

(No Model.)

2 Sheets—Sheet 1.

T. J. DIEUZET.
LINTING MACHINE.

No. 411,139.

Patented Sept. 17, 1889.

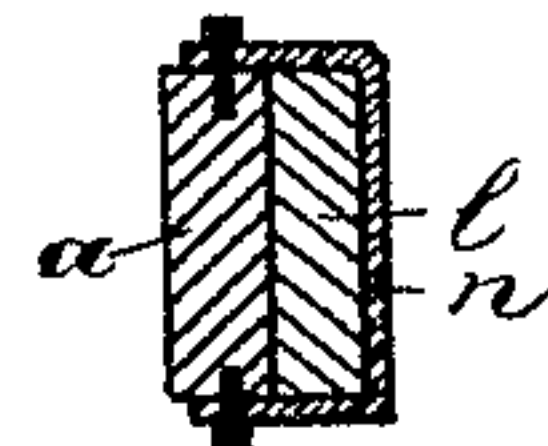
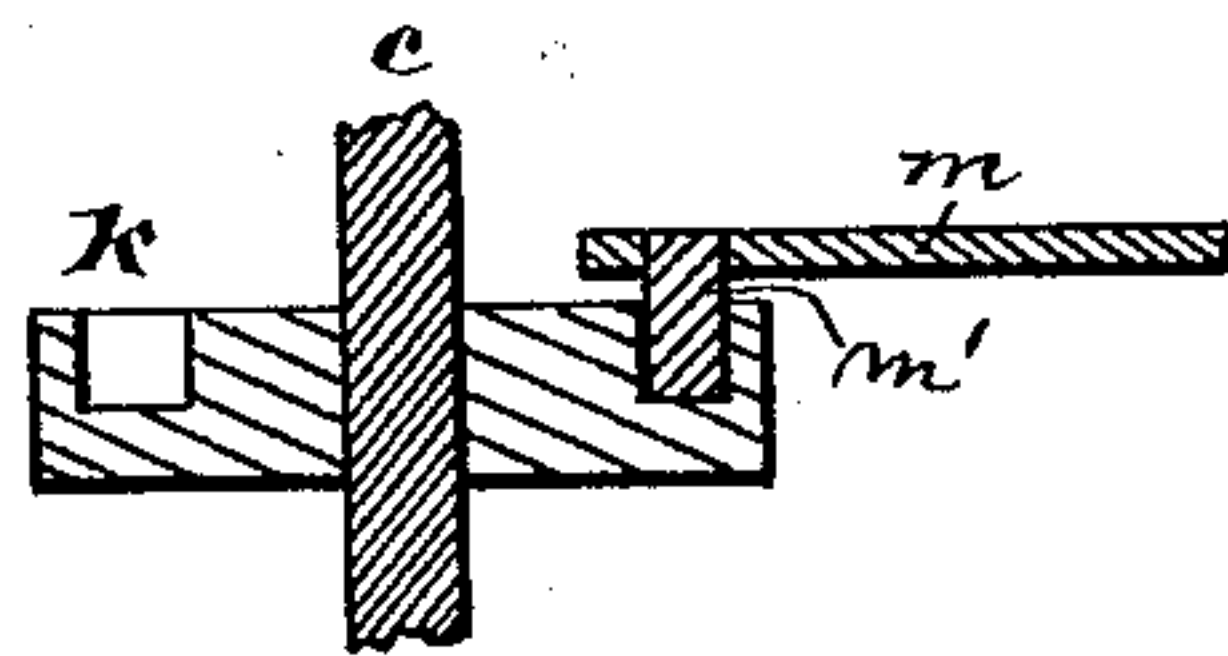
