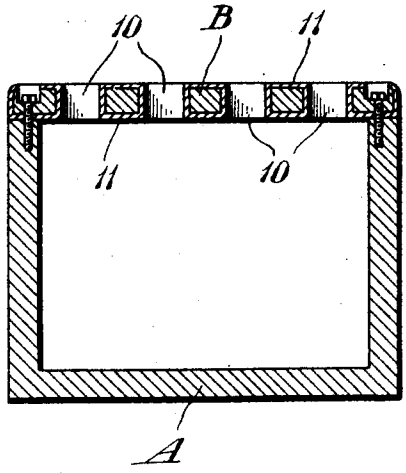
Feb. 19, 1929. 1,703,010

G. J. MANSON

SUCTION BOX

Filed Dec. 8, 1927



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Patented Feb. 19, 1929. 1,703,010

UNITED STATES PATENT OFFICE.

GEORGE JAMES MANSON, OF HAWKESBURY, ONTARIO, CANADA.

SUCTION BOX.

Application filed December 8, 1927. Serial No. 238,657.

This invention relates to improvements in suction boxes for pulp and paper machines, and the objects of the invention are to increase the life of the wire or felt passing over the suction box and to facilitate the operation of pulp and paper machines.

Suction box covers for suction boxes on pulp and paper machines have been made from wood in various forms and from hard rubber. These wear rapidly and unevenly. The wires or felts carrying the pulp fibres travel across the suction box top at a high rate of speed and are held against the top face of the suction box by the difference in pressure between the inside and outside of the box.

Unless the top of the suction box is smooth and free from grooves and ridges the wires or felts wear rapidly. As the wear at the suction box face is a main factor in the life of the wires or felts, a smooth face on this cover increases the life of the wire and so decreases the cost of operation.

I find that with a suction box top made of steel, suitably slotted or grooved to allow for the passage of air and water, covered with a coat of enamel, wears much more slowly than any material at present used. Various metals can be substituted for steel to carry the coat of enamel but I prefer to use steel as it is the cheapest and strongest material. When the plate is enamelled of course the enamel will enter the holes or slots and completely cover both faces and edges of the plate.

For a more complete understanding of the invention, reference is made to the accompanying specification and drawings.

The drawing shows a transverse section through a suction box embodying the present invention.

Referring to the drawings, A indicates the suction box and B the top thereof, which is formed with slots 10 of suitable form to allow for the passage of air and water in the usual way.

In accordance with the present invention, the top B is formed from metal having a coating 11 of enamel, which covers both surfaces and the slots, whereby the enamel will form the contacting surface with the felt or wire passing over the box.

As many changes could be made in the above construction, and many apparently widely different embodiments of my invention, within the scope of the claim, constructed without departing from the spirit or scope thereof, it is intended that all matter contained in the accompanying specification and drawings shall be interpreted as illustrative and not in a limiting sense.

What I claim as my invention is:

A suction box for pulp and paper machines having a slotted metal top and a surface layer of enamel completely covering the entire exposed surface thereof.

In witness whereof I have hereunto set my hand.

GEORGE JAMES MANSON.