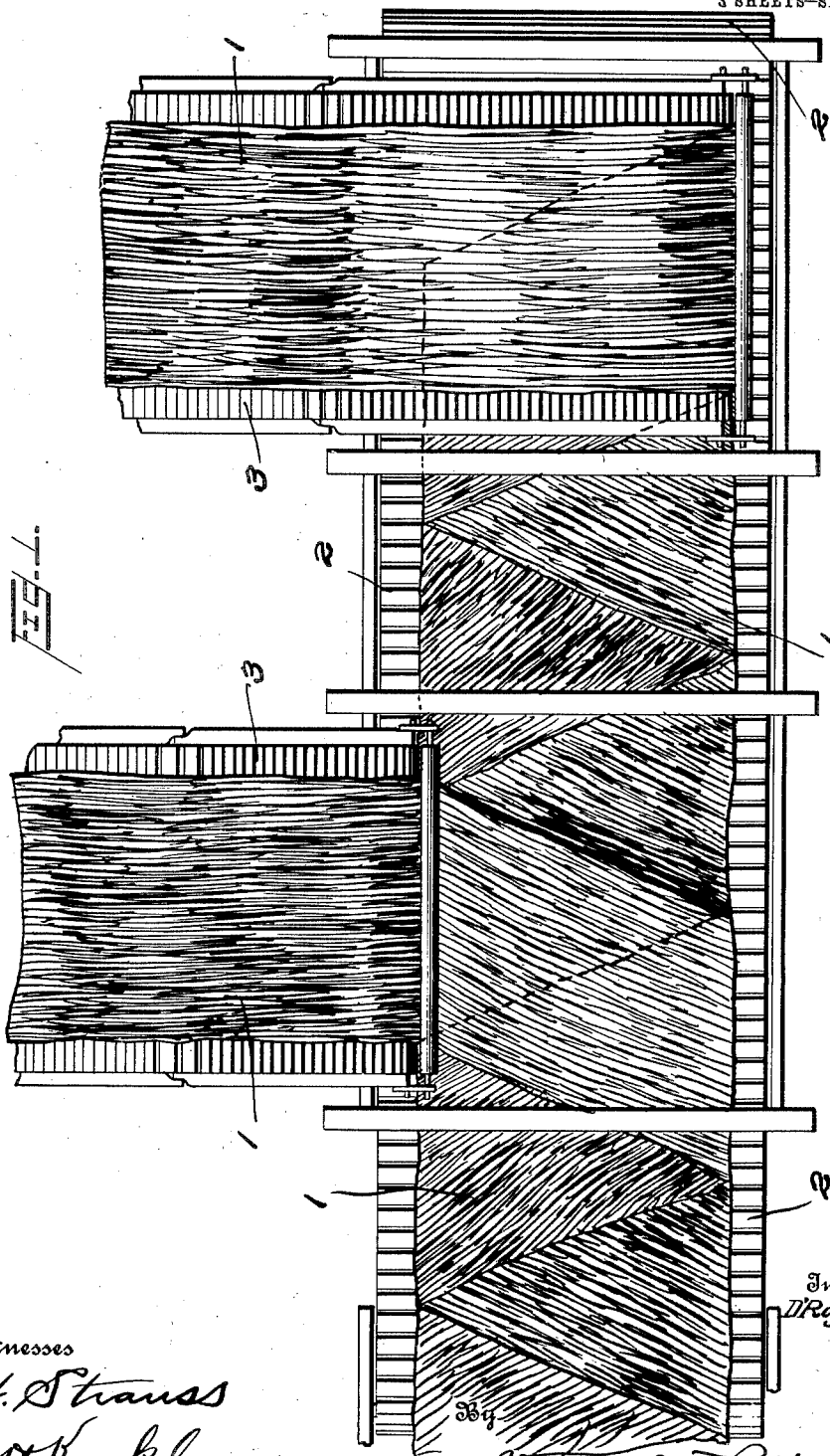


D'ROY F. FOWLER.
METHOD OF MAKING PADDING.
APPLICATION FILED APR. 25, 1912.

1,108,354.

Patented Aug. 25, 1914.

