

C. J. KRAMER.  
Combined Sad-Iron and Fluting-Roller.

No. 215,941.

Patented May 27, 1879.

Fig: 1.

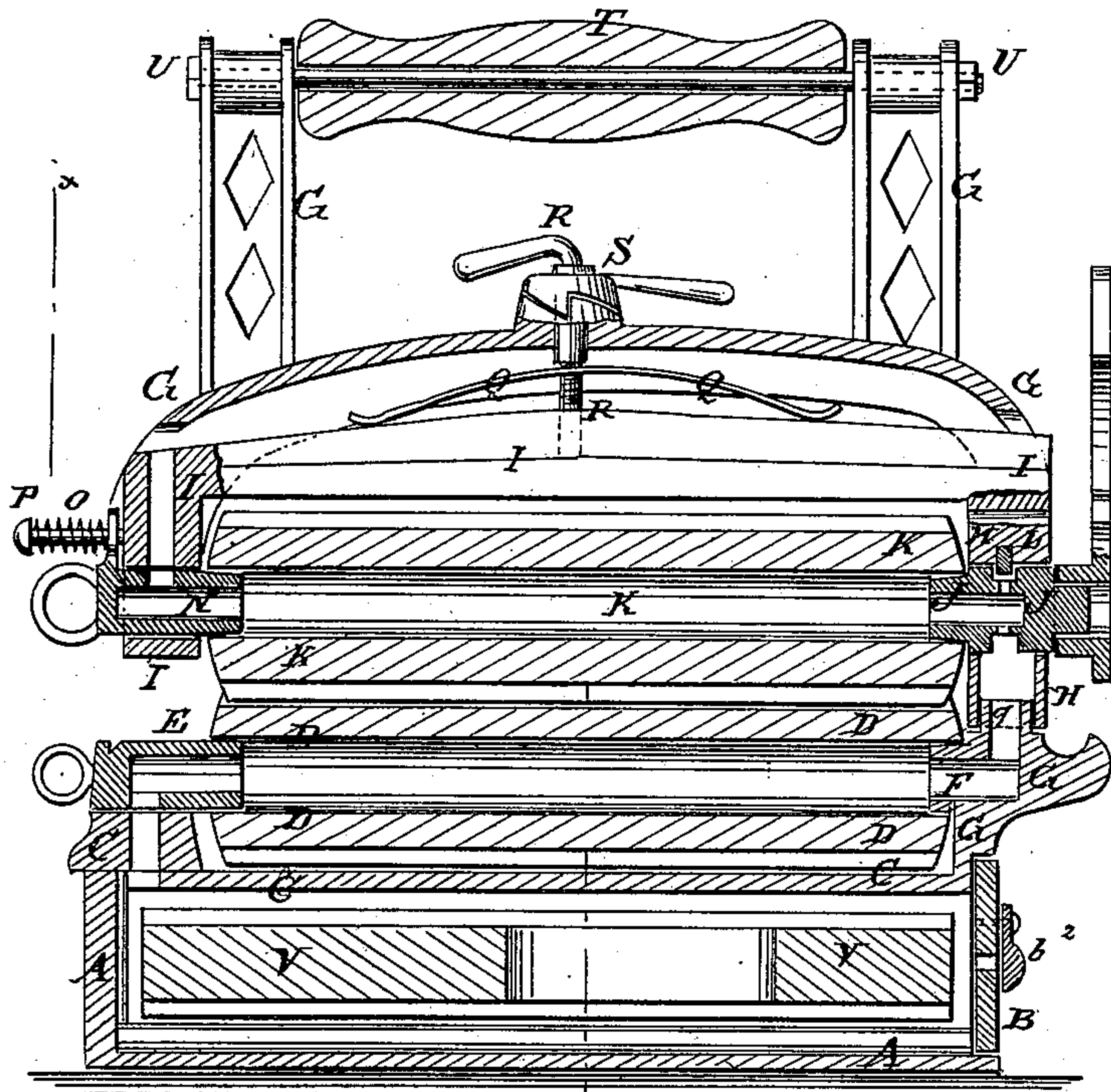


Fig: 2.

