

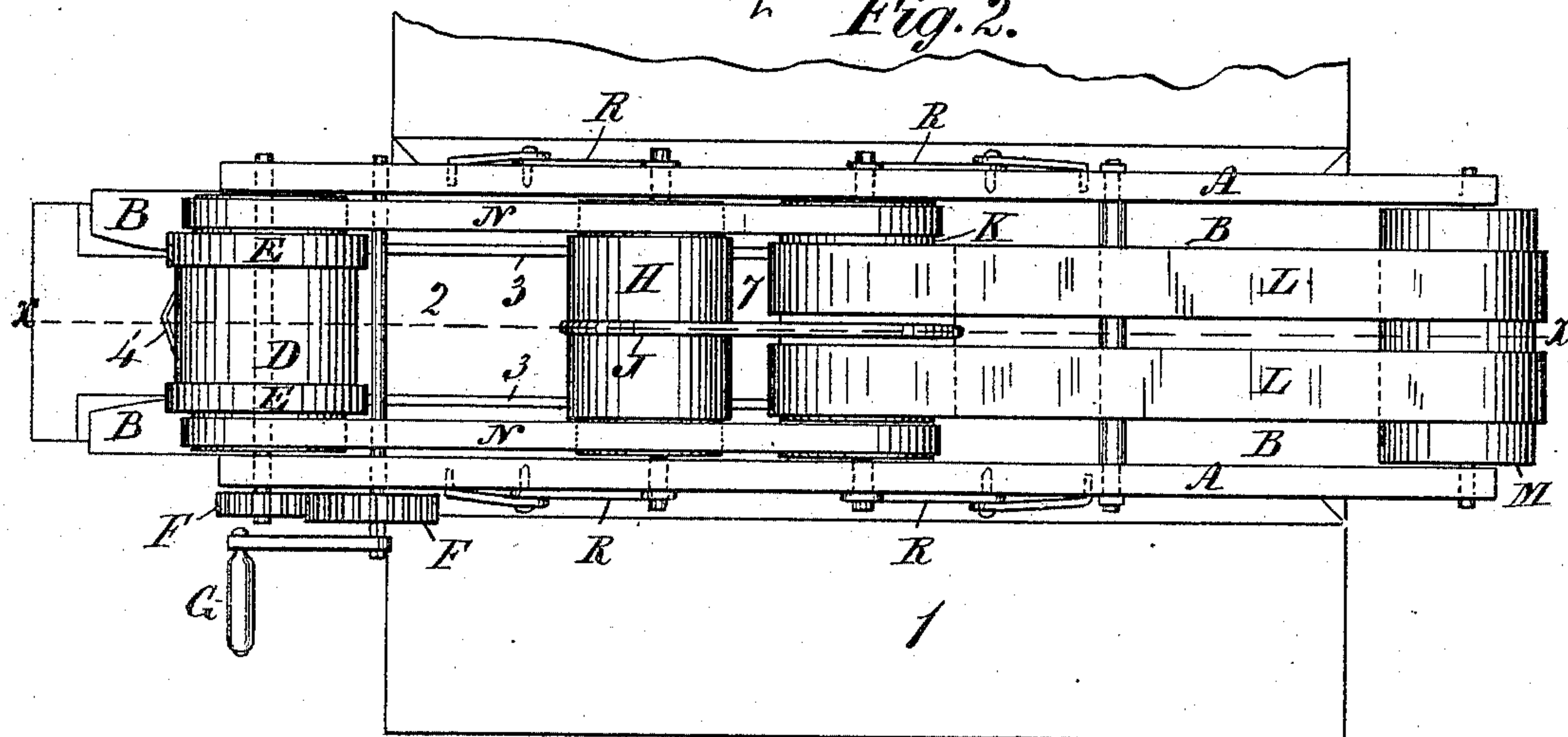
