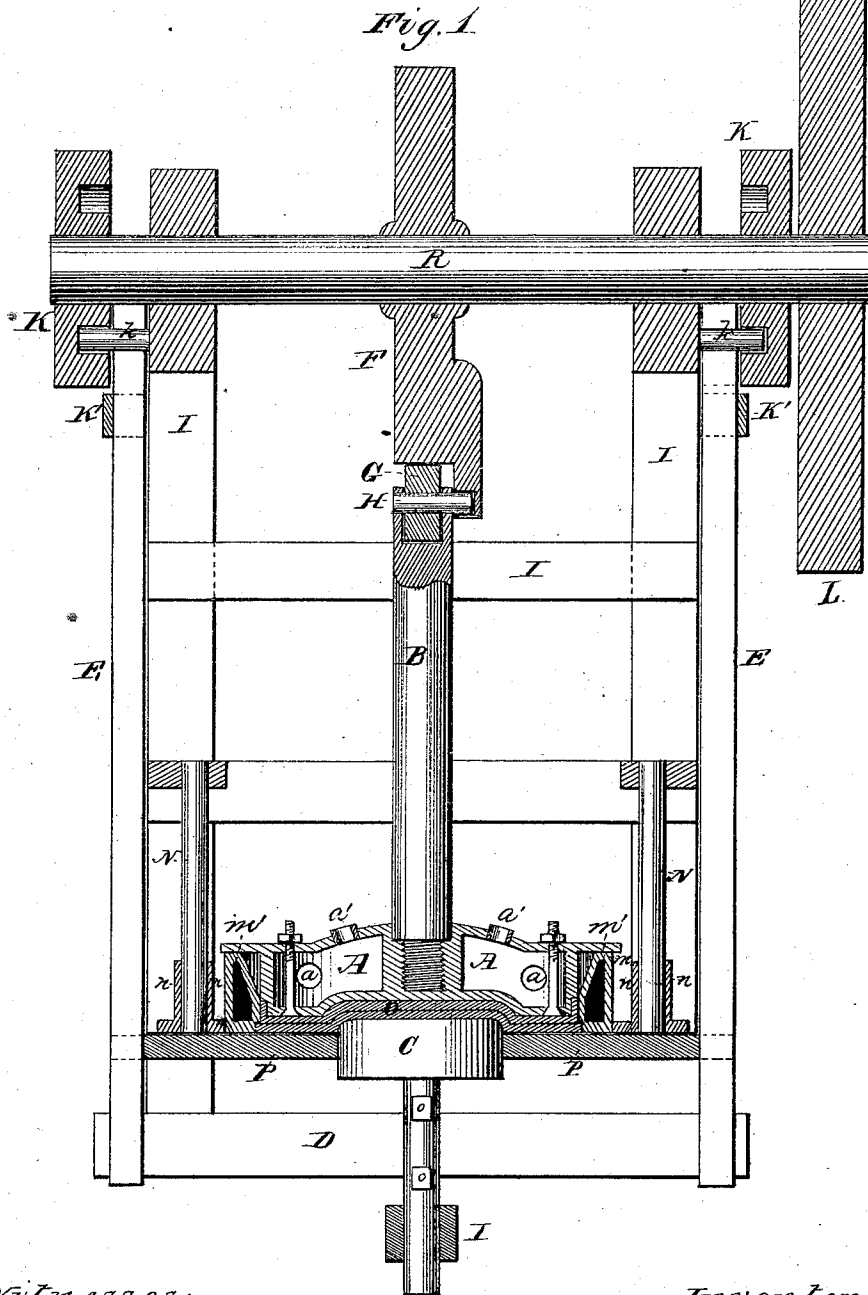


C. V. MOTTAM.

Machines for Making Paper Heads for Barrels.
No. 157,971. Patented Dec. 22, 1875.

Patented Dec. 22, 1874.