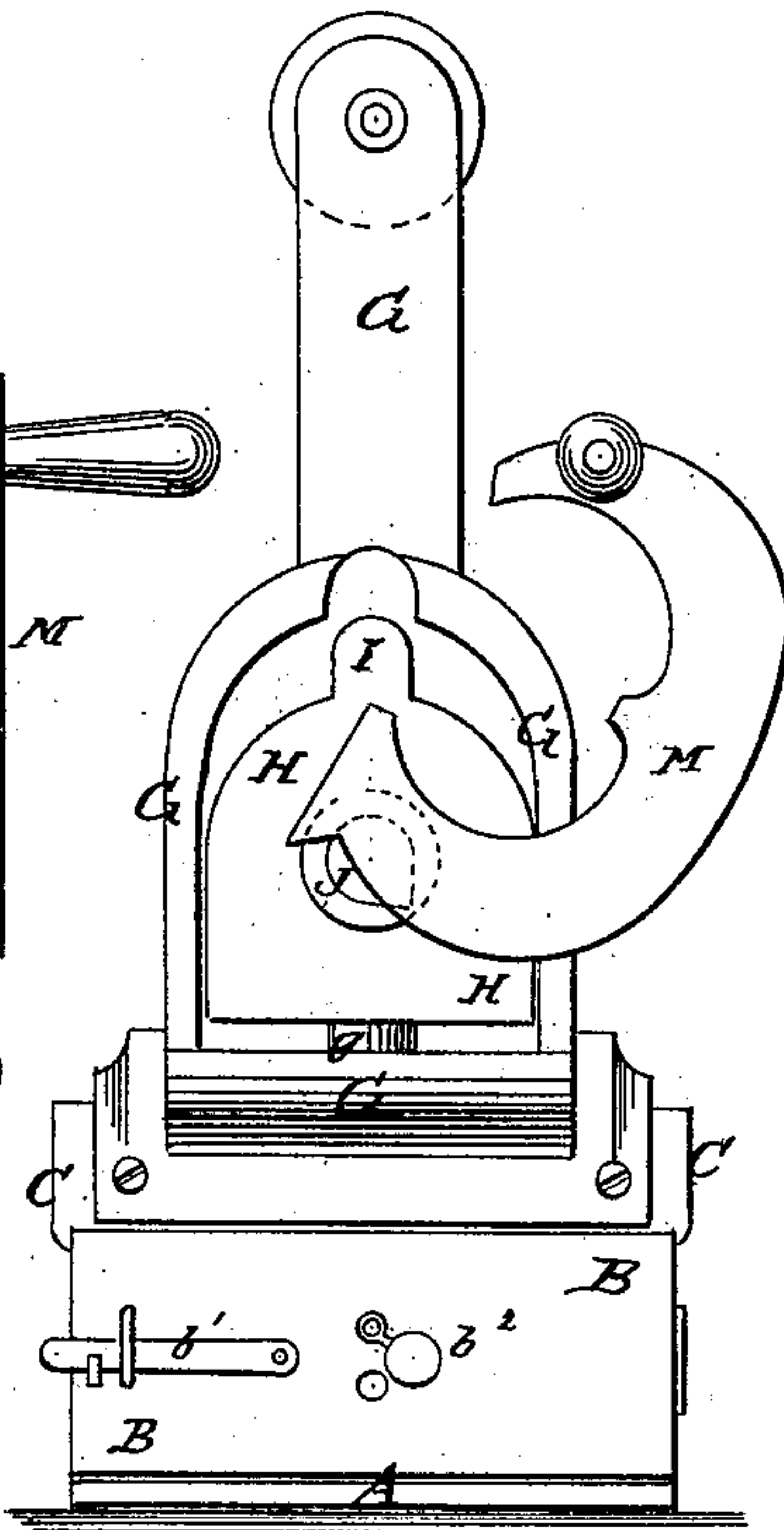


Fig: 6.