3 SHEETS-SHEET 1.



Witnesses

A. Strauss

R. H. Krenkel

Inventor
D'Roy F. Fowler

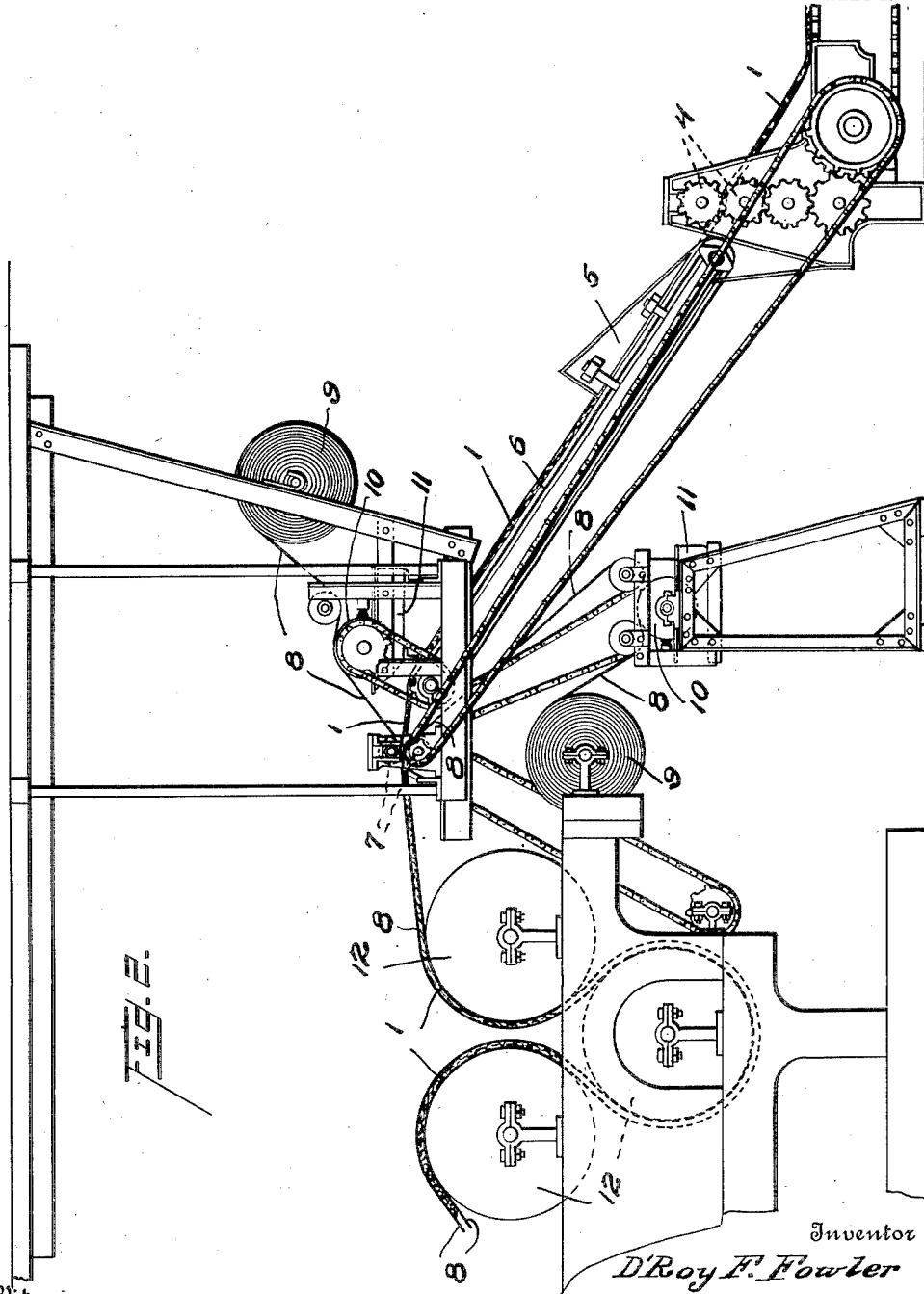
By
Joshua R. H. P. H. Attorney

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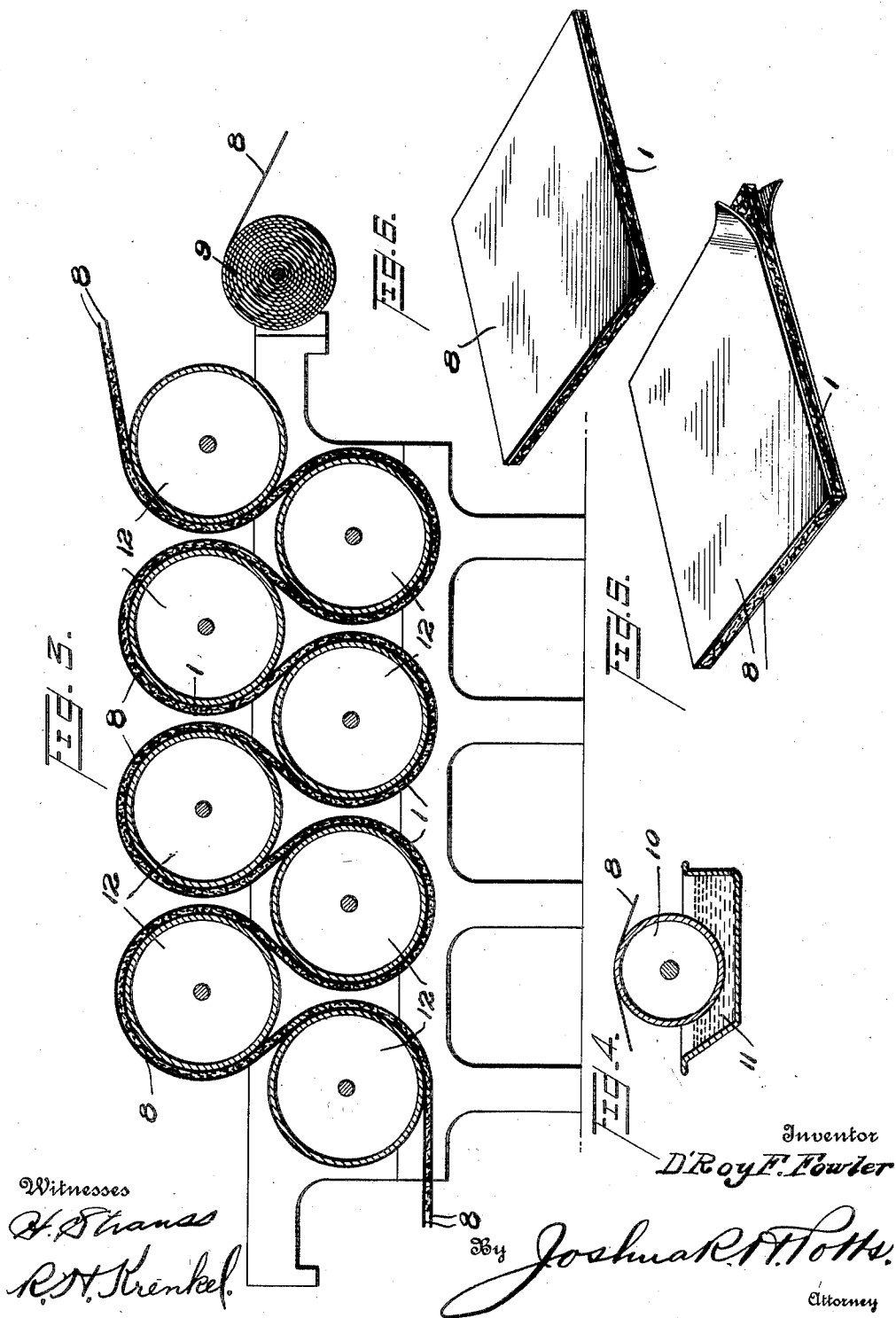
Attorney

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3 SHEETS-SHEET 3.



UNITED STATES PATENT OFFICE.

D'ROY F. FOWLER, OF MELROSE PARK, PENNSYLVANIA.

METHOD OF MAKING PADDING.

1,108,354.

Specification of Letters Patent.

Patented Aug. 25, 1914.

Application filed April 25, 1912. Serial No. 693,075.

