

No. 625,876.

Patented May 30, 1899.

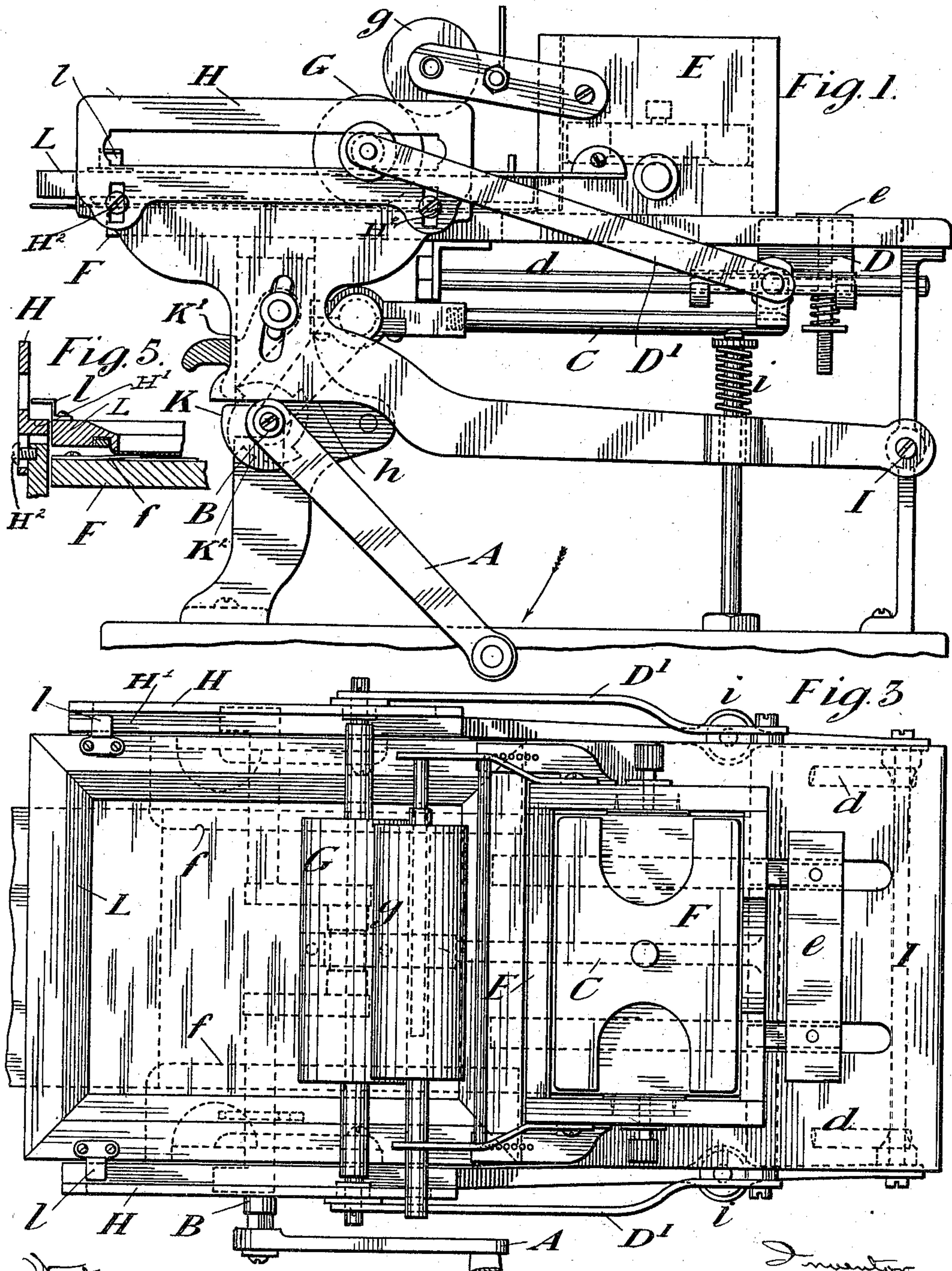
F. ELLAM.

APPARATUS FOR STENCIL PRINTING ON CARDS.

(Application filed Nov. 25, 1898.)

(No Model.)

2 Sheets—Sheet 1.



Witness
J. B. Ketchum
Norman Ellist

Inventor
Frederick Ellam
By
James L. Norris

No. 625,876.

Patented May 30, 1899.