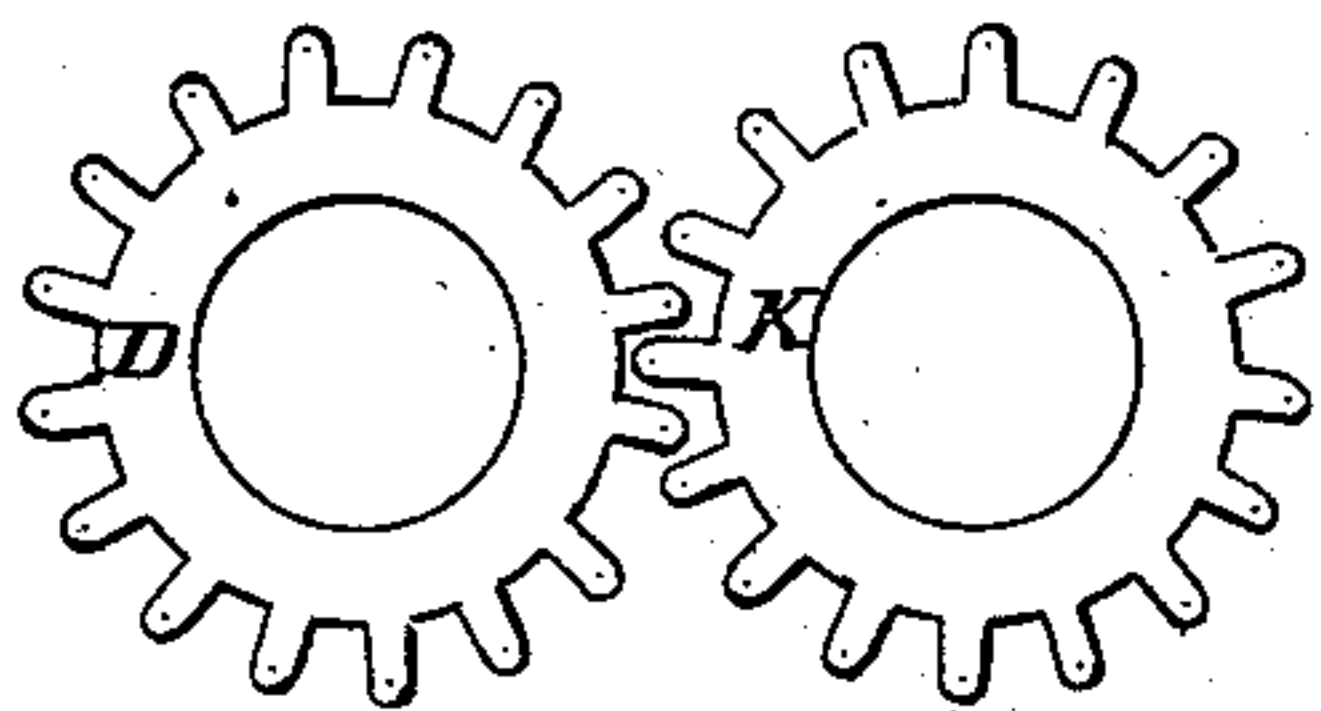


Fig: 7.

