

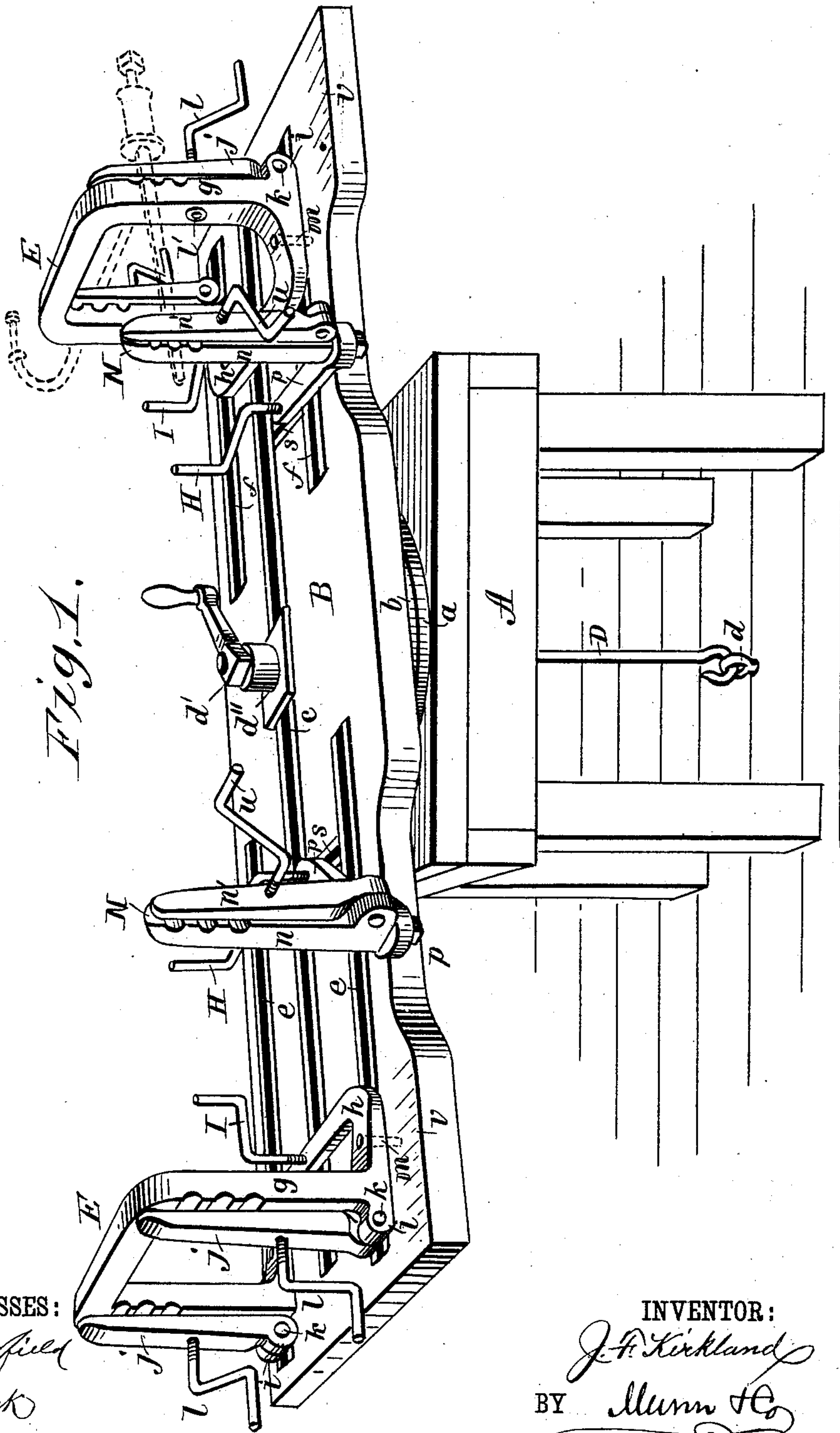
(No Model.)

