No. 691,804.

Patented Jan. 28, 1902.

H. PARKER. INDENTED AND PERFORATED MATERIAL.

(Application filed Mar. 29, 1901.)

(No Model.)

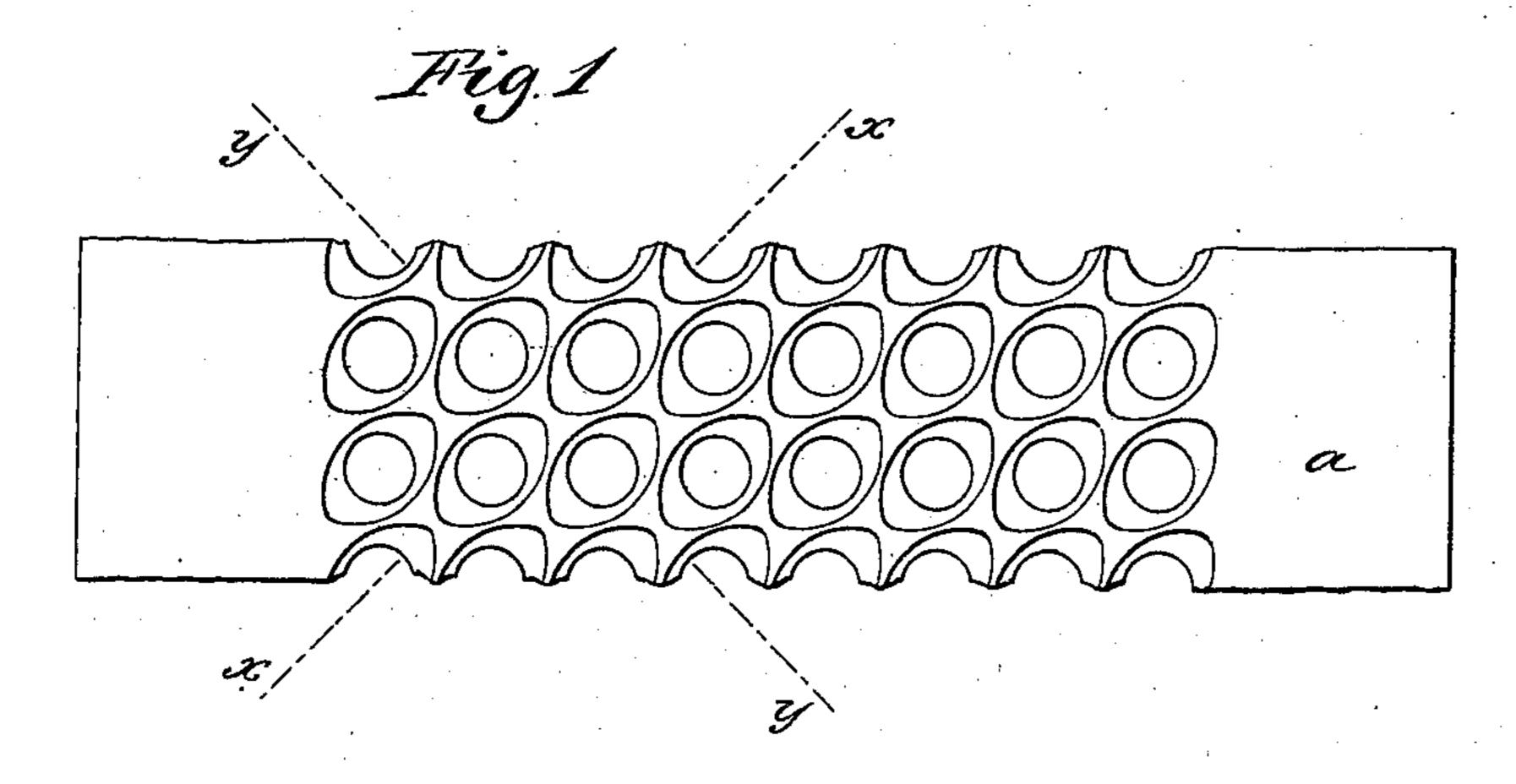


Fig. 2



Fig. 3

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United States Patent Office.

HOWARD PARKER, OF BELLOWS FALLS, VERMONT.

INDENTED AND PERFORATED MATERIAL.

SPECIFICATION forming part of Letters Patent No. 691,804, dated January 28, 1902.

Application filed March 29, 1901. Serial No. 53,535. (No model.)

To all whom it may concern:

Be it known that I, HOWARD PARKER, a citizen of the United States of America, residing at Bellows Falls, in the county of Windham and State of Vermont, have invented a certain new and useful Improvement in Indented and Perforated Material, of which the following is a specification, reference being had to the accompanying drawings, wherein—

Figure 1 is a face view of a hard-rubber belt embodying said improvement. Fig. 2 is a view of the same in vertical section on the plane x x of Fig. 1. Fig. 3 is a view of the same in vertical section on the plane y y of Fig. 1.

The object of the improvement is the production of material in the form of a plate, belt, cylinder, or other desired and useful form having in it a series of neighboring in-20 dentations of a certain shape, with holes in the indentations reaching through to the other side of the material. One function for which a belt thus indented and perforated is of special utility is for supporting a "Fourdrinier 25 wire." These wires are extremely expensive, and when used in connection with the ordi-· nary suction-boxes they are easily torn, so that their life is extremely short. It is important, therefore, for the economical operation 30 of a paper-making machine that some agency be interposed between this wire and the suction-box to relieve the wire of this hard wear, and the belt which is herein shown and described is particularly adaptable for this pur-35 pose.

In the accompanying drawings, the letter a denotes the material—in this instance a belt of hard rubber. In the surface of this belt there are neighboring indentations of the same general shape. These indentations are longer than they are wide. They have bottoms

curved from end to end. By preference they are pointed at two opposite ends, and they have perforations extending through the material. In the case of such an indented and 45 perforated rubber belt underlying a Fourdrinier wire the former gives the latter perfect support against the suction to which the Fourdrinier wire is subjected in use. The indentations are by preference so located that 50 those of one row lap past those of the next row. Consider the rows lying in the direction of the dotted line x x, and this overlapping is apparent. It is a feature which helps to prevent the formation of water-mark in the 55 paper. The holes in the bottom of the indentations are preferably round. Through these holes the water drawn from the pulp escapes.

I claim as my improvement—

1. Material having in its surface a series 60 of neighboring indentations having bottoms curved from end to end with round holes in the indentations reaching through to the opposite side of the material.

2. Material having in its surface a series 65 of neighboring indentations having bottoms curved from end to end, approximately pointed at two opposite ends in surface outline, and with holes in the indentations reaching through to the opposite side of the material. 70

3. Material having in its surface a series of neighboring indentations having bottoms curved from end to end, approximately pointed at two opposite ends in surface outline, one row of indentations lapping the next row 75 and with holes in the indentations reaching through to the opposite side of the material.

HOWARD PARKER.

Witnesses:

BERTHA I. CAPRAU, CHARLES H. ROBB.