

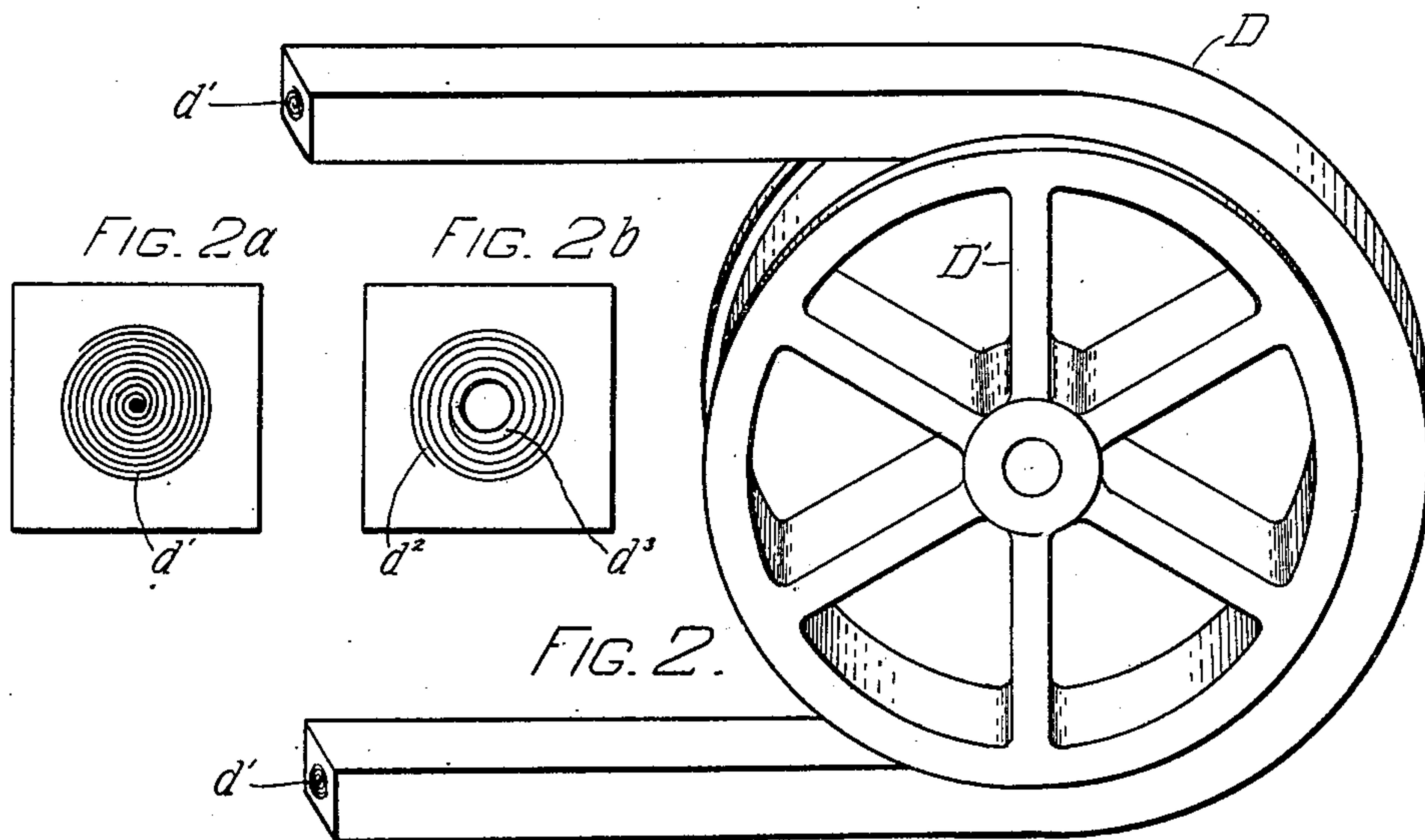