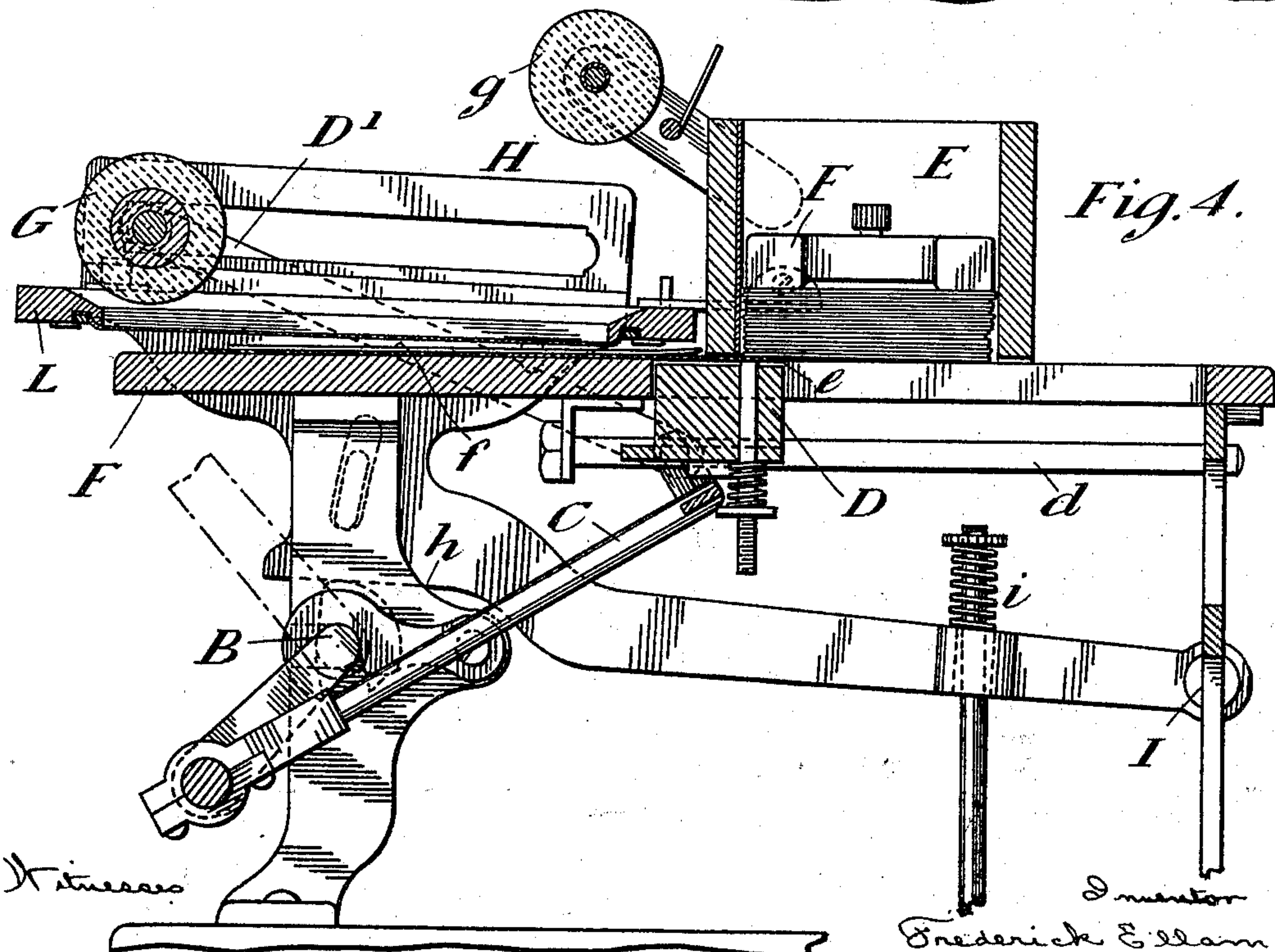
