

D. P. SANDERS.

MOLD SANDER.

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956,829.

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Fig. 1.

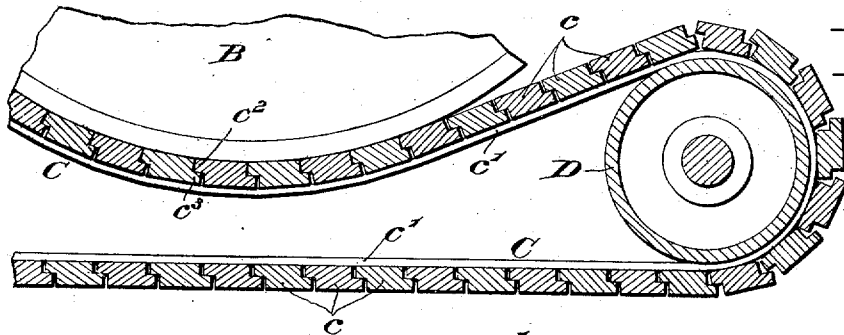
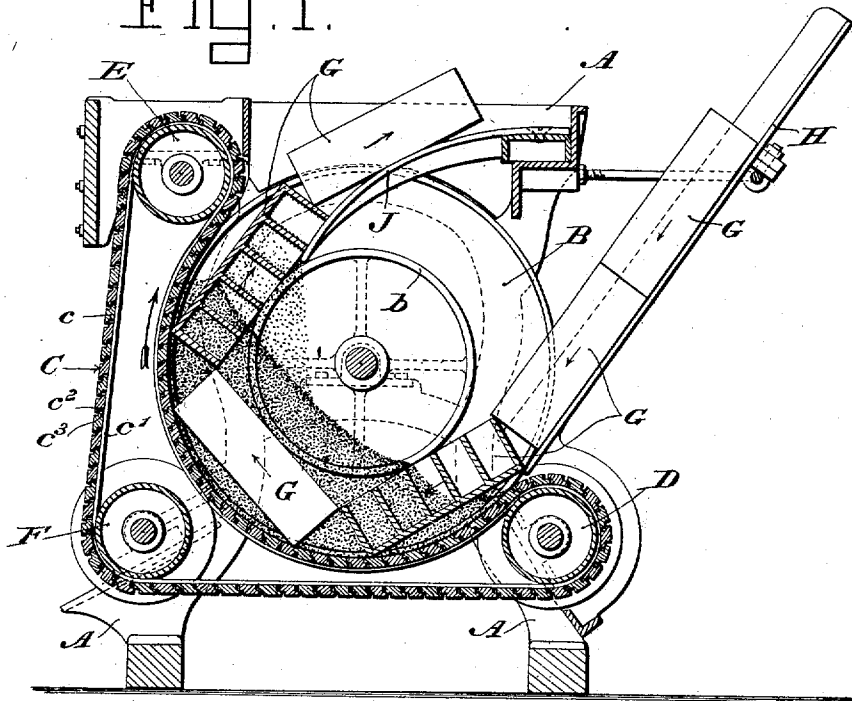


Fig. 2.

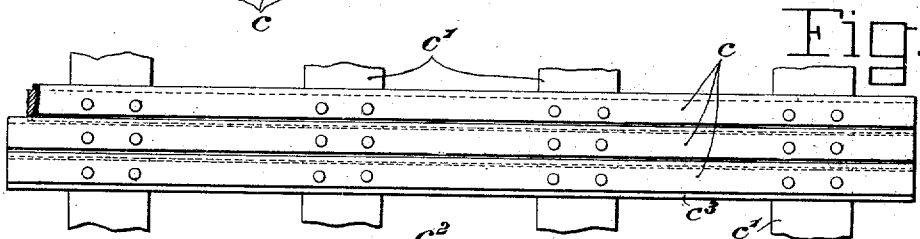


Fig. 3.

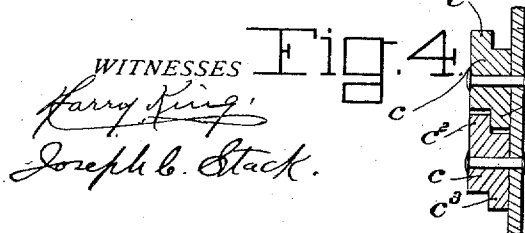


Fig. 4.

WITNESSES

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UNITED STATES PATENT OFFICE.

DAVID P. SANDERS, OF LANCASTER, PENNSYLVANIA.

MOLD-SANDER.

956,829.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, DAVID P. SANDERS, a citizen of the United States, residing at Lancaster, in the county of Lancaster and State of Pennsylvania, have invented certain new and useful Improvements in Mold-Sanders; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to mold-sanding machines in which the sand is contained in the hollow of an endless apron which passes around under guide-wheels and conveys the molds through the sand by holding them between the apron and lateral flanges on said wheels.