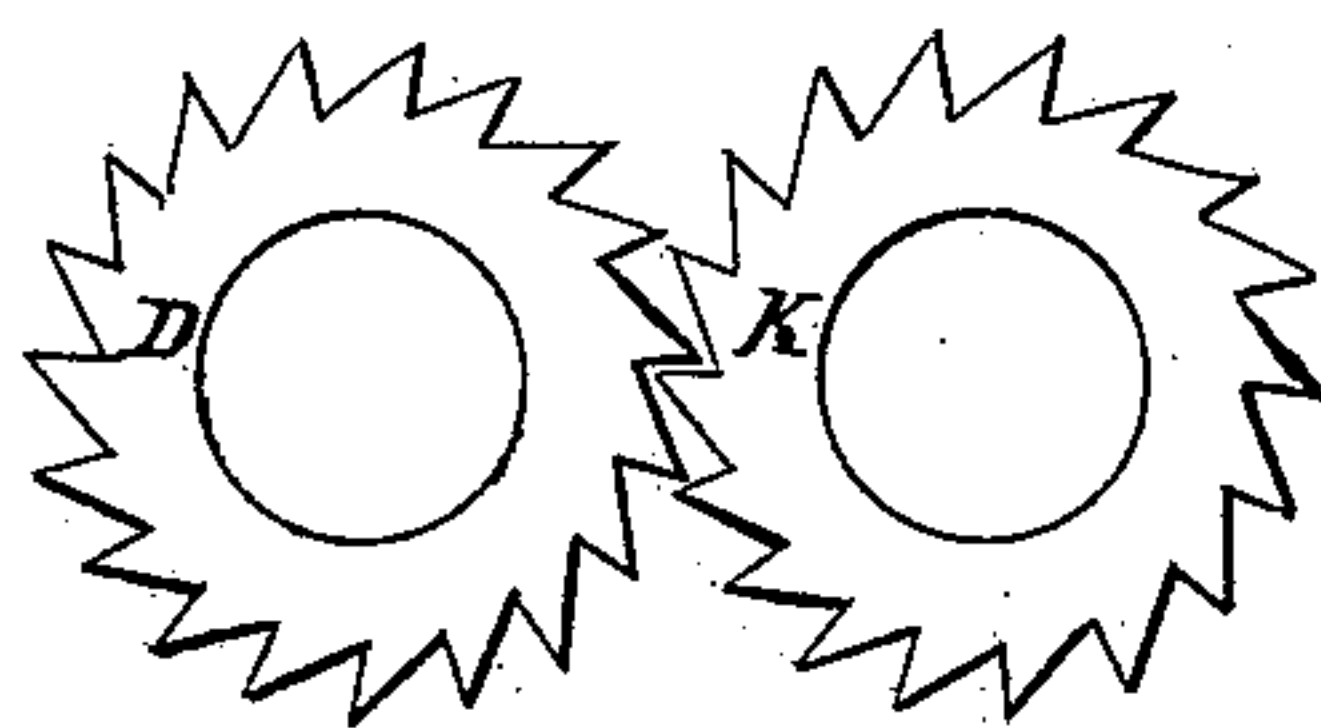


Fig: 3.

