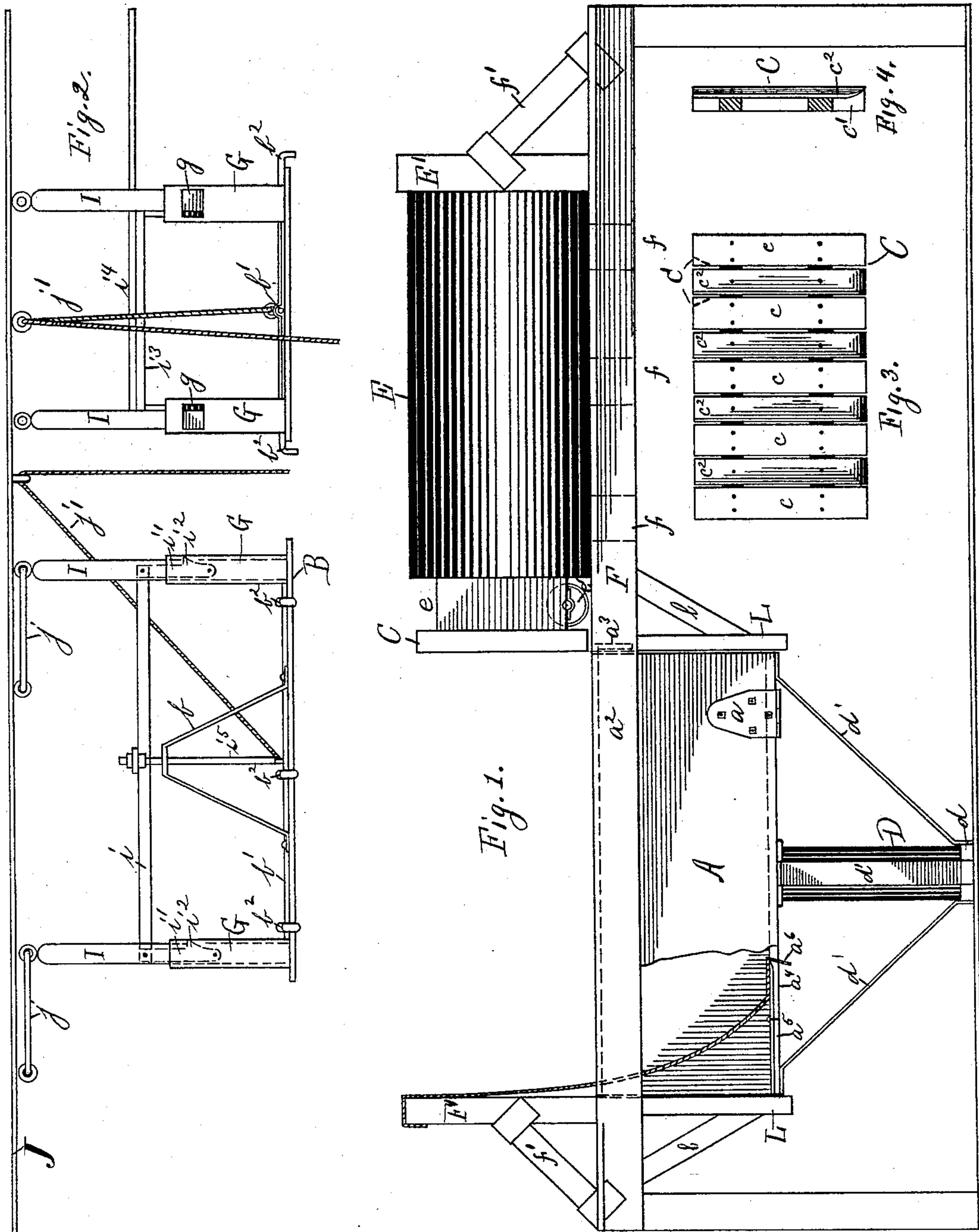


(No Model.)

C. C. INGRAM.
COTTON PRESS.

No. 452,438.

Patented May 19, 1891.



WITNESSES:

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CHARLES C. INGRAM, OF LITTLE ROCK, ARKANSAS.

COTTON-PRESS.

SPECIFICATION forming part of Letters Patent No. 452,438, dated May 19, 1891.

Application filed November 29, 1890. Serial No. 373,028. (No model.)

To all whom it may concern:

Be it known that I, CHARLES C. INGRAM, a citizen of the United States, residing at Little Rock, in the county of Pulaski and State of Arkansas, have invented certain new and useful Improvements in Cotton-Presses, and particularly in the patent to Charles Calhoun Ingram and William Sparks Kellogg, of Little Rock, Arkansas, issued August 26, 1890, No. 435,119; and I do 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention has relation to cotton-presses; and it consists in the novel construction and arrangement of its parts.

In the accompanying drawings, Figure 1 is a side elevation of my invention, showing the baling-box A below the floor of the lint-room and the cover B and its attachments swung back and out of the way. Fig. 2 is an end view of the cover B and its attachments. Fig. 3 is a front view of the facing c of the plunger C, and Fig. 4 is a sectional view of Fig. 3.

