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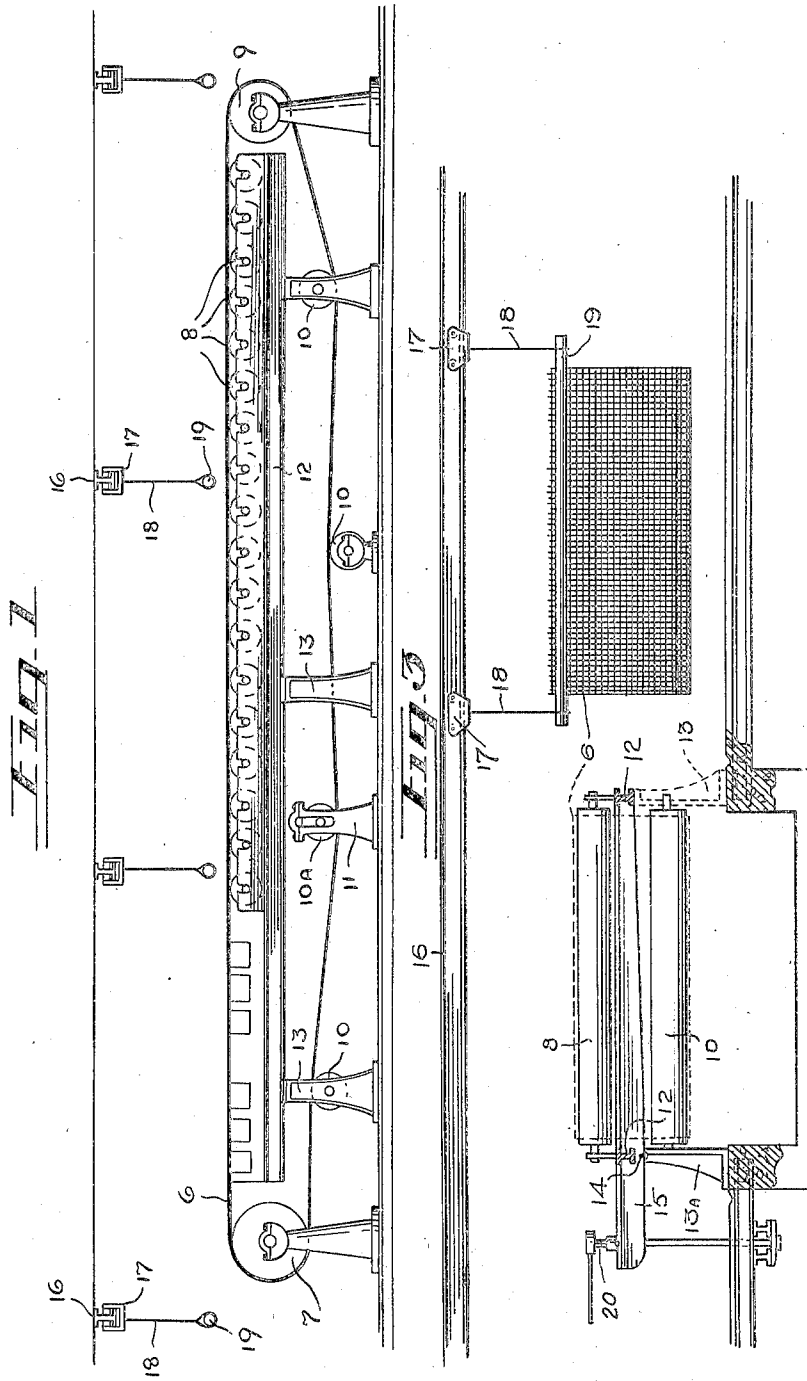
W. E. BEADLE

1,738,520

PAPER DRYING MACHINERY

Filed April 11, 1928

2 Sheets-Sheet 1



INVENTOR

Warren E. Beadle

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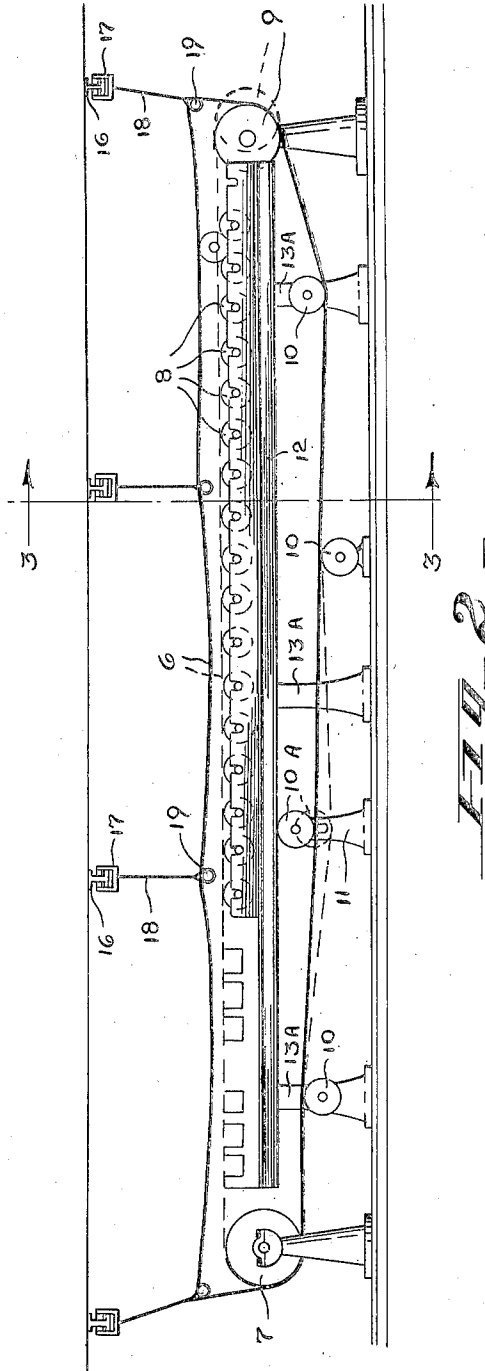
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PAPER-DRYING MACHINERY