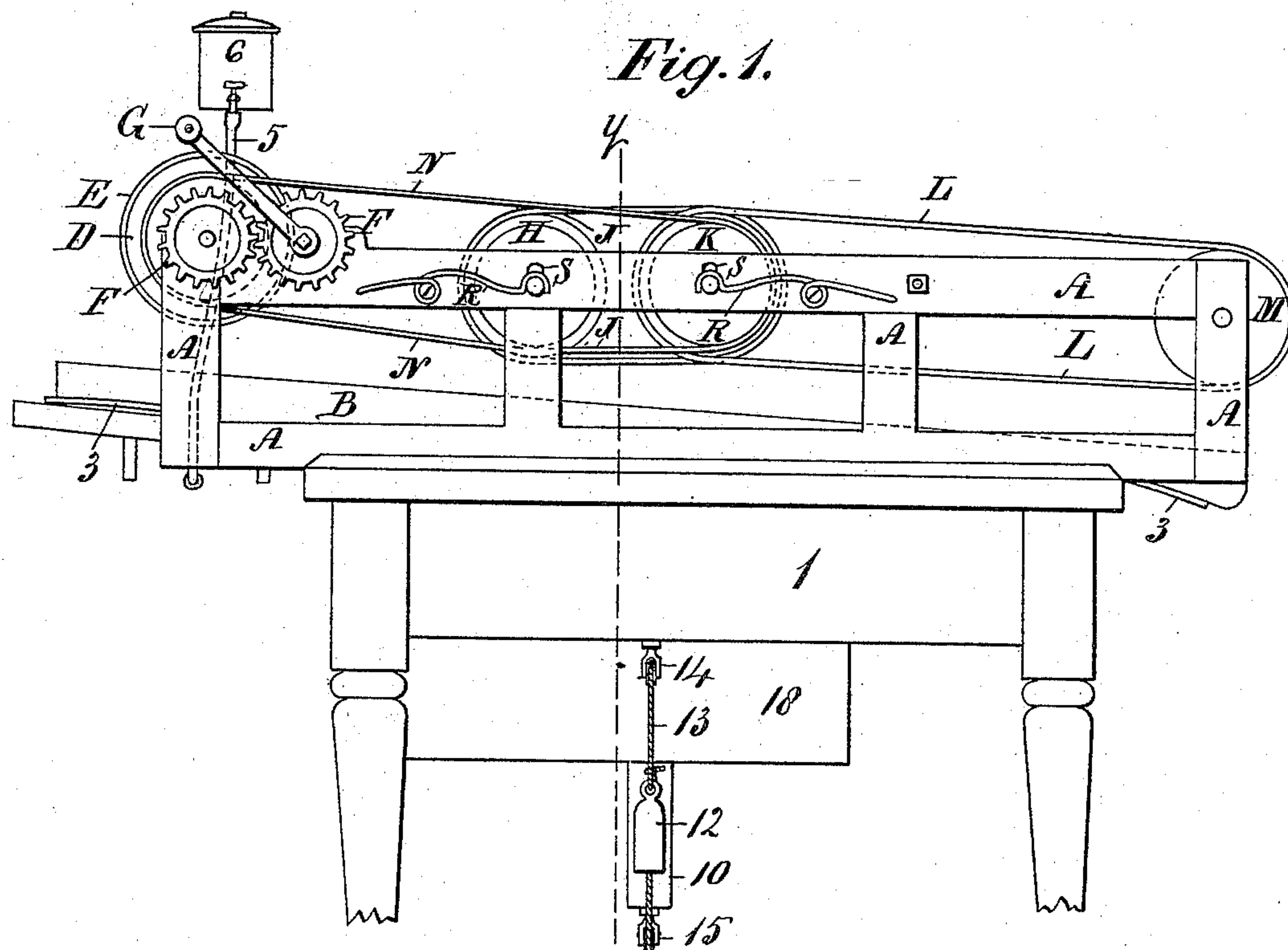
(No Model.)