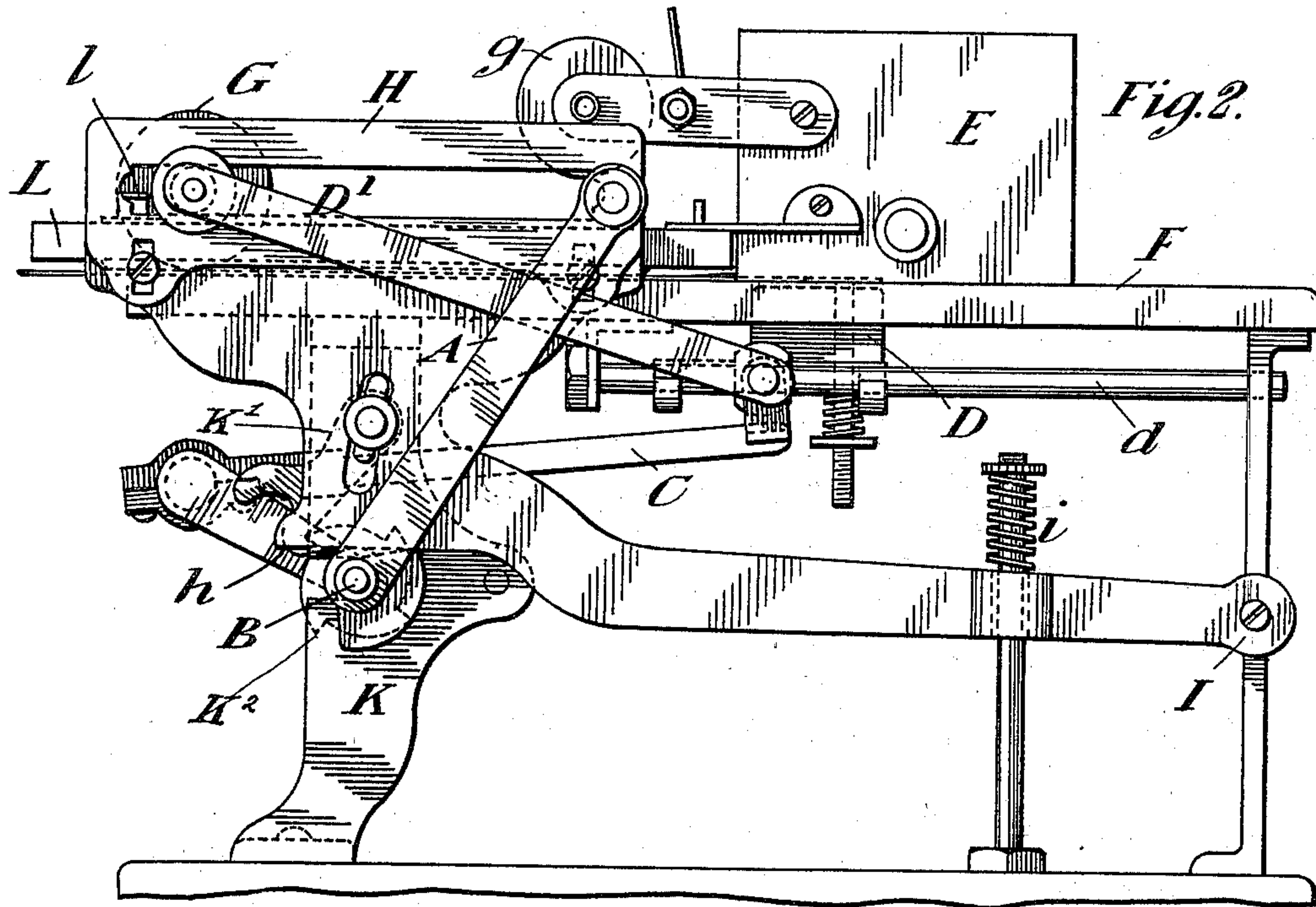
F. ELLAM.

