(No Model.)

G. CONKLING.

BELT FOR ORE SEPARATORS.

No. 423,906. Patented Mar. 25, 1890.

Fig. 1.

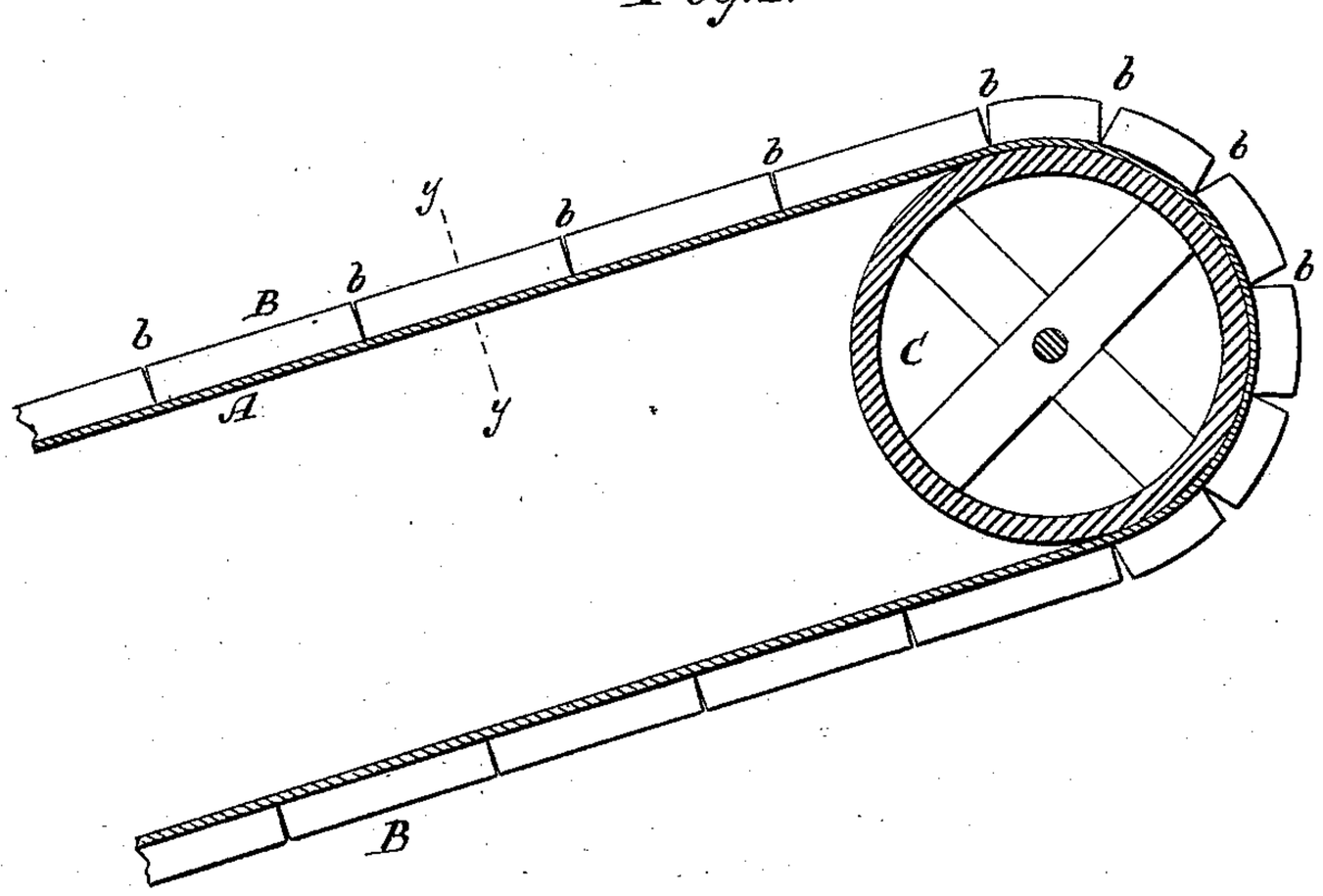


Fig. 2.