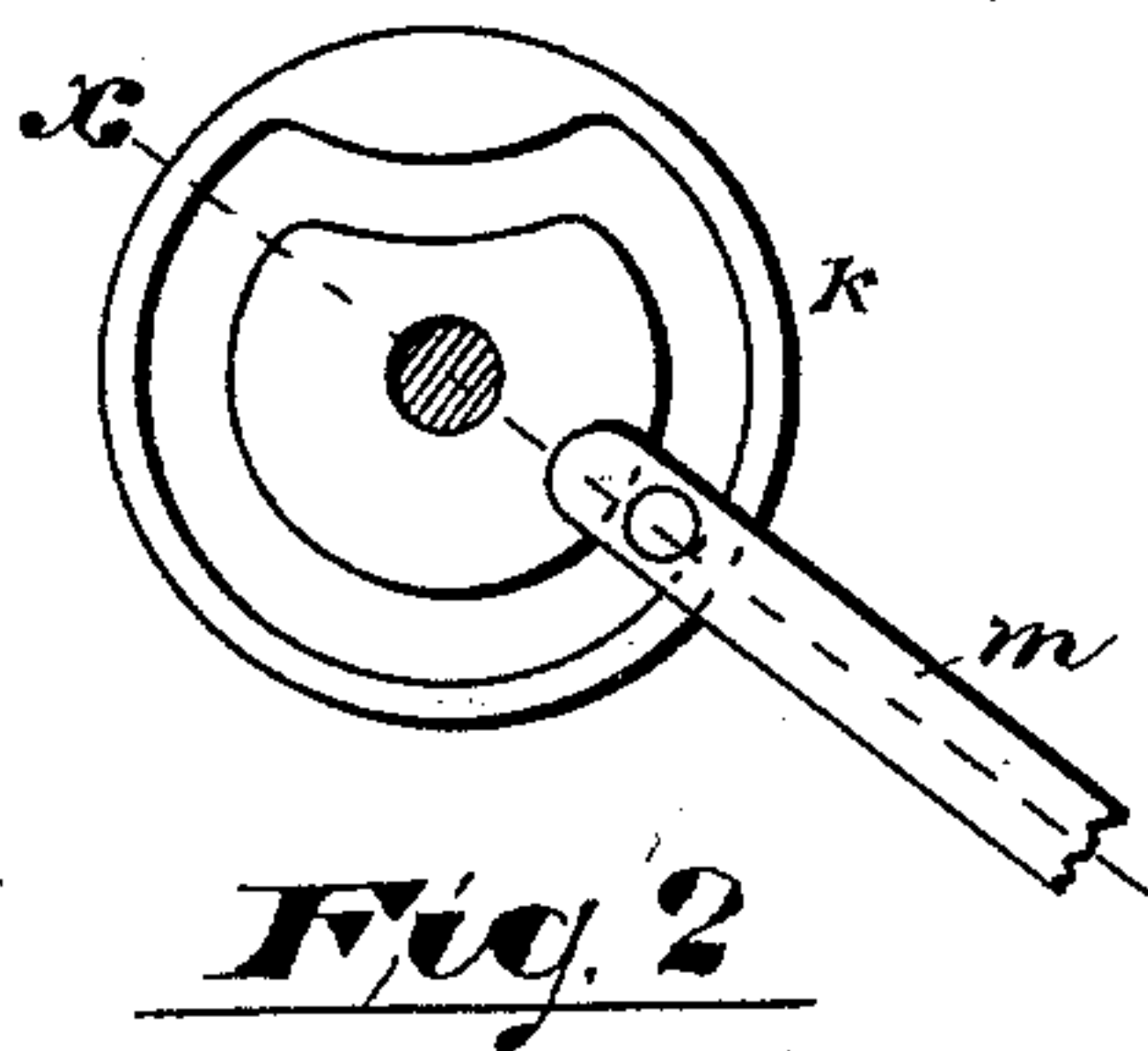
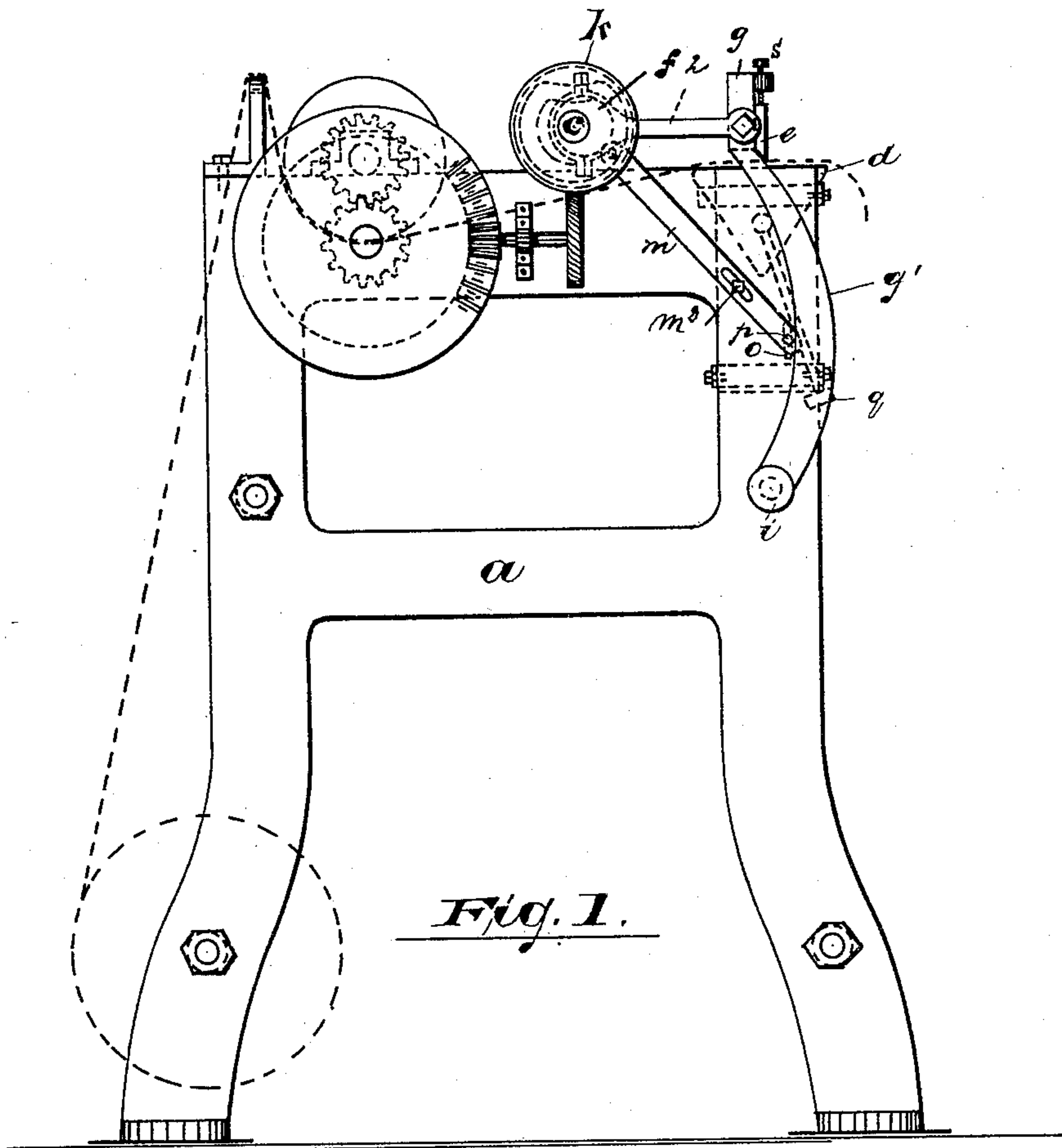


