

(No Model.)

E. T. THOMAS.
SEWING MACHINE.

No. 266,553.

Patented Oct. 24, 1882.

Fig: 1.

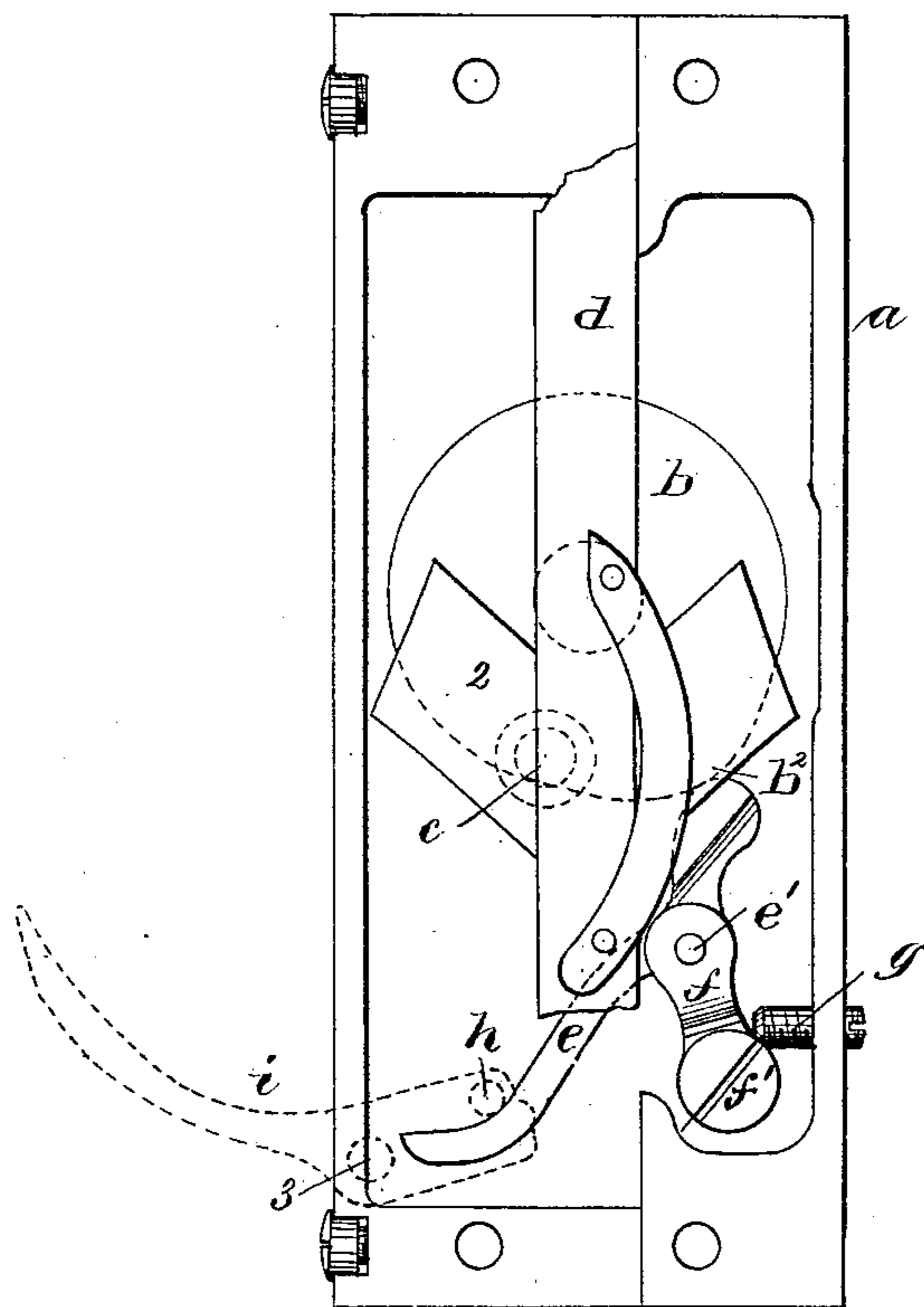
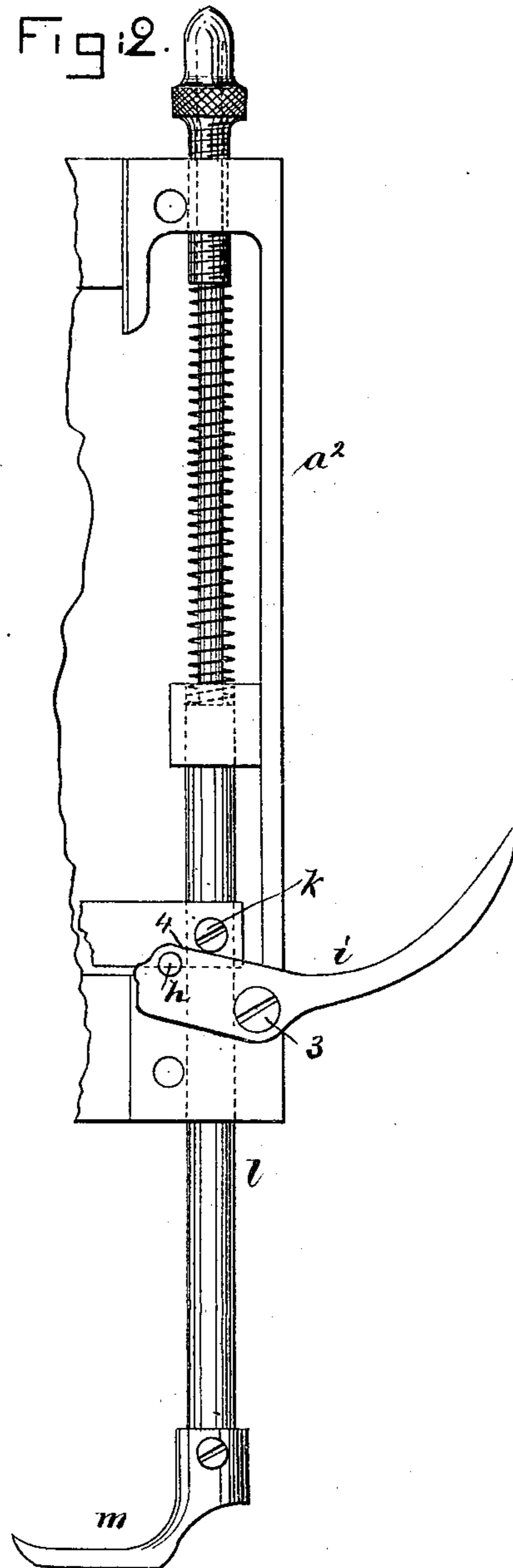