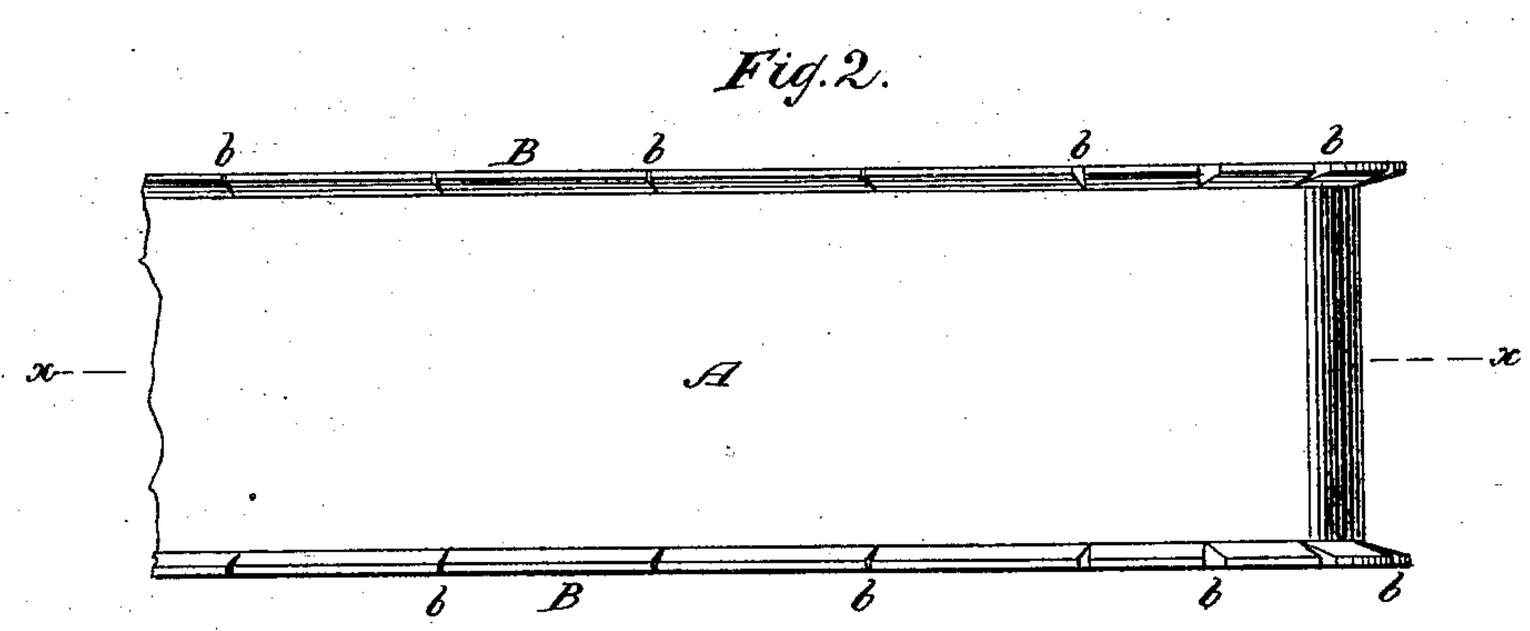
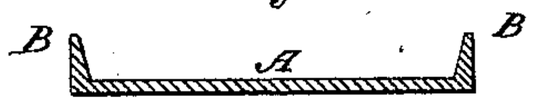


Fig. 3.



WITNESSES:

Eduard Wolff.
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INVENTOR:

Gurdon Conkling.

BY
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his ATTORNEYS

UNITED STATES PATENT OFFICE.

GURDON CONKLING, OF GLENS FALLS, NEW YORK.

BELT FOR ORE-SEPARATORS.

SPECIFICATION forming part of Letters Patent No. 423,906, dated March 25, 1890.

Application filed May 29, 1889. Serial No. 312,563. (No model.)

To all whom it may concern:

Be it known that I, GURDON CONKLING, a citizen of the United States, residing at Glens Falls, in the county of Warren and State of New York, have invented new and useful Improvements in Belts for Ore-Separators and other Articles, of which the following is a specification.

This invention has for its object to provide a novel conveying-belt especially designed for magnetic ore-separators; and it consists in a belt composed of a sheet of fibrous material—such as leather—formed integral with a longitudinal rim at each edge, which is slitted at intervals, and, as shown, is tapering from the surface of the belt outward to facilitate its correct working around pulleys.

The invention is illustrated by the accompanying drawings, in which—

Figure 1 represents a longitudinal section in the plane *x x*, Fig. 2. Fig. 2 is a plan or top view. Fig. 3 is a transverse section in the plane *y y*, Fig. 1.

Similar letters indicate corresponding parts.

In the drawings, the letter A designates a belt, which is composed of a continuous sheet of leather or other pliable and fibrous fabric formed integral at each edge with a rim or flange B, slitted at intervals, as at *b*, and of gradually-reduced thickness from its base to its outer edge, so that such rim or flange tapers outwardly from the surface of the belt-body. This construction is such that when the belt is stretched over a pulley the slits will enable the rims to accommodate themselves to the curvature of the pulley. If the rims of the belt are made without the slits or incisions *b b*, their height must necessarily be very limited, and even if the rims are made only half an inch high and the belt is stretched over pulleys, the extra strain to which the rims are exposed while passing round the pulleys, causes said rims to become torn in a short time. This disadvantage is obviated by my invention. If the belt A passes round a pulley C, the incisions *b b* permit the rims B to accommodate themselves to the curvature of the pulley, while in those portions of the rims which are stretched in right lines the incisions *b b* close up, so that the material carried by the belt is retained thereon by the rims B B.

From this description it will be readily understood that the rims B B of my belt may be made of considerable height, so that if the belt is used in an ore-separator or for similar purposes a mass of ore of the depth of several inches may be placed upon the belt without danger of spilling.

I am aware that conveying-belts have been composed of transverse wires arranged side by side and bent up at the ends to form side rims, and I am also aware that conveying-belts have been provided with side rims formed by sections hinged together, and finally that overlapping metallic pieces have been riveted to each edge of a belt to form side rims. Such constructions, therefore, I do not claim.

What I claim as new, and desire to secure by Letters Patent, is—

1. A conveying-belt composed of a sheet of fibrous material formed integral with side rims slitted at intervals, substantially as shown and described.

2. A conveying-belt composed of a sheet of material formed integral at each edge with a rim slitted at intervals, substantially as described.

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

GURDON CONKLING.

Witnesses:
JOHN VAN SANTVOORD,
ERNST F. KASTENHUBER.