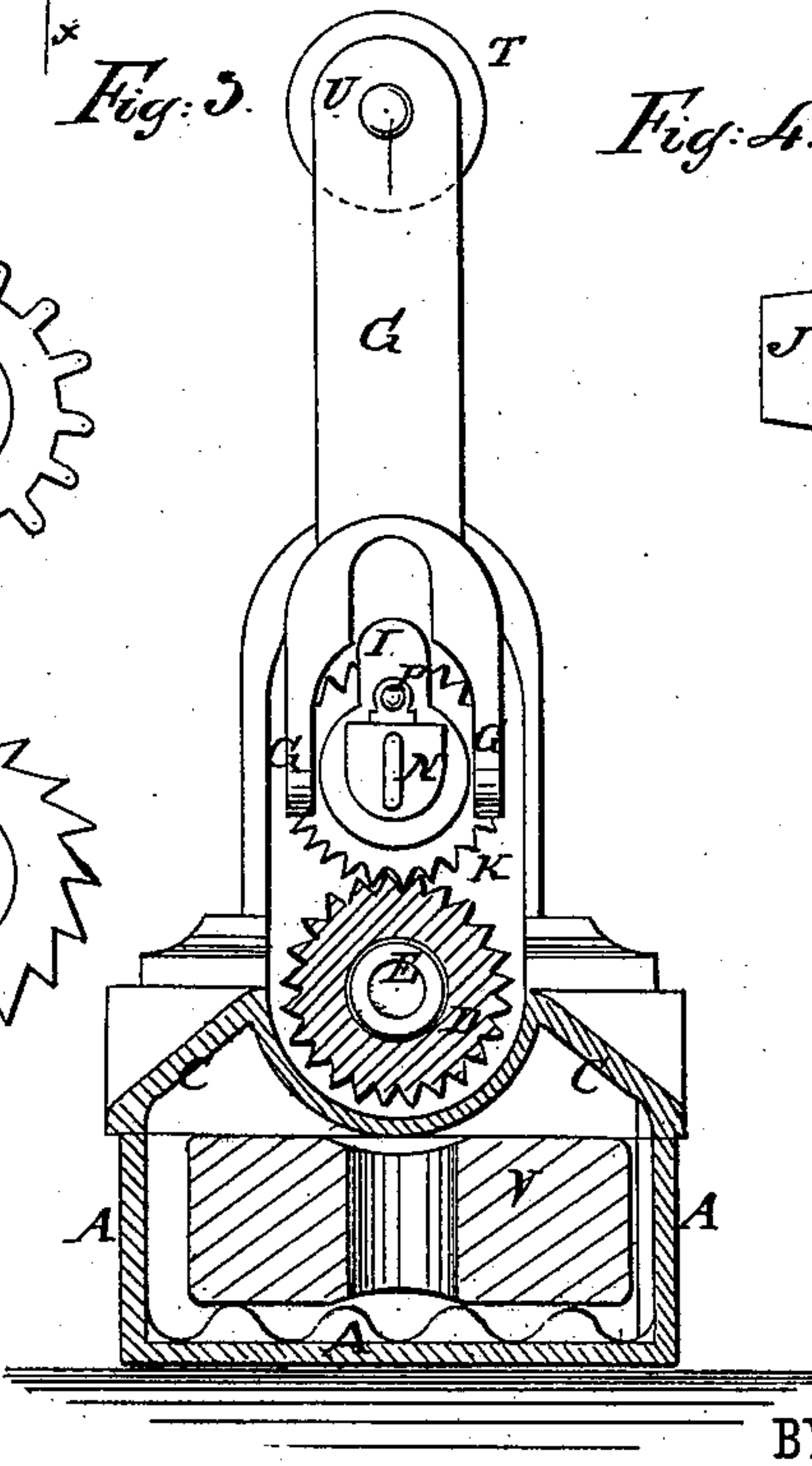


Fig: 4.

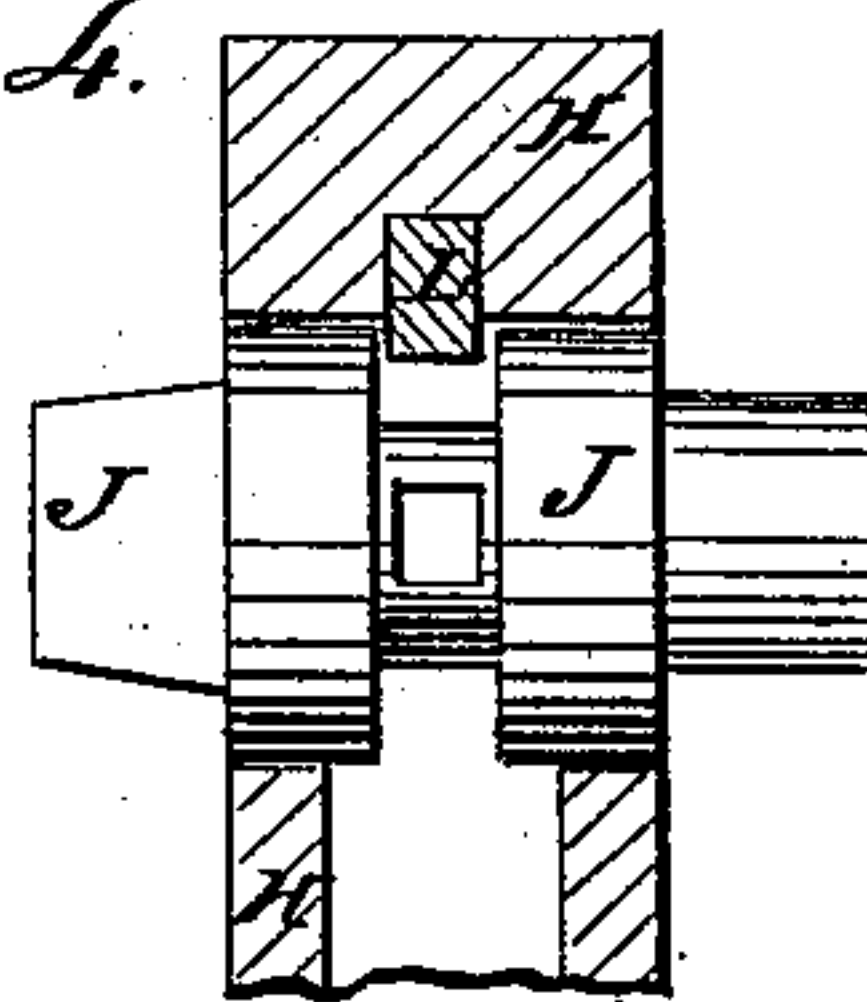
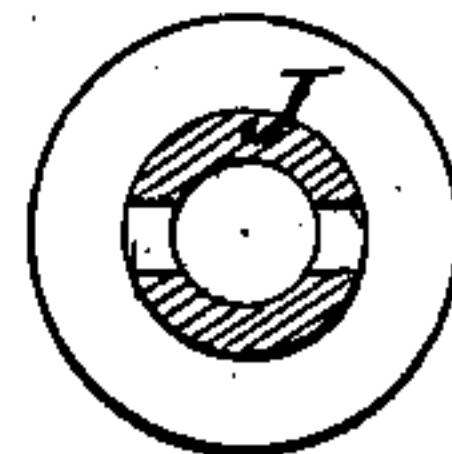


