J. D. YOST.

MACHINES FOR RECEIVING AND DRYING SHEETS FROM PRINTING-PRESSES.

No. 181,387. Patented Aug. 22, 1876.

Fig. 1.

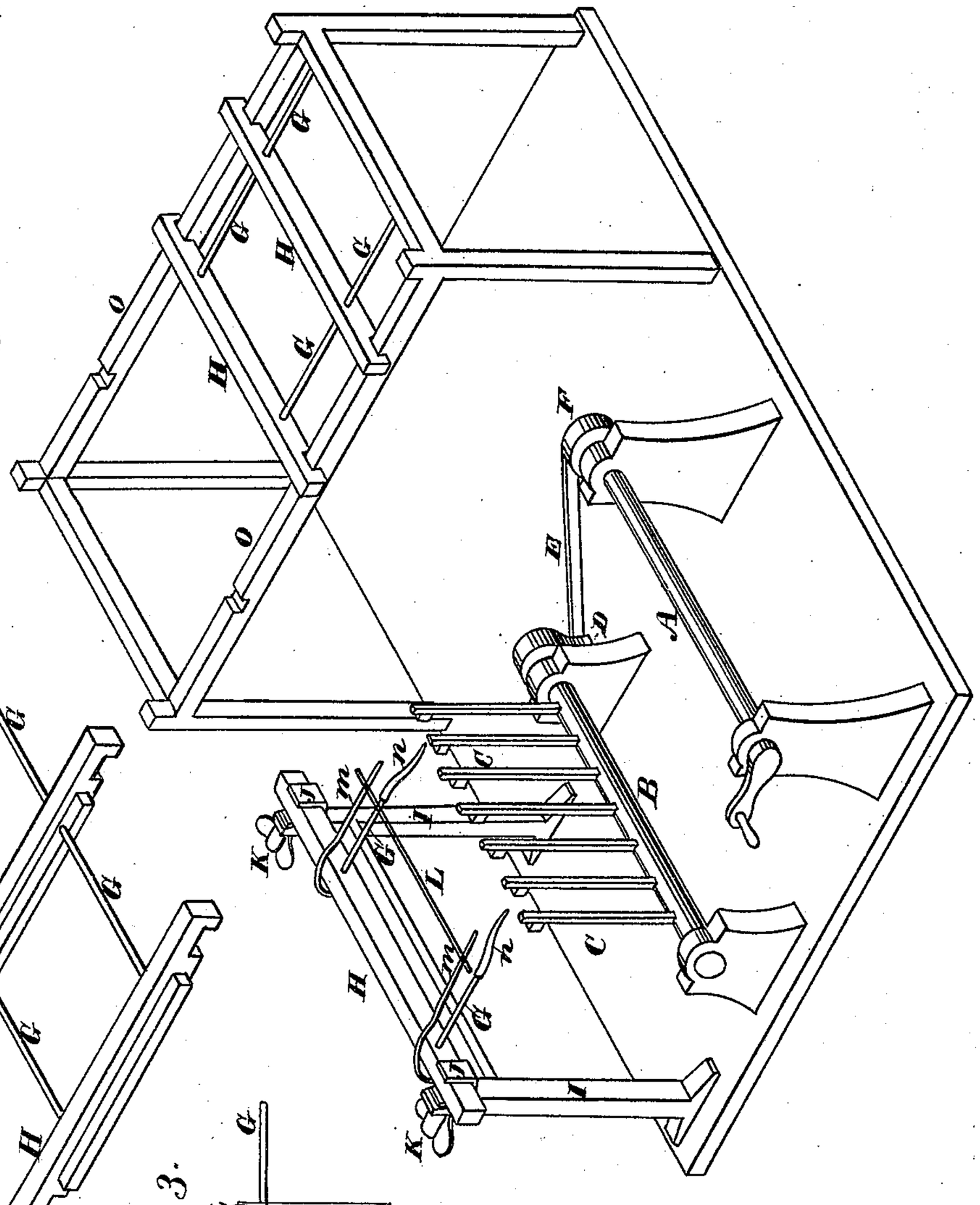
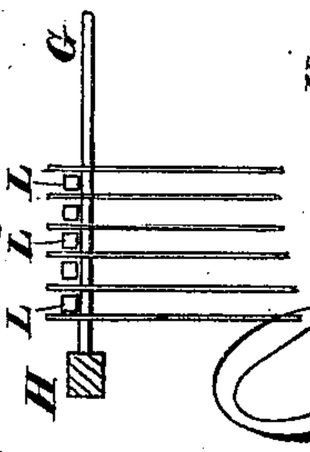



Fig. 2.




Fig. 3.

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## IMPROVEMENT IN MACHINES FOR RECEIVING AND DRYING SHEETS FROM PRINTING-PRESSES.