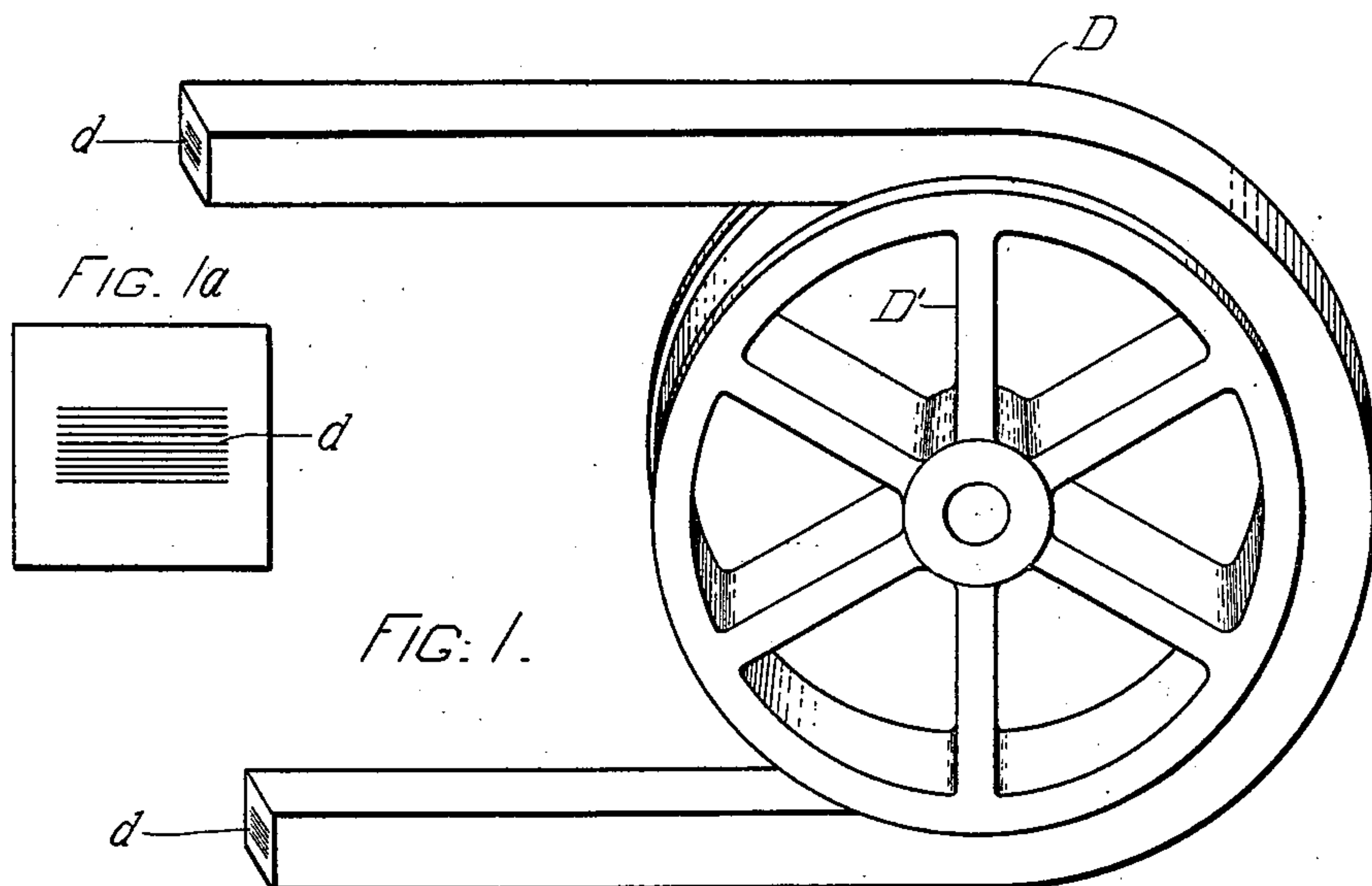
No. 669,252.