Fig: 5.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

CARL J. KRAMER, OF SHILOH, LOUISIANA.

## IMPROVEMENT IN COMBINED SAD-IRON AND FLUTING-ROLLER.

Specification forming part of Letters Patent No. 215,941, dated May 27, 1879; application filed February 3, 1879.

*To all whom it may concern:*

Be it known that I, CARL JULIUS KRAMER, of Shiloh, in the parish of Union and State of Louisiana, have invented a new and useful Improvement in Combined Sad-Iron and Fluting-Roller, of which the following is a specification.

Figure 1 is a vertical longitudinal section of my improved device. Fig. 2 is a rear-end view of the same. Fig. 3 is a front-end view of the same, partly in cross-section through the line *x x*, Fig. 1. Fig. 4 is a detail sectional view, showing the crank-pivot. Fig. 5 is a detail cross-section of the crank-pivot. Figs. 6 and 7 are detail end views of different sets of fluting-rollers.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved sad-iron, which shall be so constructed that fluting-rollers may be readily applied to it, and heated by the iron-block or the coals that heat the sad-iron, and which shall be simple in construction, and convenient and effective in use in either capacity.

The invention consists in the combination of the sad-iron, made hollow, and open at its top and rear end, provided with a door at its rear end, and having attached to its top a plate recessed upon its upper side, and provided with a sliding hollow pivot at its perforated forward end, the handle-frame, provided with a hollow pivot, and a hollow projection at the lower end of its rear arm, the pressure-bar, provided at its rear end with a sliding bearing-block, having a cavity in its lower end, and a hole through it to receive the hollow grooved and perforated rotating pivot, and provided at its perforated forward end with a hollow sliding pivot, the pin, the spring, the cam, and the wooden hand-piece with each other, to adapt it to receive a pair of hollow detachable fluting-rollers and their crank, as hereinafter fully described.

A represents the body of the sad-iron, which is made hollow, and with its top and rear end open. The inner surface of the bottom of the body A is corrugated, as shown in Figs. 1 and 3, to facilitate the heating. The rear end of the sad-iron A is closed by a door, B, hinged at one end, and provided with a latch, *b*<sup>1</sup>, at its

other end. The door B is also provided with a draft-opening, which may be closed when desired by a slide, *b*<sup>2</sup>. To the top of the body A is secured a plate, C, in the upper side of which is formed a semi-cylindrical recess to receive the lower fluting-roller, D. The fluting-roller D is made hollow, and the forward end of its cavity fits upon a pivot, E, which slides in a groove in the forward part of the top plate, C, and is made hollow, and has a hole formed through its lower side in such a position as to come opposite a hole through the said top plate, C, when the said pivot is pushed in, and thus forms a passage or flue, through which the heat from the cavity of the sad-iron A passes into and through the said lower roller, D. The rear end of the lower fluting-roller, D, revolves upon a hollow pivot, F, formed upon the rear arm of the handle-frame G, which is firmly secured to the rear end of the top plate, C. The rear arm of the handle-frame G has an opening formed through it, into which projects a hollow projection, *g*<sup>1</sup>, the cavity of which communicates with the cavity of the pivot F, to form a passage for the heat.