3 Sheets—Sheet 1.

F. X. GAUDRIE.
CAN LABELING MACHINE.

No. 488,273.

Patented Dec. 20, 1892.



Witnesses:
John Grist
Attorney.

Inventor:
Francis X. Gaudrie
By Henry Grist
Attorney.

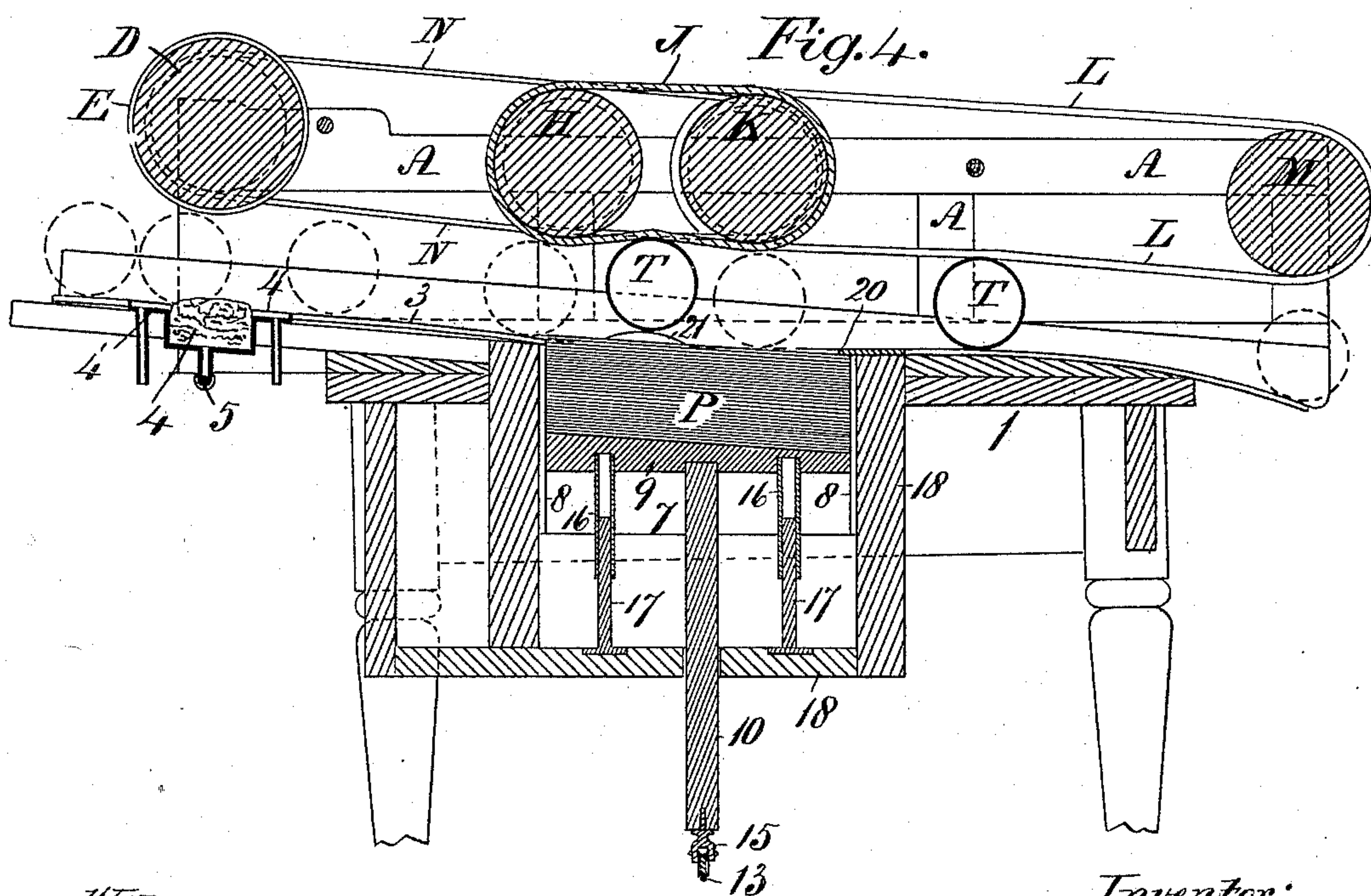
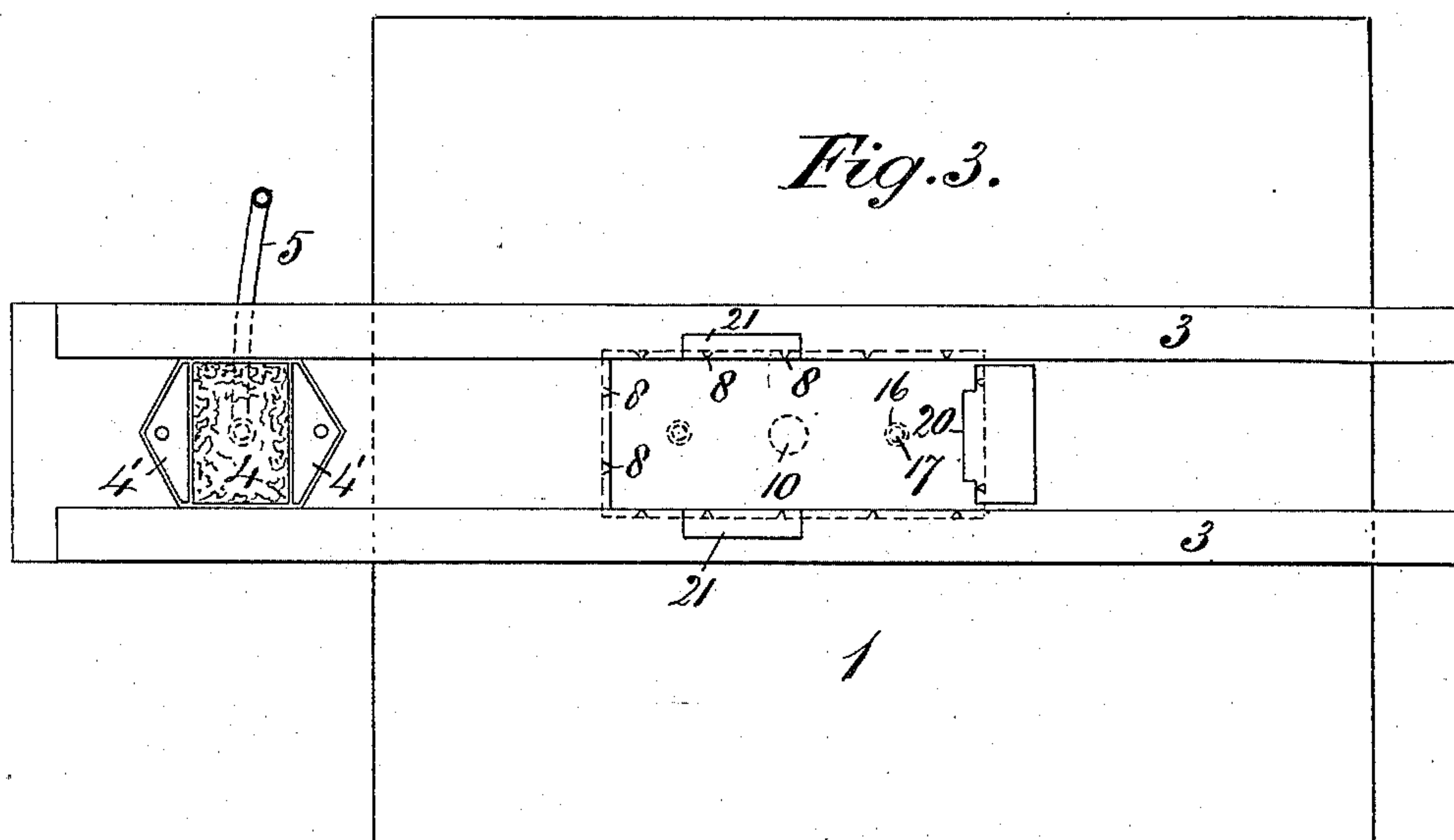
(No Model.)