2 Sheets—Sheet 1.

J. F. KIRKLAND.
CARRIAGE TOP FORMER.

No. 341,662.

Patented May 11, 1886.



WITNESSES:

J. D. Lafield
C. Sedgwick

INVENTOR:

J. F. Kirkland
BY *Munn & Co.*
ATTORNEYS.

(No Model.)

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Fig. 2.

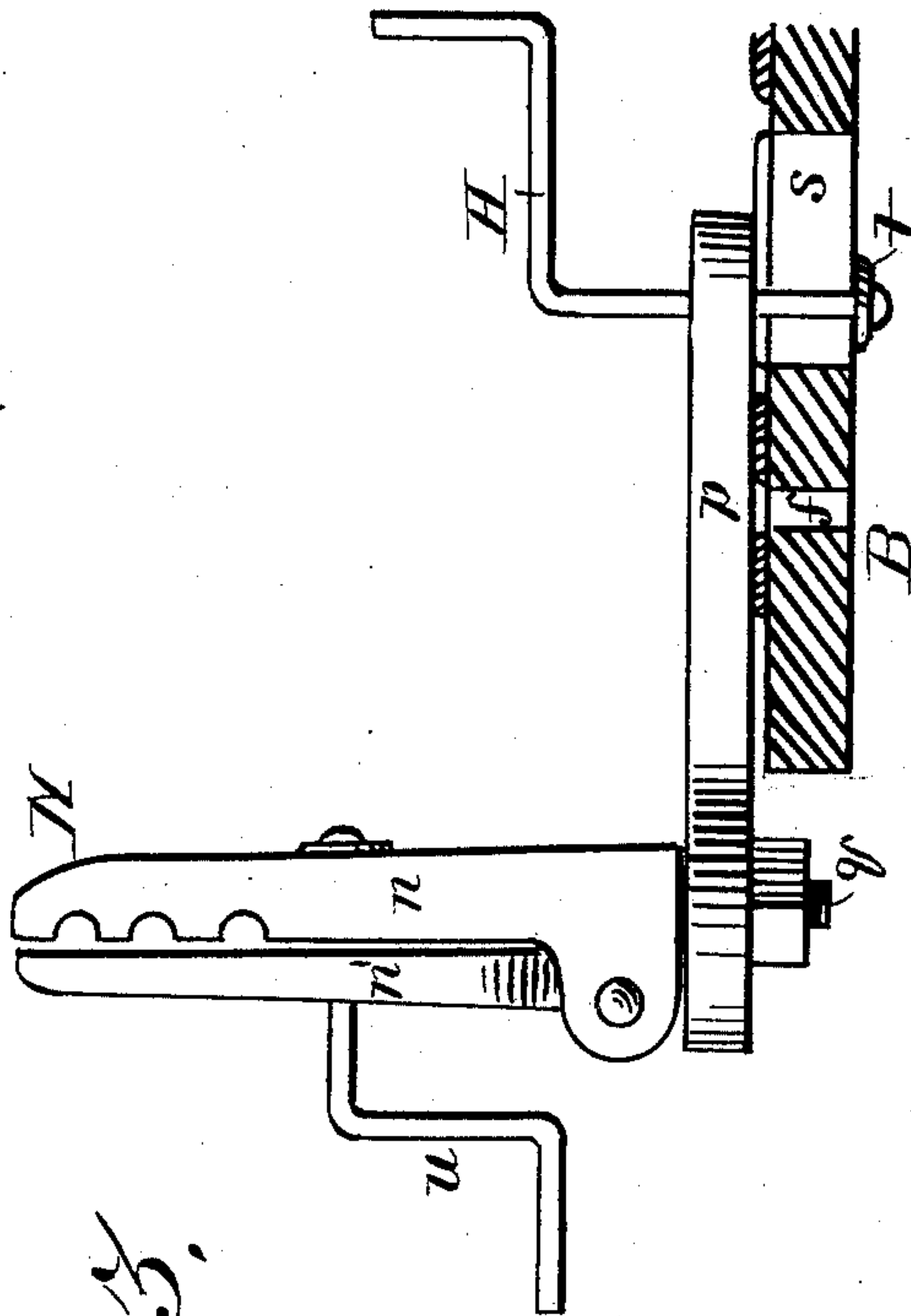
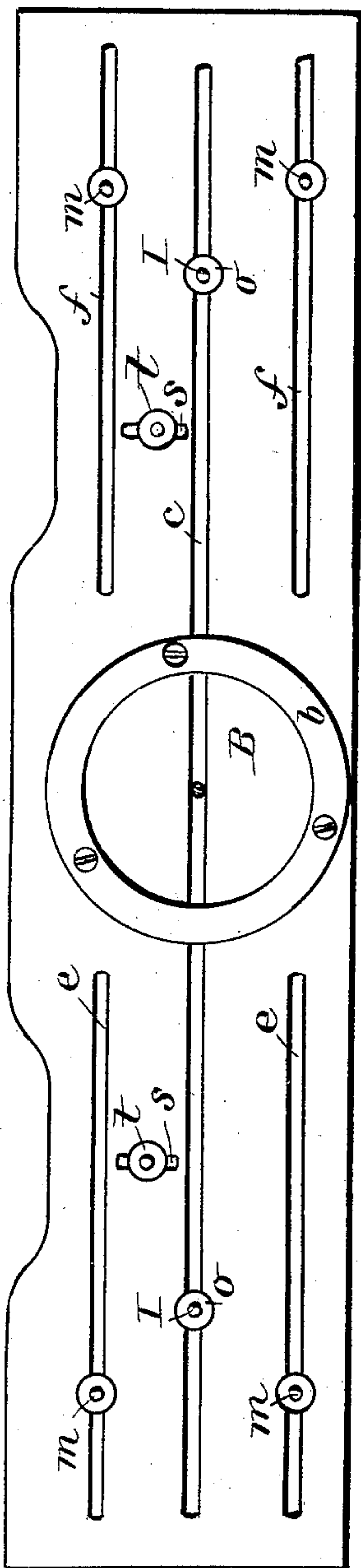