Fig: 2.



Witnesses

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UNITED STATES PATENT OFFICE.

EDDY T. THOMAS, OF NEW YORK, N. Y., ASSIGNOR TO THE C. W. WILLIAMS
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SEWING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 266,553, dated October 24, 1882.

Application filed March 18, 1882. (No model.)

To all whom it may concern:

Be it known that I, EDDY T. THOMAS, of New York, county and State of New York, have invented an Improvement in Sewing-Machines, of which the following description, in connection with the accompanying drawings, is a specification.

This invention in sewing-machines has for its object certain improvements in mechanism for automatically lifting the presser-foot while the needle is in the material and just as the usual four-motioned feeding device, located below the material, reaches the end of its back-stroke, which is of advantage when braiding or embroidering.

My invention consists essentially in a cam and a lever actuated thereby, having an adjustable pivoted fulcrum, combined with the presser-foot-raising lever, adapted to engage a pin or projection on or connected with the presser-bar and lift the presser-foot, substantially as will be described.

Figure 1 represents in front elevation the head of a "New Home" sewing-machine, the face or cover plate of the head being taken off to show the disk which carries the needle-bar and its actuating crank-pin, and my improved devices for lifting the presser-bar at each revolution of the needle-bar-operating shaft; and Fig. 2, an inner side view of part of the face or cover plate removed from Fig. 1, to show the presser-foot bar carried by it, and the usual hand-lever for lifting the presser-foot.

The head *a* has within it the disk *b*, provided at its front with the usual crank-pin, *c*, (shown in dotted lines,) which enters a groove in the cross-head 2 and reciprocates the needle-bar in the usual manner. This disk *b*, at its periphery, is made cam-shaped, the highest point or greatest diameter of the said cam being at *b*². This cam, by its action on the short end of the auxiliary lifting-lever *e*, pivoted at *e'* on

the adjustable link *f*, having its fulcrum at *f'*, turns the said lever on its fulcrum *e'* once during each rotation of the cam and reciprocation of the needle-bar. The end of the long arm of lever *e* is extended under a pin or projection, *h*, of the usual hand-operated presser-foot-lifting lever, *i*, pivoted at 3 on the cap or cover plate *a*² of the head *a*. The movement of lever *i* about its fulcrum causes its edge 4, acting against the pin *h* of the presser-bar, to lift the presser bar and foot more or less from the work under it while the needle is in the material, the needle serving as a pivot for the said material. This is done automatically by the movement of lever *e* in engagement with pin *h* of the usual hand-lever, *i*.

To lift the presser more or less for each stitch the lever *e* may be adjusted or moved by the adjusting device *g*, (shown as a screw,) acting against the link *f*, carrying the pin which serves as the fulcrum for lever *e*.

The presser-foot has been lifted automatically at each stitch in many different ways; so I do not broadly claim mechanism for that purpose; but

I do claim—

The cam-disk and the presser-foot-lifting lever *i*, combined with the auxiliary lifting-lever *e* and the adjustable link *f*, to support the fulcrum of the lever *e*, the latter by its movement turning the usual lifting-lever and lifting the presser bar and foot automatically once for each stitch, substantially as and for the purpose described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

EDDY T. THOMAS.

Witnesses:

W. H. SIGSTON,
B. J. NOYES.