3 Sheets—Sheet 2.

F. X. GAUDRIE.
CAN LABELING MACHINE.

No. 488,273.

Patented Dec. 20, 1892.



Witnesses:
John Grist
W. H. Morsey.

Inventor:
Francis X. Gaudrie
By Henry Grist
Attorney.

(No Model.)

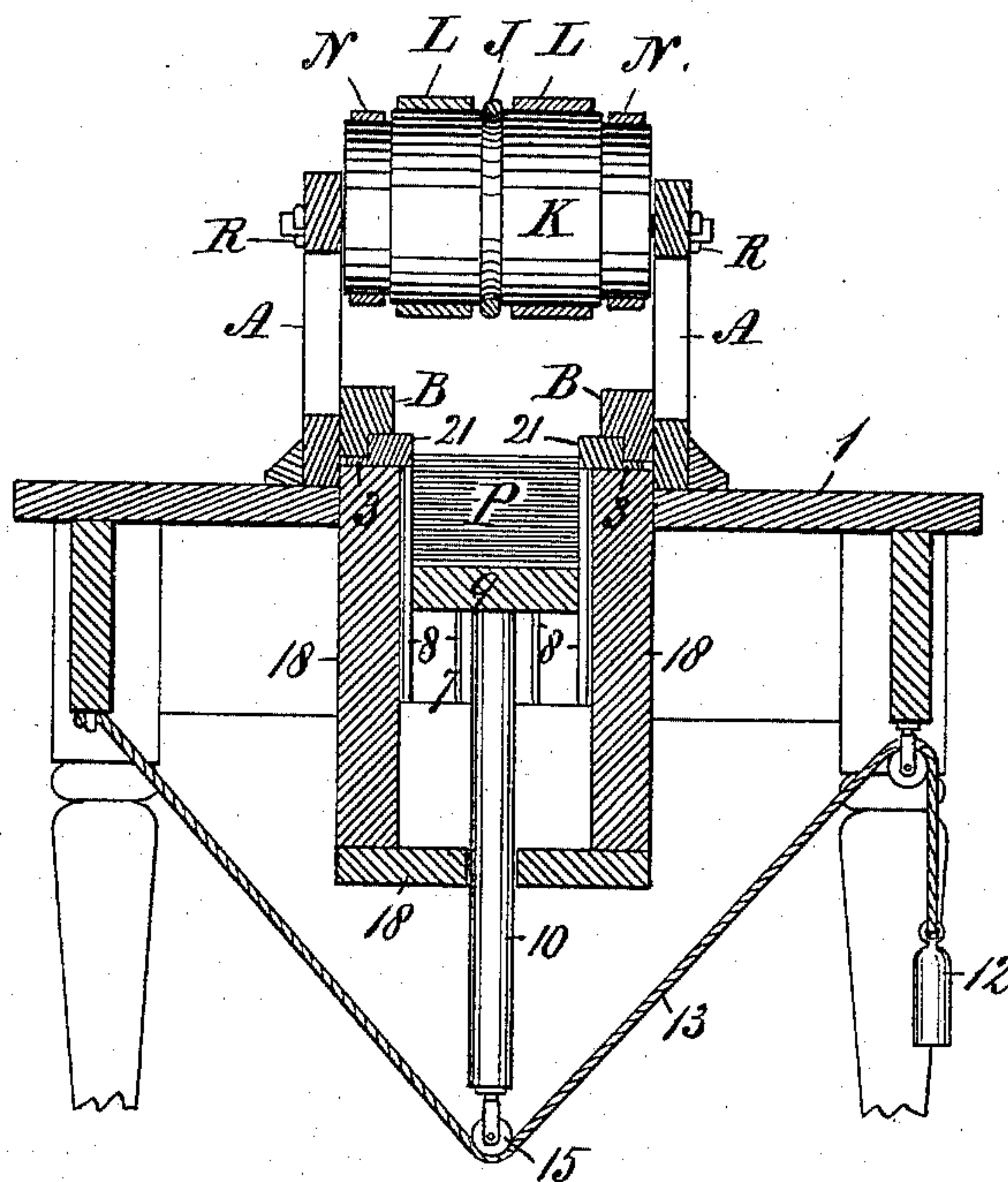
3 Sheets—Sheet 3.