Fig. 3.

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UNITED STATES PATENT OFFICE.

JAMES FRANCIS KIRKLAND, OF GUELPH, ONTARIO, CANADA.

CARRIAGE-TOP FORMER.

SPECIFICATION forming part of Letters Patent No. 341,662, dated May 11, 1886.

Application filed February 12, 1886. Serial No. 191,727. (No model.)

To all whom it may concern:

Be it known that I, JAMES FRANCIS KIRKLAND, of Guelph, in the Province of Ontario and Dominion of Canada, have invented a new and Improved Carriage-Top Form, of which the following is a full, clear, and exact description.

The object of my invention is to provide a form upon which the frames of carriage-tops may be mounted in proper position at the time they are being trimmed, the object of the invention being to provide a form which may be quickly and accurately adjusted to hold the several parts of frames of varying form and size in their required relative position; and to this end the invention consists of a base or body pivotally mounted on a stand and provided with adjustable end and side clamps, as will be hereinafter more fully explained, and specifically pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of my improved carriage-top form. Fig. 2 is an inverted plan view of the base or body of said form; and Fig. 3 is a sectional view of a portion of the body, one of the side clamps being shown in elevation.

In constructing such a carriage-top form as is illustrated in the accompanying drawings, I provide a heavy stand, A, to the top of which there is secured a circular rail or plate, a, upon which there rests a similar plate, b, that is carried by the under side of the base or body B of the carriage-top form. This base B is provided with a central longitudinal slot, c, through which there is passed the shank of a hook, D, the lower end of which is fixed to an eye, d, as shown in Fig. 1, the upper end projecting above the base B and being threaded to engage with a crank-armed nut, d', by means of which the base B is clamped to the stand A, a shouldered washer, d'', being interposed between the nut d' and the base B, as shown.