The object of the invention is to increase the efficiency of such machines by an improvement in the apron.

In the accompanying drawings, which form a part of this specification: Figure 1 is a cross-section of a mold-sanding machine having my improved apron applied thereto. Fig. 2 is an enlarged cross-section of the apron. Fig. 3 is a plan view of a fragment of the apron. Fig. 4 is a detail cross-section taken through the fastenings of the slats of the apron to one of the belts thereof.

A indicates the frame of the machine.

B is one of the main guide-wheels, the duplicate of which does not appear.

C is the endless apron which bears against the wide rims of the wheels, passing under the same and rearwardly upward to form a receptacle for the supply of sand.

D, E and F are the guide-rollers around which the apron passes; the bearings for the roll F being provided with adjusting devices for tensioning the apron. Power is or may be applied at a pulley (not shown) on the shaft of roll E.

G indicates the brick-molds.

H denotes an inclined chute at the front of the machine for guiding the molds down onto the apron, said chute being formed by a pair of angle beams only one of which appears in the drawings.

J is one of the pair of curved arms attached to the upper front cross-member of the machine-frame and projecting inward and downward to a point where they will

extend under the molds as the latter are brought up by the apron.

In operation, as well understood, the molds are successively guided down the chute H into the space between the apron C and annular flanges *b* on the inner faces of the wheels B, and, the apron being in motion, the molds are caught between it and said flanges, and are carried thereby into the quantity of sand previously deposited in the hollow or concavity of the apron, which sand falls back into and fills the molds and spills out again as the molds come up in an inverted position over the arms J, from which they are taken by an attendant.

Referring now to the endless apron C, wherein my improvement resides, the same is composed of wood or metal slats *c*, preferably hard wood slats such as maple or oak, arranged transversely of and fastened preferably by riveting upon endless belts *c*¹ of canvas or other suitable strong and flexible material. The slats are arranged close together and are formed with stepped or rabbeted edges, undercut at one side and overcut at the opposite side, forming upper flanges *c*² and lower flanges *c*³ on opposite edges, each flange being preferably of about half the thickness of the slat. They are arranged so that the rabbeted edge of each slat fits the adjacent edge of the next slat, the flanges *c*² making lap-joints with the flanges *c*³. By this construction, the slats compose a continuous hard wood flooring and present a smooth surface on the concave side of the apron where it passes around the wheels B and forms a receptacle for the sand, the cracks between the slats being tightly closed and excluding admission of sand. I do not confine myself however to interfitting rabbeted edges, though they are preferred; the apron may be composed of plain slats of wood or metal, in that case being covered with canvas or similar material.

Heretofore machines of this character have been used with an apron or belt made of canvas, usually four-ply and stiffened by means of steel braces running across the belt. Such belts would last only about a year, whereas my hard wood or metal apron will last several times as long, and is so constructed that it can be repaired and kept in condition, since in case of excessive wear on

any portion of the apron some of the slats can be removed and new slats inserted.

Having thus described my invention, what I claim is:

5 1. In a mold-sander, an endless mold-conveying apron guided to form a concavity for sand and composed of closely-arranged flexibly-connected slats which abut and close joints when concaved to receive the sand
10 and convey the molds.

2. In a mold-sander, an endless mold-conveying apron guided to form a concavity for sand and composed of flexibly-connected slats having interfitting rabbeted edges making lapped upper and lower flanges on adjacent edges of contiguous slats.
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3. In a mold-sander, an endless mold-conveying apron guided to form a concavity for sand and composed of slats arranged transversely of and fastened upon endless flexible belts, the slats being arranged to form a continuous smooth surface on the concave side of the curved run of the apron, thereby preventing the falling of sand between the slats.
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4. In a mold-sander, an endless mold-conveying apron guided to form a concavity for sand and composed of closely-arranged flexi-

bly-connected hard wood slats, the apron in its concavity conveying the molds and retaining the sand.

5. In a mold-sander, an endless mold-conveying apron guided to form a concavity for sand and composed of flexibly-connected hard wood slats having interfitting rabbeted edges making lapped upper and lower flanges on adjacent edges of contiguous hard wood slats.
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6. In a mold-sander, an endless mold-conveying apron guided to form a concavity for sand and composed of hard wood slats arranged transversely of and fastened upon endless flexible belts, the hard wood slats being arranged to form a continuous smooth surface on the concave side of the curved run of the apron to convey the molds and to retain the sand upon and prevent its falling through the apron.
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In testimony whereof I affix my signature, in presence of two witnesses.

DAVID P. SANDERS.

Witnesses:

HARRY ALLEN WEBSTER,
M. H. DIFFENBAUGH.