F. X. GAUDRIE.
CAN LABELING MACHINE.

No. 488,273.

Patented Dec. 20, 1892.

Fig. 5.



Witnesses:
John Grist
J. H. Morsey.

Inventor:
Francis X. Gaudrie
By Henry Grist
Attorney.

UNITED STATES PATENT OFFICE.

FRANCIS XAVIER GAUDRIE, OF PORT HOPE, CANADA.

CAN-LABELING MACHINE.

SPECIFICATION forming part of Letters Patent No. 488,273, dated December 20, 1892.

Application filed September 8, 1892. Serial No. 445,360. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS XAVIER GAUDRIE, of Port Hope, in the Province of Ontario, in the Dominion of Canada, have invented
5 certain new and useful Improvements in Can-Labeling Machines; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, in which—

10 Figure 1, is a side elevation of my can labeling machine. Fig. 2, is a top view of the same. Fig. 3, is a plan of the track, the roller frame removed to show the underlying parts. Fig. 4, is a section on line X X Fig. 2, and Fig.
15 5, is a section on line Y Y Fig. 1.

My invention has for its object to construct a machine to label cans accurately and with speed, without first gumming the labels, and to prevent the gummed can injuriously distributing gum to different parts of the machine.
20

My invention consists in the construction and combination of certain parts of the machine, as hereinafter described and set forth
25 in the claims.

1, is a stand or table supporting the can track 2, and a frame carrying rollers and belts for rolling the cans along the track. The can-track has parallel rails 3, 3, on which the cans travel and said track is preferably elevated slightly at the feed end to receive the cans from a feeding trough, down which the cans roll in close order to be labeled. Between the rails, near the feed end of the machine, is a
30 gumming pad or cushion 4, which is preferably set in a metal tray 4', to prevent loss of gum and confine it to the tray. The pad preferably consists of a sponge covered with a perforated material and an absorbent covering through which the liquid gum oozes, and the gum is supplied to the pad or sponge by a tube 5, from an elevated reservoir 6, having a control valve to regulate the supply. Between the track rails and at a distance of
35 about one revolution of a can from the middle of the pad, is an open-top label-receptacle 7, of the size of the labels, and in length equal to the circumference of the can, and the walls of the label-receptacle, internally, are provided with vertical strips 8, to relieve the
45 50

edges of the labels of frictional contact with said walls.

The label-receptacle, has internally, a bottom which yields to upward pressure, and is shown in the drawings as a plunger 9, on
55 which the labels are placed in a pile, face downward. The plunger is provided with a downwardly projecting rod 10, which forces the plunger upwardly to keep the top label in position to adhere to the gummed portion
60 of the can, and such operation of the rod 10, is preferably done by a gravitating weight 12, attached to a cord 13, passing over a fixed pulley 14, and a moving pulley 15, on the end of said rod, and the other end of the cord is
65 attached to a fixture. The plunger is made to work true in the label-receptacle, by providing it on the underside with downwardly projecting tubes 16, which slide on posts 17, affixed to the bottom of a casing 18, around
70 the label-receptacle, so that the pile of labels moves upward after the upper label is adhesively attached to the can.

The labels are kept from being forced out of the label-receptacle by a lip 20, secured to
75 the top edge of said receptacle and projecting over the end of the label-space or label about to leave the receptacle, and said top label is kept in alignment with the path of the can by segment pieces 21, on top of the
80 rails, whereby the vertical wall or inner sides of said pieces have contact with the pile of labels as they rise in the label-receptacle and keep the labels in alignment with the path of the can. The bottom of the label-receptacle
85 inclines to cause that end of the labels toward the gumming pad, to be a little higher than the rails, and have contact first with the gummed portion of the can. The can will then rise from the rails and while traveling
90 along the pieces 21, draw the label from under the lip 20, and afterward the can will follow the rails. After a can has traveled the length of the label-receptacle, the top label will have adhered to the can, whereby both ends of the
95 labels will meet and thus cover the gummed portion of the can. The cans after being labeled roll along the rails until they leave the machine. The labels previous to being released from lip 20, are smoothed tightly
100

around the can whereby both ends will be uniformly jointed, by means of a belt and rollers hereinafter described, and the cans may be discharged from the track by instrumentalities now to be described.