My invention is described as follows: It consists of a baling-box A to receive the lint-cotton, and it is shown in Fig. 1 with its top on a level with the floor, so that the cotton may be swept into it with brooms. Underneath said box is a steam-cylinder D about nine inches in diameter and having a stroke of about three and one-half feet. Cylinder E is provided with a follow-block e, attached to its piston-rod, to the lower end of which is journaled a wheel e', which runs upon the floor between the side beams F and on the bottom of the press-box A to bear up said follow-block. Said cylinder rests on the pieces of timber secured crosswise to the pieces F, the ends of which are represented by the dotted lines f.

F' are heavy posts mortised upright into the beam F, and f' is a brace mortised into the upright post F' and into the side beam F and secured by strong clamps.

E' is a heavy post mortised upright in said side beam F, and having the brace and clamps corresponding to the brace f' and clamps. Said devices last above described are dupli-

cated, and between the uprights F' is a facing corresponding to the facing c, (see Fig. 3,) against which the cotton is pressed.

G marks four hollow posts, one secured on each corner of the cover B, and each having in one side an opening g.

I represents four posts secured together by the side pieces i, pivoted to the hinges i', which in turn are pivoted to the posts I. Each hinge i' has projecting from one edge a catch-extension i². Said side pieces i are held together by a cross-piece i³. (See Fig. 2.) On the top of said cross-piece i³ is pivoted a cross-lever i⁴, having a rod i⁵, extending downward and through the upper end of the brace b, which is secured on the upper surface of the cover B. Said posts I are hinged to the upper floor J by linked hinges j. The frame just described is provided with a rope j', so that the said frame and cover B may be pulled back and out of the way, so that the packers may get to the bale and cover and bind it.

L L are heavy posts mortised downwardly into the side beam F and secured by proper braces l. Said pieces L L also have secured to them end walls to keep the cotton from coming out of the ends of the box A when the same is down, as shown in Fig. 1. The sides of the said box are hinged to the bottom of the same by strong hinges a, and to the upper edge and outer face of said sides are pivoted rods a², having each a bent end a³, and said box has in its bottom a hinged door a⁴, running crosswise, its free edge being beveled and adapted to impinge the end of the bagging a⁶ against the bottom of the box. The cover B has pivoted on its upper face a center rod b' and the hooks b³, their ends extending over the edge of said cover and grasping the side rods a². The cylinder D is provided with a band d, to which are secured the lower ends of four braces d', the upper ends of which are secured to the bottom of the cotton-box A, and from the bottom of said cotton-box extends a piston-rod designed to work up and down in the said cylinder D.

My invention is operated as follows: The cotton-box is placed in the lint-room, through the floor of which is an opening just large enough for the box to pass up and down. When the box is to be filled, it is let down until its upper edge is on a level with a floor of

the lint-room, and the cover is pulled up and swung back out of the way, as shown in Fig. 1, and then when the box is packed full the said cover is allowed to swing down until it is over the top of the said box, when the lever i^4 is pulled back, which draws the hooks i^2 out of the openings g in the hollow posts G , and allows the cover to descend and settle on the top of said box. The hooks b^2 are then brought down and their bent ends hooked over and against the outer face of the rods a^2 , and the cover is then secured in place. Then the steam is let on in the steam-cylinder D , which raises the piston, and consequently the cotton-box A is raised until the lower face of its bottom is on a line with the upper surface of the lint-room, at which instance the hooks i^2 catch into the openings g of the hollow posts G . Now the steam or other power is turned on the piston in steam-cylinder E , which forces the follow-block e forward until the face of the follow-block reaches the beveled edge of the door a^4 , when the cotton is pressed into a bale. Now, the cotton being pressed into a bale, the bent ends a^3 of the rods a^2 are turned up, which turns the rods a^2 and throws up the outer ends of the hooks b^2 , and the cover is released, and the rope j' is pulled, which swings the said cover and its frame-work up and back out of the way, and the sides of the said box A are then allowed to fall level with the floor, thus giving room for the packers to get around the bale and hoop it, and sew the bagging, if need be, on both sides and ends while the bale is still under pressure. Then withdraw the follow-block, and the bale of cotton may be rolled out of the way. The face C of the follow-block is provided with slats c , the ends of which may be beveled a little, as

shown by the dotted lines c' , and said slats so arranged as to leave slots between them, so that the hooping-irons may run down the said slots on the outside of the bagging. In these said slots are secured thin bars of iron c^2 , the lower ends of which are slightly turned in to turn the lower ends of said hoop-irons when they strike the lower side of the bale. The end wall between the uprights F' and the door a^4 and part a^5 of the bottom of box A are provided with faces exactly similar to the facing C of the plunger.

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

1. In a press, substantially as described, the box A , having the hinged sides and in its bottom the hinged door a^4 , and part a^5 , provided with slats c and bars c^2 , substantially as shown and described.

2. In a press, substantially as described, the box A , having in its bottom the hinged door a^4 , provided with a beveled edge and slats c and bars c^2 , and part a^5 , also provided with slats and bars, substantially as described.

3. In a press, substantially as described, the box A , having in its bottom the part a^5 , and door a^4 , hinged to said part and provided with a beveled edge adapted to impinge the corresponding beveled edge of the bottom and hold between said edges the end of the bagging, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

CHARLES C. INGRAM.

Witnesses:

S. F. FIELD,

T. J. OLIPHINT.