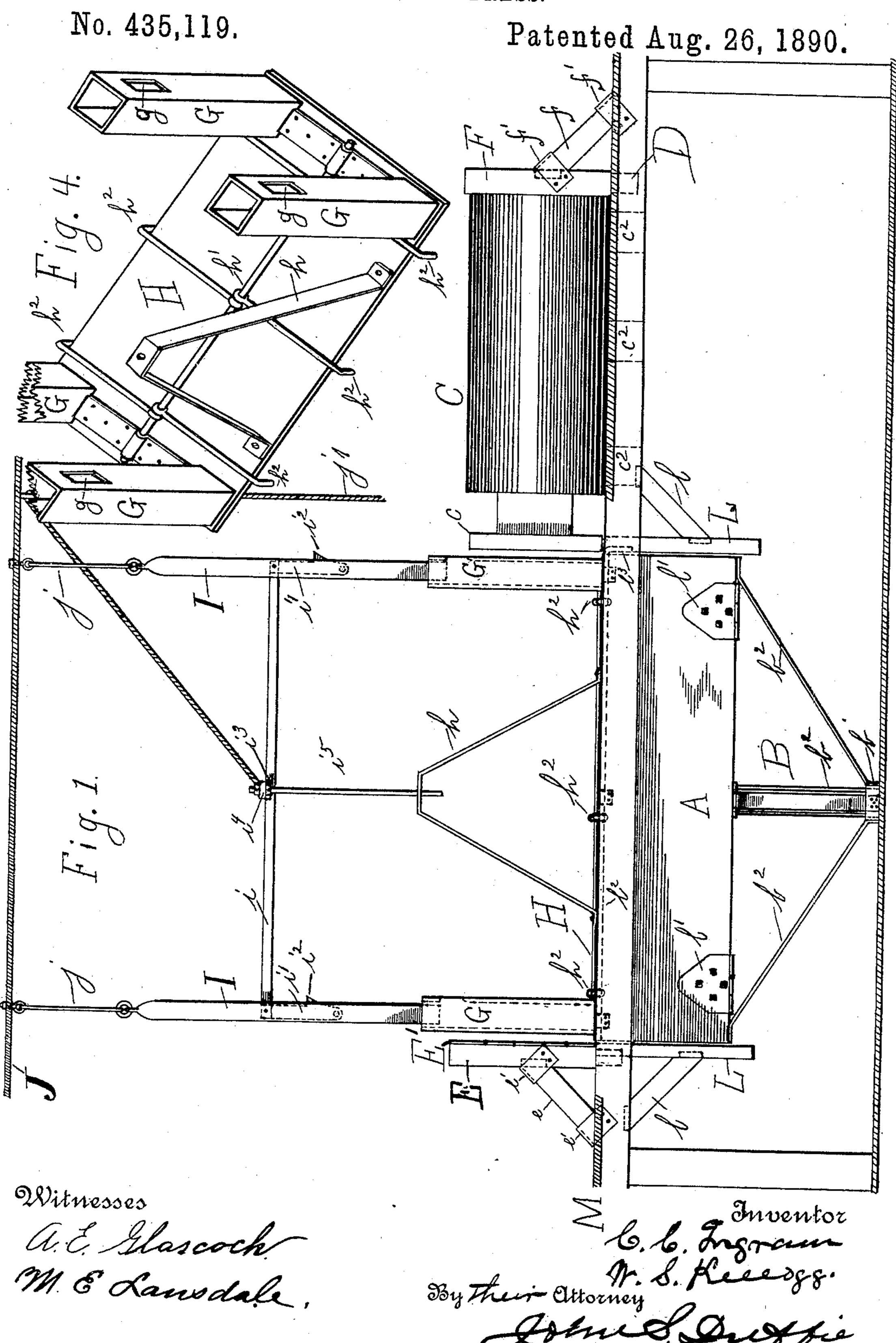
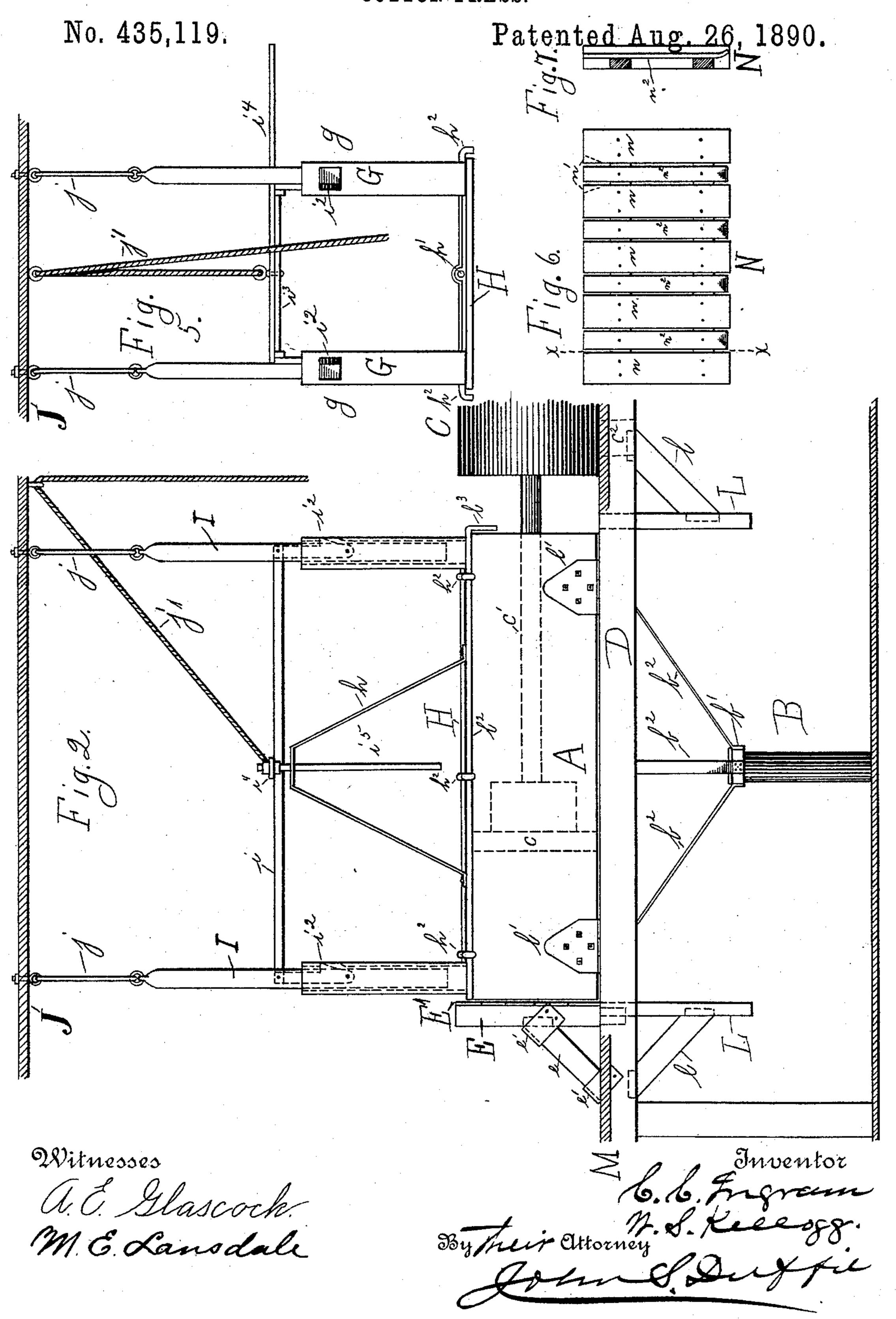