Fig. 2

Fig. 3.

Fig. 4.

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Witnesses
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By his Attorneys
Drake & Co.

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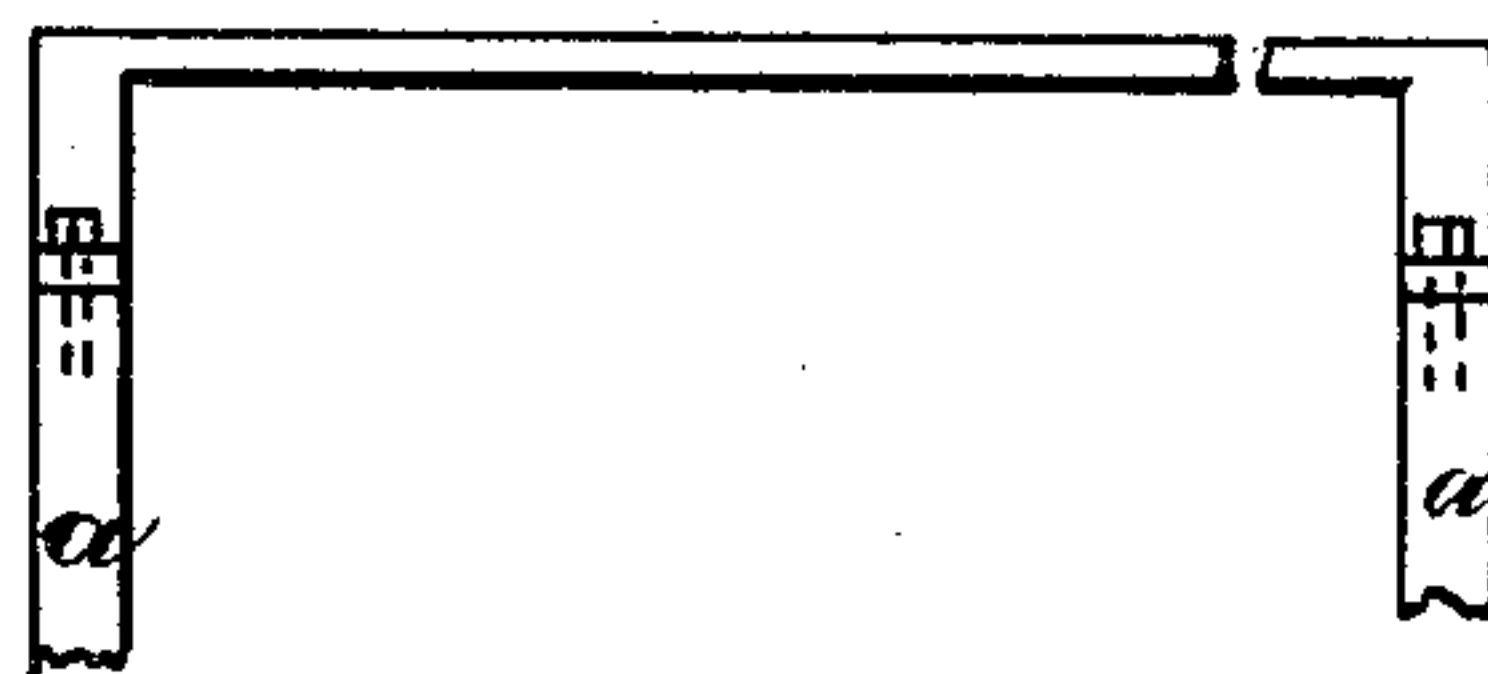
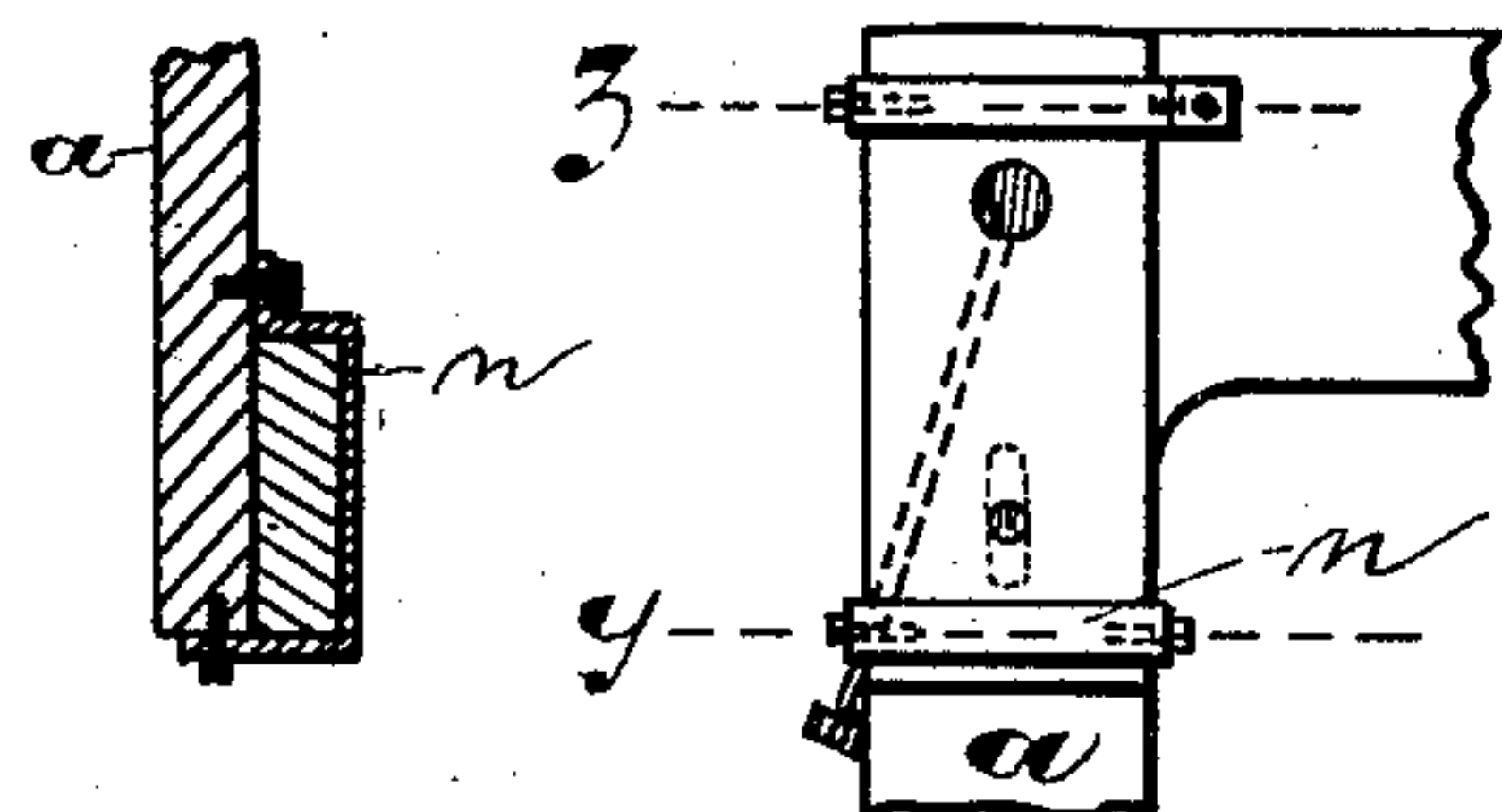
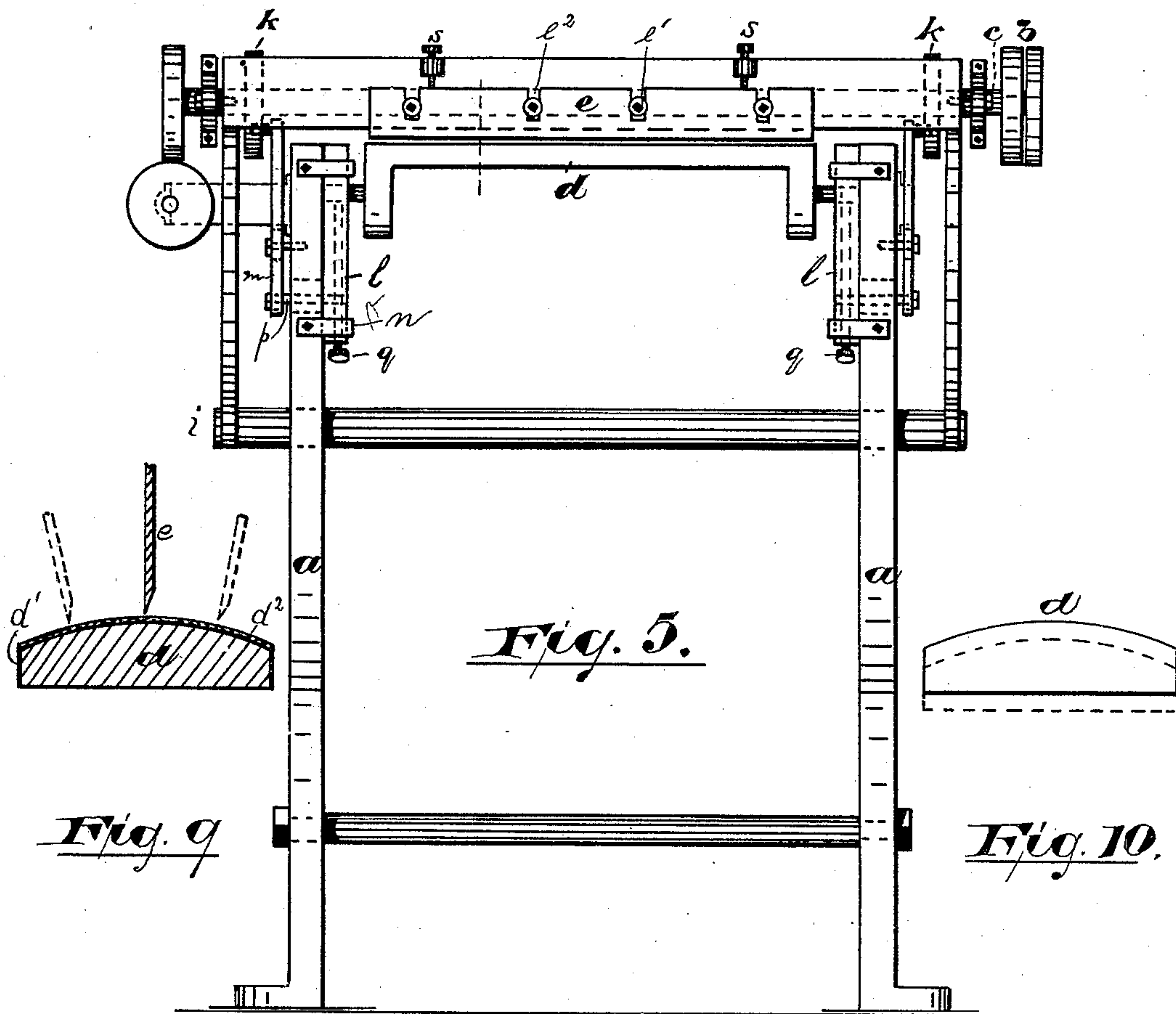