APPARATUS FOR STENCIL PRINTING ON CARDS.

(Application filed Nov. 25, 1898.)

(No Model.)

2 Sheets—Sheet 2.



Witnesses

Wm. B. Keefe
Norman Elliott

Inventor
Frederick Ellam

James L. Norris

UNITED STATES PATENT OFFICE.

FREDERICK ELLAM, OF LONDON, ENGLAND.

APPARATUS FOR STENCIL-PRINTING ON CARDS.

SPECIFICATION forming part of Letters Patent No. 625,876, dated May 30, 1899.

Application filed November 25, 1898. Serial No. 697,440. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK ELLAM, a citizen of England, residing at No. 12 King street, Cheapside, in the city of London, England, have invented a certain new and useful Apparatus for Stencil-Printing on Cards, (for which I have applied for a patent in Great Britain, dated November 15, 1898, No. 24,082,) of which the following is a specification.

This invention relates to apparatus for stencil-printing a number of cards successively brought under a stencil plate or sheet, through the pervious parts of which ink is pressed by a roller on the card below.

The accompanying drawings show a machine according to this invention.

Figures 1 and 2 are side views showing the moving parts in two different positions. Fig. 3 is a plan, and Fig. 4 is a longitudinal section. Fig. 5 is a part transverse section showing the side guides for the cards.

By means of a winch-handle A or other power a crank-shaft B is caused to revolve in the direction of the arrow. The crank is linked by a connecting-rod C to a feed slide-block D, which is guided on rods *d* as it is caused to reciprocate under a card-magazine composed of a box E, containing a number of superposed cards loaded by a weight F. On the slide-block D there is fixed, adjustable in height, a strip of metal *e*, the front end of which, as the block D reciprocates, meets the rear edge of the lowest card in the box and pushes it forward, each card as it is thus advanced pushing forward those in front of it, which are guided along a table F by metal strips *f*, which are fixed at the sides of the table and overlap the side edges of the cards. The feed-block D is connected by links D' to the axis of a roller G, which receives ink from another roller *g*, that is inked by hand and can be raised out of the way of G when there is sufficient ink on G. The axis of the roller G reciprocates in the slots of the upper adjustable sections or parts of vertically oscillatory side frames H, which are pivoted at I and are pressed down by adjustable springs, such as *i*. The front parts *h* of the frames H rest on cams K on the crank-shaft, these cams as the shaft revolves causing the frames to ascend and allowing it to descend.

The upper sections or parts of the pivoted

frame may be made adjustable by set-screws H², Figs. 1 and 5.

The shaft of the crank B may be prevented from turning backward by a pawl and a ratchet-wheel, (indicated by dotted lines,) as at K' K², Figs. 1 and 2, the ratchet-wheel being on the shaft and the pawl pivoted above the same.

On the frames H is laid a stencil-frame L, holding the stencil plate or sheet, this frame having at its sides hooks *l*, which project over the ledges H', Figs. 3 and 5, of the frames H in such manner that normally the stencil-frame rests on the sides of the table F; but when the frames H are slightly raised their ledges H' strike the hooks *l*, and the stencil-frames and frames H rise together.

The apparatus works as follows: While the feed-block D is advancing a card, the frames H and stencil L are in their raised positions, due to the action of the cam K; but the stencil is not raised as far as the frames and the inking-roller G, which advances without delivering ink on the stencil. During the return stroke of the feed-block D, which is effected without moving any card, the frames H and inking-roller G are in their lowered position, as allowed by the cams K, and depressed by the springs *i*, so that the roller G travels back, bearing on the stencil and pressing ink through its pervious parts on the card below it. This action is repeated for every revolution of the crank-shaft.

Having thus described the nature of this invention and the best means I know of carrying the same into practical effect, I claim—

1. The combination of vertically-movable side frames, a stencil-frame lying between the side frames, a support or table on which the stencil-frame normally rests, mechanism for raising the side frames and permitting them to descend, means for engaging parts of the stencil-frame and lifting the latter after said side frames are slightly raised, an inking-roller traveling back and forth above the stencil-frame, a feed device for feeding the cards to be stenciled onto the said table or support while the stencil-plate is raised, and means for actuating the inking-roller and the feed device, substantially as described.

2. The combination of vertically-movable side frames having lateral ledges, a table or

support, a stencil-frame arranged between the side frames, normally resting on the table or support and having lateral hooks which are engaged by the lateral ledges of the side frames as they rise to lift the stencil-frame from the table or support, mechanism for raising the side frames and permitting them to descend, an inking-roller traveling over the stencil-frame, a card-feeding device, and means for actuating the inking-roller and card-feeding device, substantially as described.

3. The combination of a table or support, vertically-movable side frames, a stencil-frame lying between the side frames and normally resting on the table or support, mechanism for raising the side frames and permitting them to descend, means for engaging parts of the stencil-frame and lifting the latter when the side frames are raised, an inking-roller traveling above the stencil-frame,

a reciprocating card-feeding block connected with the inking-roller, and a crank-shaft connected with the card-feeding block, substantially as described.

4. The combination of a table or support, vertically-movable side frames, a stencil-frame arranged between said side frames, an inking-roller traveling over the stencil-frame, a reciprocating card-feeding block, a crank and rods respectively connecting the feed-block with the inking-roller and the crank, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

FREDERICK ELLAM.

Witnesses:

JNO. P. M. MILLARD,
GERALD L. SMITH.