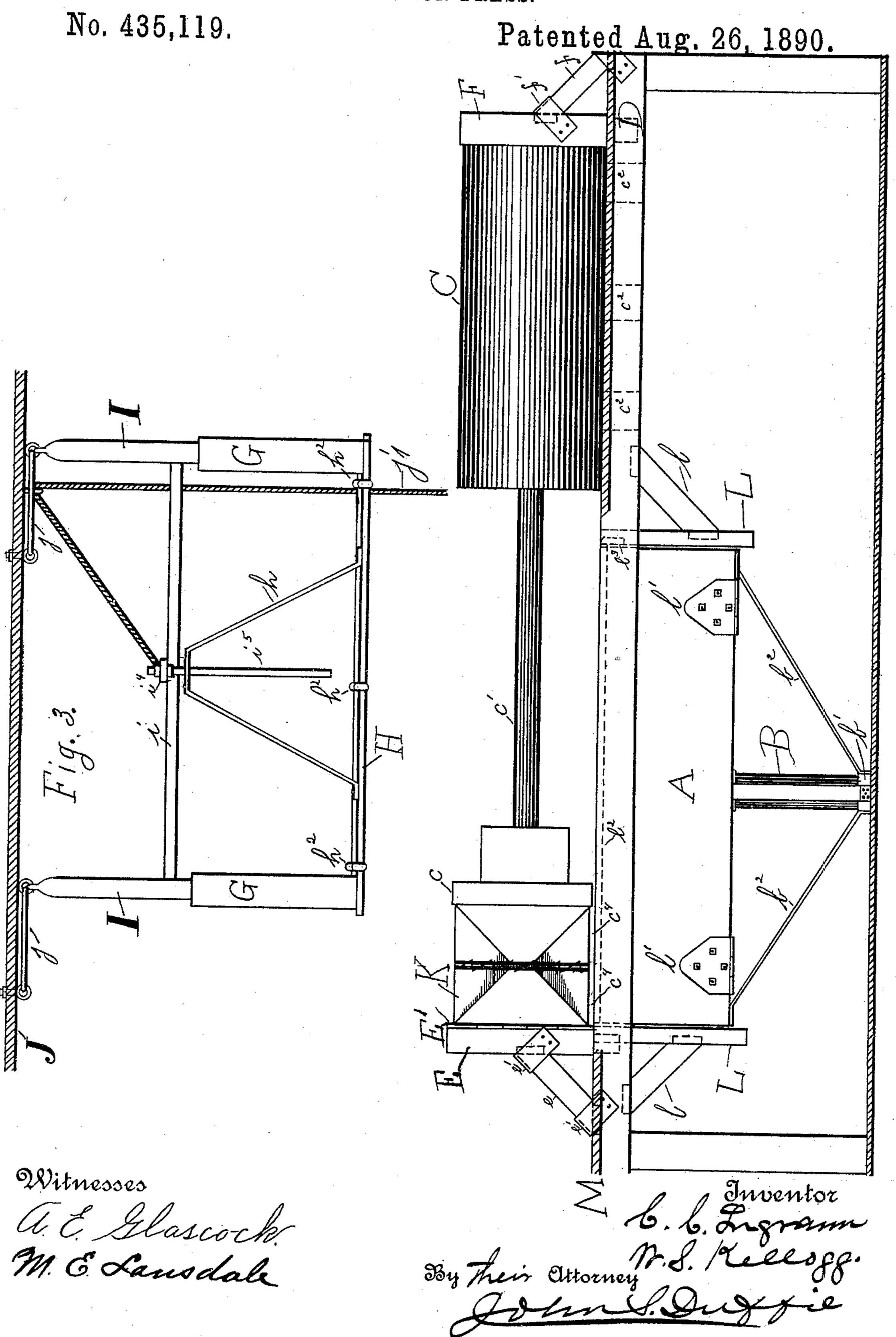
C. C. INGRAM & W. S. KELLOGG. COTTON PRESS.