Fig. 6. *Fig. 7.*

Fig. 8.

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UNITED STATES PATENT OFFICE.

THEODORE J. DIEUZET, OF BLOOMFIELD, NEW JERSEY, ASSIGNOR OF ONE-HALF TO WALTER R. WILLIAM, OF SAME PLACE.

LINTING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 411,139, dated September 17, 1889.

Application filed August 6, 1888. Serial No. 282,065. (No model.)

To all whom it may concern:

Be it known that I, THEODORE J. DIEUZET, a citizen of the United States, residing at Bloomfield, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Linting-Machines; and I do hereby 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 letters of reference marked thereon, which form a part of this specification.

The object of this invention is to secure in a sheet of lint a deeper pile on the woven part of the fabric; to more perfectly and thoroughly disintegrate the fabric in producing said pile, so that in surgical operations the sheet may be more easily and quickly torn apart; to facilitate the operation of linting the fabric, and thus to reduce the cost of construction; to secure a smoother and easier movement, and thus prevent the noise heretofore produced by linting-machines while in operation; to secure a more uniform linted surface, or to prevent "skipping," and, generally, to secure a more effective and mechanically-perfect machine.

The invention consists in the improved linting-machine and in the arrangements and combinations of parts thereof, substantially as will be hereinafter set forth, and finally embodied in the clauses of the claim.

Referring to the accompanying drawings, embraced in two sheets, in which like letters of reference indicate corresponding parts in each of the several figures, Figure 1 is a side elevation of the improved machine. Fig. 2 is an inside view of a cam-wheel for actuating the bed. Fig. 3 is a section of the same, taken on line *x* of Fig. 2. Fig. 4 is a section on line *y*, Fig. 7. Fig. 5 is a front view of the machine. Fig. 6 is a section on line *z* of Fig. 7. Fig. 7 is a detail view of a sliding plate adapted to support the bed, which co-operates with the linting-blade. Fig. 8 is a detail view of a support for the lint material as it passes toward the knife, and Figs. 9 and 10 illustrate the motions of the linting blade and bed.