Witnesses:

Saml. C. Hodgman
N. C. Applegreen

Inventor:

C. V. Mottram

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Fig. 2

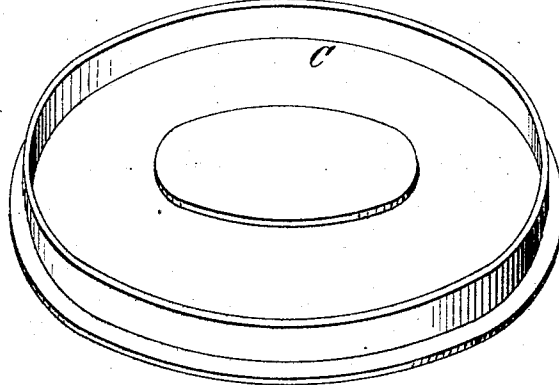


Fig. 3

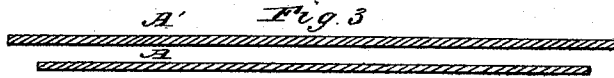
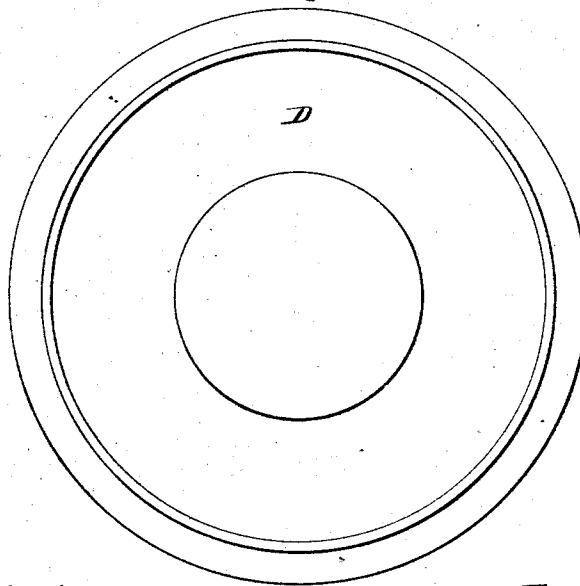


Fig. 4



Fig. 5



Witnesses:

Sam'l. C. Hodgman
N. C. Appelgren

Inventor:

C. V. Mottram.

UNITED STATES PATENT OFFICE.

CHARLES V. MOTTRAM, OF LAWRENCE, KANSAS.

IMPROVEMENT IN MACHINES FOR MAKING PAPER HEADS FOR BARRELS.

Specification forming part of Letters Patent No. 157,971, dated December 22, 1874; application filed June 8, 1874.

CASE B.

To all whom it may concern:

Be it known that I, CHARLES V. MOTTRAM, of the city of Lawrence, in the county of Douglas and State of Kansas, have invented a new and useful Machine for Making Paper Heads for Barrels; and I hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, of which—

Figure 1 is a horizontal section of said machine or press; Fig. 3, a sectional view of the component parts of said article; Fig. 4, a sectional view of the manufactured article; Fig. 2, a perspective; and Fig. 5, a top view.

This invention relates particularly to that class of heads for barrels or other packages formed by pressing the material between dies; and consists of a machine for manufacturing said heads by the aid of steam or other power.

This machine is constructed preferably of iron, and in one of its forms is shown in the drawings filed with my application. It consists, essentially, of two pistons or male dies working in opposite directions upon and through a bed-plate, and between which is placed a movable ring or female die, said pistons and female die being heated by steam or heated air, if desirable or necessary.

Motion is communicated to the parts by means of the gear or pulley L, shaft R, cams F K K, pins or studs K K H, rods B E E, friction-roller G, and cross-head D. These parts are supported and kept in position by the framework I I L, &c., bed-plate P, and slides or guides K' K' K' N N n. Steam or heated air is admitted to the piston or die A through

suitable apertures *a' a'* by means of flexible pipes or other suitable means. The die A is made with radial partitions, near the outer ends of which are apertures *a a* for the passage of the current of steam or heated air. The female die *m* is heated in a similar manner.

To operate this machine, it being in motion, the blanks, of the proper size and shape, are placed in hoppers or chutes, (not shown in the drawing,) which conduct them between the dies while separated. The motion of the cams F K K, acting through their connections, then closes the dies, forcing the blanks into the ring or female die, against the bed-plate P, and into the desired form. The form of the cams F K K is such that the greatest motion is given during about one-third of their revolution. During the remaining two-thirds of the revolution the advance of the dies is very slight and the pressure very great, thus driving the most of the moisture out of the material, in which it is assisted by the heat. A continuance of the motion causes the action of the cams to be reversed, and the head is removed by any suitable device.

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

The machinery above described, to wit: The combination of the pistons or dies A and C with the die M and bed-plate P, substantially as and for the purpose specified.

C. V. MOTTRAM.

Witnesses:

SAML. C. HODGMAN,
N. G. APPELGREN.