To all whom it may concern:

Be it known that I, D'ROY F. FOWLER, a citizen of the United States, residing at Melrose Park, in the county of Montgomery and State of Pennsylvania, have invented certain new and useful Improvements in Methods of Making Padding, of which the following is a specification.

My invention relates to improvements in method of making padding, the object of the invention being to provide an improved series of steps in the operation of forming a padding or "wadding" as it is sometimes called, which results in the production of an improved article adapted for a wide range of usefulness and superior in many respects to articles of a similar nature heretofore in use.

With this and other objects in view, the invention consists in certain novel steps in the method as will be more fully hereinafter described and pointed out in the claim.

The accompanying drawings illustrate a construction permitting the several steps of my improved method to be carried out, and in which;

Figure 1, is a diagrammatic plan view showing the "stock" as it is laid on a movable conveyer, with the fibers of the stock crossing each other. Fig. 2, illustrates in side elevation a machine which receives the stock and applies the paper or other flexible sheet thereto. Fig. 3, is a sectional view illustrating the drying operation of the padding as it comes from the machine shown in Fig. 2. Fig. 4, is a detail view in section illustrating one of the sizing rolls of the machine shown in Fig. 2. Fig. 5, is a fragmentary perspective view of a piece of my improved padding made by my improved method, and Fig. 6, is a similar view of a modified form of padding.

In carrying out my improved method, I employ suitable mechanism for feeding the stock backwardly and forwardly in a transverse direction across, a movable conveyer, whereby the fibers are caused to cross each other. The stock which is illustrated at 1, is preferably of unglazed cotton and jute but of course may be varied at will. As indicated in Fig. 1, the first step of the method is to lay this stock upon an endless conveyer 2, which moves at right angles to suitable mechanisms 3. The ordinary camel-back lapper in connection with any approved Garnett or carding machine is

found very efficient for the purpose. By regulating the speed of the conveyer 2 and the lappers illustrated at 3, two or more being preferably employed, the movement of the lappers backwardly and forwardly in a transverse direction over the conveyer 1, lays the stock in diagonal folds with the fibers crossing each other as shown in Fig. 1.

The next step of the method is carried out by the machine shown in Fig. 2. This machine passes the stock between rolls 4 and guides 5 and up a conveyer 6 to a point between pressing rolls 7 where it forms a juncture with a sheet or sheets 8 of paper or other suitable material. The machine illustrated in Fig. 2 is applying to both sides of the stock, sheets of paper, and of course it is to be understood that but one side of the stock may be supplied with paper if desired. The paper or other material forming the sheet or sheets is fed from rolls 9 to the opposite sides of the stock, and in its passage from the rolls 9 to the rolls 7 is treated on its inner face to sizing. This sizing may, of course, be applied in various ways. I have shown for the purpose rollers 10 which move through sizing baths 11 and apply the sizing to the sheet 8 as it passes over the roll. It may, however, be found that the sizing may be applied in other ways, but in any event, it is applied to the face of the sheet which is brought into contact with the stock. As these sheets and the stock pass between the rolls 7, they are pressed with sufficient force to compel the fibers of the stock to adhere to the sheets.

The next step in the method consists in drying the padding thus formed. This is accomplished by passing the padding over a plurality of steam heated hollow rolls 12. These rolls are revolved and the padding takes a circuitous passage around them as shown most clearly in Fig. 3.

The padding as it comes from the drier is ready for handling, and may be cut or rolled as desired for shipment. As above pointed out, the padding may have sheets at both sides of the stock as shown in Fig. 5, or it may have a single sheet as shown in Fig. 6. In any event, the sheet forms a covering for the stock, strengthens the padding and renders it efficient for many uses, which is not possible with material of a similar nature heretofore made.

Various modifications might be resorted to in the manner of carrying out the steps

in the method and various materials may be used to form the stock and the sheets without departing from my improved method. I therefore consider myself at liberty to make such changes as fairly fall within the spirit and scope of the appended claim.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

The herein described process of making padding consisting in applying superimposed layers of stock consisting of a mixture

of two or more fibrous materials with the fibers of the several layers arranged angularly to each other and then applying sheets of flexible material to the opposite faces of the sheet thus formed, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

D'ROY F. FOWLER.

Witnesses:

S. W. FOSTER,
CHAS. E. POTTS.