Patented Mar. 5, 1901.

J. B. FORSYTH.
DECKLE STRAP.

(Application filed Dec. 13, 1900.)

(No Model.)



WITNESSES

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UNITED STATES PATENT OFFICE.

JAMES BENNETT FORSYTH, OF BOSTON, MASSACHUSETTS.

DECKLE-STRAP.

SPECIFICATION forming part of Letters Patent No. 669,252, dated March 5, 1901.

Application filed December 13, 1900. Serial No. 39,647. (No model.)

To all whom it may concern:

Be it known that I, JAMES BENNETT FORSYTH, of Boston, in the county of Suffolk and State of Massachusetts, have invented an Improved Deckle-Strap, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view illustrating a portion of a deckle-strap as now commonly made, and Fig. 1^a is an enlarged cross-section of such a deckle-strap. Fig. 2 is a similar perspective view illustrating a portion of my improved deckle-strap, and Fig. 2^a is an enlarged cross-section thereof. Fig. 2^b is an enlarged cross-section of a modified form.

Deckle-straps are endless straps rectangular in cross-section, which are supported on antifriction wheels or pulleys along each side of the wire apron of a paper-making machine, the deckle-strap on one side forming one side of a trough and the deckle-strap on the other side forming the other side of that trough, the bottom of which is the wire apron, this wire apron and the two deckle-straps traveling together several feet a second. These deckle-straps were formerly made of strips of canvas sewed together to form an endless strap of proper size and shape in cross-section, but have been long made by covering such a canvas strap with rubber, as shown in Figs. 1 and 1^a. The canvas strips making the core *d* are in practice usually cut bias and united by a thin coating of rubber, and their purpose is to give the proper tensile strength to the completed deckle-strap and yet not make it so stiff that it cannot be readily carried around the two end wheels *D'*, Fig. 3. Deckle-straps as heretofore made (shown in Figs. 1 and 1^a) should be used with the strips of canvas *d* flatwise over the pulleys *D'*, and in practice when one of the faces of the deckle-straps becomes uneven through wear the strap is turned to bring the uneven face innermost and the opposite face outermost, so that the unworn face will run in contact with the wire apron; but when deckle-straps of the kind shown in Figs. 1 and 1^a are worn on two opposite faces the attempt to utilize the third or fourth face not only made the strap so stiff as to be objectionable, but also increased the strain and caused the rub-

ber to crack after comparatively short usage, because of the canvas strips *d* standing edgewise to the pulleys. This has for many years been recognized as an objection to the deckle-straps shown in Figs. 1 and 1^a, and the object of my invention is to do away with that objection and to permit the use in turn of each one of the four sides with equal advantage next to the wire apron, thereby practically doubling the life of a pair of deckle-straps and also making it impossible to apply the deckle-straps with the wrong face next the wire apron, which has heretofore accidentally occurred to the injury of the deckle-straps for the reasons above stated. In my improved deckle-straps the canvas core *d'* is made of a sheet of canvas coated with rubber or the like and rolled up to form a core, the essential matter being to make the deckle-strap equally flexible whichever one of its four faces be used next the wire apron. Preferably I make the core *d'* of canvas cut bias and roll it either on itself or on a small cord of rubber compound, as it is easier to roll it by starting it on a cord-like strip of compound. The core may of course be made hollow, as shown in Fig. 2^b, and the cores *d'* and *d''* may be braided—that is, may consist of several concentric fibrous tubes. In making the hollow core *d''* of canvas cut bias it is more convenient to use a mandrel covered with a tube of rubber *d'''*—that is, one edge of the rubber-coated canvas strip forming core *d''* is first pressed upon the rubber tube on the mandrel, when the canvas strip can be readily and quickly rolled up on the mandrel.

I have shown the deckle-straps square; but they are frequently made with two opposite sides slightly different in width from the other two opposite sides.

What I claim as my invention is—

The improved deckle-strap above described consisting of an endless strap of rubber rectangular in cross-section provided with a core of fibrous material of the same flexibility when bent in any direction, substantially as and for the purposes specified.

JAMES BENNETT FORSYTH.

Witnesses:

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