Application filed April 11, 1928. Serial No. 269,251.

This invention relates to new and useful improvements in a paper-drying device as used in connection with paper-making machines and an object is to proceed in such manner and adapt such elements that will expedite the changing process.

Other objects and many of the attendant advantages will be readily appreciated as the invention becomes better understood from a consideration of the illustrative embodiments of the same and for which purpose such descriptive drawings have been hereto appended wherein:

Fig. 1 is an elevation of the machine and co-acting elements.

Fig. 2 is a side elevation of the machine showing the changing process in procedure.

Fig. 3 is a section on the plane of line 3—3, Fig. 2 looking in the direction indicated.

Referring more in detail to the drawings in which similar reference numerals designate the corresponding elements throughout the several views—

It will be seen that the endless, conveyor-wire 6 which often has to be replaced and onto which the paper stock from the head-box of the paper machine is delivered, is of very fine mesh-screen and requires careful handling combined with the quickest operation when being placed. This conveyor 6 is disposed around and over the couch or drive roll 7, over the table-rolls 8, around the breast-roll 9 and over and under the lower rolls 10 in alternate order and is normally kept taut by the effect of the stretch-roll 10A which is vertically movable within the slotted bearing-posts 11. The table-rolls are borne in suitable bearings carried by the table-frame 12 which is supported by suitable pillars 13 disposed therebeneath, at intervals along the sides of the frame. This table frame 12 is pivotally connected as at 14 to the pillars 13A disposed along one side thereof and has certain cross-beams 15 laterally extending beyond said pillars 13A in a manner to be rockable thereon by the effect of said pivots 14.

Tracks 16 are positioned above this conveyor-device and in crosswise relation to the length thereof and each of these tracks operably carries trucks 17 from each of which

depends a suitable bar or the like 18, which bars co-act and support the horizontally disposed rods 19.

How to perform this process of changing with the use of the elements comprising this invention will hereinafter be made clear.

In proceeding with the operation of changing the mesh-screen conveyor 6, the old and used conveyor-wire is removed, then the screw element 20 is operated in a manner to effect and depress the laterally extending extremities of the cross beams 15 which rock upon the pivot elements 14 in a manner that their other ends in connection with the table frame and its dependent parts, are raised to such extent to permit the temporary removal of the pillars 13 disposed along the one side of the machine. Those bearing posts of the lower-rolls 10 and which are disposed along the said one side of the machine are also removed and the breast-roll 9 is temporarily moved in toward the end of the table frame. The stretcher-roll 10A is moved to raised position and all as shown in Fig. 2 of the drawings.

Now the new mesh-screen conveyor 6 is suspended in normal, working position upon the rods 19 carried by the trucks 17 and disposed to the side of the machine. When positioned, the trucks 17 are run along the tracks 16 to cover the machine, carrying with them the conveyor 6 which passes into working relation with the rollers from the side. Then the carrier device is released of the conveyor wire 6 which rests in working relation with the rolls which are returned to normal, operating position with their bearing posts. Now the pillars 13 are replaced and the table-frame 12 is allowed to bear thereon as the screw-element is released from the laterally extending extremities of the cross-beams 15 and the machine is ready to again function.

It will be readily seen that this invention comprises a great improvement in "paper-drying machines" for to facilitate changing the conveyor wire thereof and whilst the preferred embodiments have been described yet it is to be understood that minor changes in the construction and arrangement of the co-operating elements may be resorted to within

the scope of what is claimed without departing from the spirit of the invention.

What I claim:

5 1. A paper-drying device comprising a table-frame, said frame having cross-beams, said cross beams laterally extending beyond one side of said frame; pillars supporting said frame, said pillars being disposed at intervals beneath the side of said frame, said pillars at said one side of said frame, pivotally bearing said cross-beams in a manner that such beams are rockable thereon rendering said table frame hingeable; and a mesh-screen conveyor disposed over and around said table frame as and for the purpose specified.

10 2. A paper-drying device comprising a table-frame, said frame having cross-beams, said cross beams laterally extending beyond one side of said frame; table-rolls carried by said frame; a drive roll disposed at one end of said frame; a breast roll disposed at other end of said frame; pillars supporting said frame, said pillars being disposed at intervals beneath the sides of said frame, said pillars at said one-side of said frame, pivotally bearing said cross-beams in a manner that such beams are rockable thereon rendering the connected table frame hingeable; and a mesh-screen conveyor disposed over and around said frame and in operable bearing with said rolls as and for the purpose specified.

In testimony whereof I affix my signature.
WARREN E. BEADLE.