In said drawings, *a* indicates a suitable frame upon which the operating parts find a bearing, and *b* indicates the fast and loose pulleys, the first of which transmits the power from any suitable driving mechanism to the machine.

c indicates a driving-shaft on which the means employed for operating both the bed *d* and a linting-blade *e* are arranged. The linting-blade is given a peculiar motion obtained through the medium of an eccentric *f*, as indicated in Fig. 1, arranged on the driving-shaft, and a vibrating carrier *g*, connected with said eccentric by a connecting-rod *h*. The carrier is supported at the ends by vibrating rods or arms *g'*, pivoted on the frame *a*, as at *i*. When the eccentric is given its rotary motion by means of the driving-shaft, the blade-carrier and blade are given a reciprocating movement in a curved path, as will be understood. The linting-blade is secured to the carrier by means of suitable set-screws *e'*, or other suitable fasteners, which are preferably arranged in vertical slots *e²* in said blade, so that the latter may be moved under the influence of the adjusting-screws *s*. The linting-blade is made adjustable on its carrier, so as to be raised or lowered in relation to the bed *d*. The adjustment is effected by means of adjusting-screws *s*, Figs. 1 and 5, arranged in bearings on the carrier and extending into engagement with the linting-blade, so that by turning the said screw the relation of the blade to the bed or to the cloth moving thereover is changed, as will be understood.

The upper surface of the bed *d*, or where it co-operates with the linting-blade, is convex or made concentric or approximately concentric with the path of said linting-blade. Said bed is given a motion to and from said linting-blade, moving toward said blade when said blade is about to make its operative stroke and from said blade at the end of said stroke. This movement is produced by means of a cam or cams *k*, such as are shown more clearly in Fig. 2. This said cam is connected with the bed *d*, or with a sliding plate *l*, supporting the same, by means of a rod *m*, which is intermittingly given a vertical movement by means of said cam,

which movement is transmitted to the sliding plates and from thence to the bed. Each rod *m* at its upper end is provided with a pin *m'*, which engages the groove in the face of the cam *k*, by which the desired intermitting movement is effected. From said pin or point of engagement with the cam the said rod extends downwardly at the outer sides of the frame *a*, being suitably held to said frame by, in, or on bearings *m*², and is connected to the sliding plate *l* on the inner side of said frame by a pin or bolt *p*, which extends through a slot or opening in said frame. The sliding plates, which provide the bearings for the bed, are or may be held onto the frame *a* by means of straps *n* or other suitable means, and the said frame is slotted, as at *o*, Fig. 1, to allow a passage for the bolts or pins *p* for connecting the rods *m* with the sliding plates. The bed may be held in fixed relation to the sliding plates *l* by means of set-screws *q* or other well-known suitable means.

The fabric may be fed to the linting-blade by rollers actuated by gearing which receives its motions from the driving-shaft in any well-known manner.

The linting-bed is preferably of iron, lined on its curved side first with felt *d'* and over that with leather *d*².

The operation of the improvements having been already described in connection with the description of the parts, further description is deemed unnecessary.

Having thus described the invention, what I claim as new is—

1. In a linting-machine, the combination, with a linting-blade *e*, mounted on a reciprocating pivoted carrier and movable in a curved path, of a bed having a convex sur-

face concentric with said path and means, substantially as described, for reciprocating the said pivoted carrier, substantially as and for the purposes set forth.

2. In a linting-machine, the combination, with a linting-blade *e*, mounted on a pivoted carrier and movable reciprocally in a curved path, of a reciprocating bed having a curved linting-surface to co-operate with said linting-blade and means, substantially as described, for producing the reciprocating movements of said bed and carrier, substantially as set forth.

3. In a linting-machine, the combination, with a convex linting-bed, of a driving-shaft, an eccentric *f* arranged thereon, vibrating arms carrying the carrier *g* and the linting-blade, and rod *h*, connecting the eccentric with said carrier, substantially as and for the purposes set forth.

4. In combination, a frame *a*, blade *e*, carrier *g*, eccentric *f*, rod *h*, arm *g'*, convex bed *d*, plate *l*, rod *m*, and cam *k*, all arranged and adapted to operate substantially as and for the purposes set forth.

5. In combination, a frame *a*, linting-blade *e*, carrier *g*, adjusting means between the blade *e'* and carrier *g*, eccentric *f*, and rod *h*, arm *g'*, plate *l*, bed *d*, rod *m*, and cam *k*, all said parts being arranged and adapted to operate substantially as and for the purposes set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 28th day of July, 1888.

T. J. DIEUZET.

Witnesses:

CHARLES H. PELL,
C. H. BALDWIN.