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United States Patent Office.

CHARLES CALHOUN INGRAM AND WILLIAM SPARKS KELLOGG, OF LITTLE ROCK, ARKANSAS.

COTTON-PRESS.

SPECIFICATION forming part of Letters Patent No. 435,119, dated August 26, 1890.

Application filed April 22, 1890. Serial No. 349,052. (No model.)

To all whom it may concern:

Be it known that we, CHARLES CALHOUN INGRAM and WILLIAM SPARKS KELLOGG, citizens of the United States, residing at Little 5 Rock, in the county of Pulaski and State of Arkansas, have invented certain new and useful Improvements in Cotton-Presses; and we do declare the following to be a full, clear, and exact description of the invention, such 10 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 specificaτ₅ tion.

Our invention has relation to cotton-presses; and it consists in a novel construction and arrangement of its parts, hereinafter described.

Figure 1 is a side elevation of our invention, 20 showing the baling-box A below the floor M of the lint-room. Fig. 2 is a side elevation of our invention, showing the baling-box A above the floor of the lint-room. Fig. 3 is a side elevation of our invention, showing the bale 25 K pressed between the end wall and the plunger c, and the baling-box A dropped below the floor of the lint-room out of the way, and the cover H and its attachments swung back out of the way. Fig. 4 is a perspective 30 view of the cover H. Fig. 5 is an end view of the cover H and its attachments. Fig. 6 is a front view of the face N of the plunger c. Fig. 7 is a sectional view of Fig. 6, cut through on the line x x.

Our invention is described as follows: In the accompanying drawings, A represents the baling-box to receive the lint-cotton, and it is shown in Fig. 1 with its top on a level with the floor, so as to receive the lint-cotton, which 40 may be swept into it with brooms or otherabout twelve and one-half feet long, three feet deep, and four and one-half feet wide. Underneath said box is a steam-cylinder B, about 45 nine inches in diameter and having a stroke of about three and one-half feet.

C represents a large steam-cylinder about nine feet long, thirty-five inches in diameter, and provided with a follow-block c, attached 50 to its piston-rod c'. Said steam-cylinder C |

rests on three heavy pieces of timber secured crosswise to the side pieces D, the ends of which are represented by the dotted lines c^2 , the front one of which is seen in the drawings. The rear one, which corresponds ex- 55

actly to the front one, is not seen.

E are heavy posts mortised upright into the side beam D, and e is a brace mortised into the upright post E and into the side beam D, and secured by strong clamps e'. F is a 60 heavy post mortised upright in said side beam D and braced by a brace f, mortised into said upright and into said side beam, and secured by clamps f'. Said devices last-above described are duplicated and said uprights E are 65 faced, thus forming a wall E' against which the cotton is pressed.