A, is a frame secured to the top of the stand 1, and parallel to the rails on the outside, and to said frame A, are secured guide bars B, B, which laterally project partly on top of said rails, and said guide bars direct the cans while rolling on the rails. To the two bars of frame A, is journaled a driving and feed roller D, having a peripheral ring E, near both ends and driven by gear wheels F, F, and crank handle G, or by suitable connection with motive power machinery.

The peripheral rings E, E, have contact with the overturned edges of the cans T, feeding into the machine, and by frictional contact therewith roll the cans in contact with the gumming pad, said pad gumming only the part between the turned ends and a portion of the circumference. The rings E, keep the intervening portion of the roller free of contact with the gummed portion of the can, to prevent the gum being injuriously distributed and wasted. The cans after passing the gumming pad are free to roll by gravitation down the inclined rails 3, 3, until they meet the end of the pile of labels P, which yielding obstructs the passage of the can until the pile is depressed in the label-receptacle 7, by the passage of the can by force.

H, K, are rollers journaled in frame A, parallel to roller D, and have a slight axial movement vertically in slots S, to yield to upward pressure, and said rollers H, and K, have a peripheral groove at the middle to receive and guide around endless belt J, which has contact with the gummed and not gummed surface of the circumference of the can. The belt projects peripherally from the grooves, and by standing out, keeps the surface of the roller free of gum. By rotation of said rollers H, K, the belt J, draws the can under it and depresses the highest end of the pile of labels, whereby the top label will adhere at said raised end to a portion of the gummed surface of the can. The can in passing over the raised segments 21, releases the label from the lip 20, and the free end of the label will then adhere to the gummed portion of the can, the ends of the label joining exactly; one end of the label adheres to one half of the

gummed portion of the can, and the other end to the other half. The belt J, projecting from the rollers H and K, prevents said rollers having frictional contact with the cans, and the gum being confined to said belt prevents injurious distribution, whereby efficiency would be imperiled. The roller K, is driven by a belt or belts N, from the roller D, and said roller K, and a parallel roller M, carry a belt or belts L, which roll the cans from the machine after leaving the belt J, properly labeled. The rollers are journaled in slotted or movable bearings or slots S, so as to yield to the resistance of the cans in passing over the raised surfaces of the rails, and if desired, springs R, may be attached to the sides of frame A, to bear upon the journals of the rollers to assist gravitation.

I claim as my invention.

1. The combination with the track-rails 3, 3, gumming pad 4, and a label-receptacle 7, intervening said rails, of the roller D, rolling the can over the surface of the gumming pad by frictional contact with the can, rollers H, and K, and belt J, rolling the can over the label-receptacle by frictional contact of the belt with the can, and the belts L, carried by rollers K, M, rolling the cans by frictional contact with the can from the machine after being labeled, as set forth.

2. In a can-labeling machine, the combination with a track having parallel rails, a gumming pad and label-receptacle intervening said rails, said receptacle having a yielding bottom or plunger 9, a frame carrying a roller D, having raised peripheral rings E, to move the cans over the surface of the gumming pad, and rollers H, K, carrying an endless belt J, above the label-receptacle, as set forth.

3. The combination with a frame or support 1, carrying a track 2, having parallel rails 3, 3, a gumming pad 4, and a label-receptacle 7, intervening said rails, of a frame A, carrying a roller D, above the gumming pad, and rollers H, K, connected by an endless belt J, above the label-receptacle, endless belts L, following the line of track and intervening said rails to discharge the labeled cans, and a belt or belts N, driving the belted rollers, as set forth.

FRANCIS XAVIER GAUDRIE.

Witnesses:

SETH SOPER SMITH,
JOHN WATSON WALLACE.