a* in Fig. 1.) Before applying the covering its inner surface is coated with any adhesive material—say fish-glue—and so that it will firmly adhere to the surface of the woven body. When thus applied, the covered belting may be passed between calender-rolls to force the covering close upon the body of the belting. The covering is best applied so that the two edges will meet at the center, as seen at *b*, Fig. 1.

This method of covering entirely incloses the woven body, and the coated surface presents very much the texture of leather, and has the same clinging qualities upon the pulleys.

Instead of entirely covering the body, as seen in Fig. 1, the covering may be applied to one side only, as indicated in Fig. 2.

While I prefer to make the body from material woven to the required width, it may be made from canvas stitched, as indicated in Fig. 3, and after stitching covered in the same manner as first described.

After the covering has been applied lines of stitches may be run through the belt, as is many times done in leather and other belting, to give a greater strength to the belt.

The cost of the fabric covering, its coating and application, is slight when compared with a leather covering, and the belting complete is produced at but a fractional cost of solid leather belting, and when the fabric body is

completely covered the belt is for all practical purposes substantially as good as the best leather belting.

I claim—

- 5 1. As an article of manufacture, the herein-described belting, consisting of the fabric body having its working-surface covered with a separate layer of fabric, the said layer of fabric coated with a composition of which oil
10 is the base, substantially as described.

2. The herein-described belting, consisting of the woven body A, having a fabric covering, *a*, enveloping the said body, the surface of the said covering coated with a composition of which oil is the base, substantially as de- 15 scribed.

ERNEST DEMING.

Witnesses:

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