G marks four hollow posts, one secured on each corner of the cover H, 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 said posts I. Each hinge i' has projecting from one edge a catch-extension i^2 . Said side pieces i are held 75 together by a cross-piece i³. (See Fig. 5.) On the top of said cross-piece i^3 is pivoted a cross-lever i^4 , having a rod i^5 extending downward and through the upper end of the brace h, which is secured on the upper surface of 80 the cover H. 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 H may be pulled back and out of the way from 85 over the bale of cotton K, so that the packers

may get to it and cover and bind it.

L L are heavy posts mortised downwardly into the side beam D and secured by proper braces l. Said pieces L L also have secured 90 wise, as may be desired. Said baling-box is 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 l', and to the up- 95 per edge and outer face of said sides are pivoted rods l^2 , having each a bent end l^3 , and the said cover H has pivoted on its upper face a center rod h' and six or more hooks \bar{h}^2 —three or more on each side—their ends extending 100 over the edge of said cover and grasping the said rods l^2 .

The cylinder B is provided with a band b', to which are secured the lower ends of four 5 braces b^2 , 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 B. Our 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 15 until its upper edge is on a level with the floor M of the lint-room, and the cover is pulled up and swung back out of the way, as shown in Fig. 3, and then when the box is packed full the said cover is allowed to swing down 20 until it is over the top of the said box, when we pull the lever i^4 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 h^2 25 are then brought down and their bent ends hooked over and against the outer face of the rods l^2 , and the cover is thus secured in place. Then the steam is let on in the steam-cylinder B, which raises the piston, 30 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 floor M, at which instance the hooks i^2 catch into the openings g of the hollow posts G. Now the 35 steam or other power is turned on the piston in steam-cylinder C, which forces the followblock c forward until the cotton is pressed into a bale K. (See Fig. 3.) Now the cotton being pressed into a bale, the bent ends l^3 40 of the rod l^2 are turned up, which turns the rods h^2 and throws up the outer ends of the hooks h^2 , and the cover is released, and then we pull on the rope j', which swings the said cover and its frame-work up and back out of 45 the way, and the said box A is then allowed to descend, as shown in Fig. 3, 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 both ends while the bale is 5c still under pressure. When the bale is finished, the box A is again raised and the sides allowed to fall back upon the floor. Then withdraw the follow-block and the bale of cotton may be rolled out of the way, or instead of 55 raising the box a plank or two may be pushed under the bale at the points c^4 on the top of

The face N of the follow-block is provided with slats n, the ends of which may be bev-

the beams D.

eled a little, as shown by the dotted lines n', 60 and said slats so arranged as to leave slots between them, so that the hooping-irons may be run down the said slots on the outside of the bagging. In these said slots are secured thin bars of iron n^2 , the lower ends of which 65 are slightly turned in to turn the lower end of said hoop-irons when they strike the lower side of the bale. The end wall E is provided with a face exactly similar to the facing N of the plunger.

Having described our invention, what we claim as new, and desire to secure by Letters

Patent, is—

1. The combination of pieces D, having the posts E, F, and L, secured in place by proper 75 braces, press-box A, having the hinged sides and rod attachments l^2 , the steam-cylinder B, for operating the press-box and secured in place by means of proper braces, steam-cylinder C, secured to the cross-pieces c^2 and 80 having secured to the outer end of its pistonrod a plunger C, provided with the slats n and bars n^2 , end wall E', also provided with similar slats and bars, and cover H, provided with proper means of securing the same to the 85 press-box A, substantially as shown and described, and for the purposes set forth.

2. The combination of pieces D, having posts E, F, and L, secured in place by proper braces, press-box A, having the hinged sides, 90 and rod attachments l2, working up and down above the steam-cylinder B and secured in place by means of proper braces, steam-cylinder C, secured to the cross-pieces c^2 and having secured to the outer end of its piston- 95 rod a plunger C, provided with the slats n and bars n^2 , end wall E', also provided with similar slats and bars, cover H, provided with the upright posts G, each having an opening g, perforated brace h, and hooks h^2 , secured 100 to the center rod h', hinged posts l, adapted to fit in the hollow corner-posts G and having hinged hooks i', side pieces i, pivoted to side hooks i', cross-pieces i^3 , secured to said side pieces, lever i^4 , pivoted to said cross- 105 piece i^3 and having the rod i^5 working through the perforation in the brace h, and rope j', secured to the cross-piece i³ and adapted to pull the said frame up and back from over the bale of cotton k, substantially as shown and 110 described, and for the purposes set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

CHARLES CALHOUN INGRAM. WILLIAM SPARKS KELLOGG. Witnesses:

Z. J. OLIPHANT, S. A. INGRAM.