The hollow projection *g*<sup>1</sup> fits into a cavity in the rear end of a bearing-block, H, formed upon or attached to the rear end of the pressure-bar I, and which moves up and down within the opening in the rear arm of the handle-frame G. The cavity in the lower part of the block H communicates with the hole through the said bearing-block H, in which the rear pivot, J, for the upper fluting-roller, K, revolves. The inner part of the pivot J is made hollow, and from the inner end of its cavity holes are formed leading out through the sides of the middle part of the said pivot, to form a passage for the heat into and through the upper fluting-roller, K. Around the middle part of the pivot J is formed a ring-groove, to allow the heat to pass into and through the holes in the sides of the said pivot at all times and in whatever position the said pivot may be. The pivot J is kept in place by a key, L, that passes through the block H and through the groove of the said pivot J at its upper side. To the outer end of the pivot J is attached a crank, M, by means of which the said pivot J is revolved. The upper fluting-roller, K, is made hollow, and the rear end of its cavity is



made square, to fit upon the squared forward end of the pivot J, so that the said pivot may carry the said roller with it in its revolution, the lower fluting-roller, D, being revolved by friction.

The forward end of the upper fluting-roller, K, revolves upon a hollow pivot, N, which slides in a hole in the forward end of the pressure-bar I, and is held in place by a spiral spring, O, connected with it and with the pin P, attached to the forward end of the pressure-bar I.

In the upper side of the hollow pivot N is formed a hole, leading into the cavity of the said pivot, and communicating with a hole passing up through the forward end of the pressure-bar I, to allow the heat to escape. The pressure-bar I is held down, pressing the upper fluting-roller, K, against the lower fluting-roller, D, by a spring, Q, placed between it and the lower side of the longitudinal bar of the handle-frame G, and which is kept in place by a pin, R, attached to the said pressure-bar I, and passing through the said spring and through the longitudinal bar of the handle-frame G. Upon the upper part of the pin R is placed a cam, S, so that by turning the said cam S the upper roller, K, may be raised from the lower roller, D, when desired.

T is the hand-piece, which is made of wood, and is secured to and between the upper ends of the upper arms of the handle-frame G by a bolt, U, passing longitudinally through it and through the upper ends of the said arms.

The sad-iron and the fluting-rollers may be heated by a block, V, of iron, placed in the

cavity of the sad-iron A, or by coals placed in the said cavity.

The fluting-rollers D K may be made with corrugations like saw-teeth, as shown in Fig. 3, or like gear-teeth, as shown in Fig. 6, or like ratchet-teeth, as shown in Fig. 7, and may be easily and quickly put in and taken out by drawing the sliding pivots E N outward.

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

The combination of the sad-iron A, made hollow, and open at its top and rear end, provided with a door, B, at its rear end, and having attached to its top a plate, C, recessed upon its upper side and provided with a sliding pivot, E, at its perforated forward end, the handle-frame G, provided with a hollow pivot, F, and a hollow projection, *g'*, at the lower end of its rear arm, the pressure-bar I, provided at its rear end with a sliding bearing-block, H, having a cavity in its lower end and a hole through it to receive the hollow, grooved, and perforated rotating pivot J, and provided at its perforated forward end with a hollow sliding pivot, N, the pin R, the spring Q, the cam S, and the wooden hand-piece T, with each other, to adapt it to receive a pair of hollow detachable fluting-rollers, D K, and their crank M, substantially as herein shown and described.

CARL JULIUS KRAMER.

Witnesses:

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