Specification forming part of Letters Patent No. **181,387**, dated August 22, 1876; application filed June 13, 1876.

*To all whom it may concern:*

Be it known that I, JOHN D. YOST, of the city and county of San Francisco, State of California, have invented certain new and useful Improvements in Receiving and Drying Sheets from Printing-Presses; and I do hereby declare the following description and accompanying drawings are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use my said invention without further invention or experiment.

My invention relates to a novel means for receiving and supporting printed sheets after they leave the press, so that they shall be hung in the least possible space without touching each other, until they are dry enough to be packed.

In certain classes of printing, as of labels in colors, and where a heavy sizing or gloss is used upon the sheets, it is imperatively necessary that the sheets be so placed that their faces can dry for some days without being touched; otherwise the gloss will be ruined, and if piled up they will stick together, and it will be impossible to separate them without mutilating them more or less. It has, therefore, been customary to remove each sheet from the receiving-table as soon as it is placed thereon by the flies, and these sheets are usually attached in pairs, back to back, and hung on lines stretched across the room till dry.

My invention consists in receiving the sheets directly from the flies upon supporting-rods, so that they hang vertically, and are just sufficiently separated to prevent their touching, as will be more fully described in the accompanying drawings, in which—

Figure 1 is a perspective view of my device. Figs. 2 and 3 are detailed views of parts of the machine.

A is the shaft upon which the cylinder of the press is supported and revolved. B is a shaft, from which the arms C of the flies project; and this shaft has an oscillating motion imparted to it by means of a crank, D, upon its end, this crank being operated by means of a connecting-rod, E, from a cam, F, upon the end of the cylinder-shaft, so constructed that the arms C, instead of laying the sheets which reach them from the cylinder upon a horizontal table, in the usual manner, will only have sufficient motion to carry the sheets from the point where they are received to a nearly vertical position, where they are transferred to the supporting-rods G. These rods are made of any suitable length, usually holding upward of a hundred sheets, and they project from a stout bar, H, which is supported upon a stand, I, in the proper position at the back of the machine. The stand has sockets J for receiving the bars H, and these sockets are provided with adjusting-screws K, by which the rods are gradually raised as the weight of the sheets becomes greater, as will be more fully described hereafter. In order to keep the sheets separate as they are received upon the rods, I employ narrow strips of wood, L, one of which is placed behind each sheet as it is received upon the rods, until the frame is full, when they may be removed and used upon the next one. In order to support these strips in a convenient position, so that they can be readily placed upon the rods G as the sheets are received, two light bars, *m*, are hinged to some part of the standard, so that they can be thrown back and hang down out of the way, until the bars H are placed in position. The bars *m* are then thrown forward, and will extend above the rods G, so as to support the strips L out of the way of the sheets. I prefer to use removable points *n* to receive the sheets, and these points are slipped upon the ends of the rods G, when they are in place, and removed after the frame is full. When large sheets are thrown off by the flies the tendency is to form a curve, and if such sheets were received upon straight rods G the curve would remain in the sheet, and by reason of hanging thus loosely they would touch each other and partially defeat the object of my invention. I therefore form the points *n* with a double curve in each, as shown, and as the extreme points will thus be nearer to each other than the rods G, it will be seen that as the sheets are pushed back upon the rods they will be drawn out straight, so as not to touch each other.

As before described, the rods G are adjusted by screws as the weight of the sheets upon them increases, so that their outer ends will

always stand at the same height. This is to make the points *n* enter each sheet at about the same distance from the margin, and not injure the sheet inside of this waste margin. The sheets are thus received upon the rods with a rapidity equal to that with which they could be thrown upon the table by the flies, and it is only necessary to remove the frames to the longitudinal supports *o*, where their ends are supported. The back of each bar H has a slot or small projection, so that when they are laid upon the supports *o* the ends of the rods G will be supported in each case upon the projection on the bar previously suspended. By this or equivalent means I am enabled to suspend my sheets directly from the press, and they are not disturbed until they are dry enough for packing.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The bars H, having the projecting rods G, in combination with the frame O, the rods of each bar being supported upon the preceding bar, substantially as and for the purpose set forth.

2. The sockets J, with adjusting-screws K, in combination with the bars H, for the purpose and substantially as herein described.

3. In combination with a device for receiving the sheets directly from the press, as shown, the strips L, for separating the sheets, substantially as and for the purpose herein described.

4. The hinged bars *m*, in combination with the rods G and strips L, substantially as herein described.

5. The removable points *n*, for receiving the sheets, said points having their extremities drawn toward each other, so that the sheets will be straightened as they are carried back upon the rods G, substantially as herein described.

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Witnesses:
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