Four other longitudinal slots, e e and f f, are formed in the base B, and serve as guides for the adjustable end clamps, E E. These

clamps E E are formed from two U-shaped irons, g and h, which are united so that the iron h will project at right angles from the iron g and constitute the base of the clamp. Lugs i i project outward from the lower ends of the iron g, and serve as supports for the clamping-jaws j j, which are pivotally connected to said lugs by bolts k k, as shown. In order that the jaws j may be brought up close against the iron g, I provide each jaw with a crank-arm screw, l, the jaws being formed with threaded sockets, through which the screws l are passed. The ends of these screws l project through the iron g, where they are held, and are prevented from being withdrawn from engagement with said irons by collars l', as shown on the right in Fig. 1. Guiding-lugs m project downward from the irons h and through the slots e and f, to act as guides for the end clamps, which end clamps are locked in place after being moved to the required position by means of horizontal screws I I, that are threaded to engage with sockets formed in the said iron h, and which project downward through a central longitudinal slot, c, the lower ends of the screws I being provided with collars or washers o, as shown in Fig. 2.

Two side clamps, N N, which consist of a standard, n, and a clamping-jaw, n', pivotally united at their lower ends, are supported by brackets p p, apertures being formed in the outwardly-projecting ends of said brackets to receive the downwardly-projecting posts q of the standards n, the idea being to pivotally connect the clamps with their supporting-brackets. The inner ends of the brackets p are held by handle-screws H H, which are passed through the said inner ends of the brackets, and also through short transverse slots s s, formed in the base B, the lower ends of said handle-screws H carrying washers or collars t, as shown in Fig. 3.

The jaws n' are operated by means of the handle-screws u. In order that the clamps may be quickly and accurately adjusted to the required position, I provide each end of the base B with a scale, as shown at v.

Such a carriage-top form as has been described may be quickly and accurately adjusted to position, and when the parts are placed

to clamp the top rail of the carriage such rail will be held in the required position during the process of trimming the top. By simply loosening the nut *d'* the form may be turned
5 about its axis, so as to bring any desired part of the top within reach of the operator.

It will of course be understood that, instead of the central longitudinal slot, *c*, there might be a central aperture for the passage of the
10 shank of the hook *D*, and two end slots to permit of the passage of the screws *I I*, and consequently of the adjustment of the end clamps.

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

1. In a machine for holding the tops of carriages while being trimmed, the combination, with a base, of clamps at opposite ends of the
20 same, the clamping-spaces of their jaws extending transversely to the base, of side clamps mounted on the same side of the base with the clamping-spaces of the jaws at right angles to those of the end jaws, substantially as set
25 forth.

2. In a machine for holding the tops of carriages while being trimmed, the combination, with the base having longitudinal slots *e e f f* at its opposite ends, on opposite sides of its
30 center, and a central longitudinal slot, of the U-irons *g h g h* at opposite ends of the frame, the jaws *j j*, hinged to the outer faces of the vertical irons *g*, screws *l*, for operating said jaws, guide-pins *m*, extending from the lower
35 faces of the irons *h* into the several slots *e e f f*, and the side clamps, *N N*, on the same side of the base adjacent to the end clamps, substantially as set forth.

3. In a machine for holding the tops of carriages while being covered, the combination,
40 with the base having clamps at opposite ends thereof, the clamping-spaces thereof being transverse to the base, of the brackets *p p* at opposite ends of the same side of the base, having the adjusting-screws *H* at their inner
45 ends, the standards *n n*, projecting up from the outer ends of the brackets, and the clamping-jaws *n'*, pivoted to the said standards, and

provided with the adjusting-screws *u u*, substantially as set forth. 50

4. In a machine for holding carriage-tops while being covered, the combination, with a stand, *A*, and the base *B*, pivoted to swing horizontally thereon, of the vertical end clamps
55 extending transverse to the base and the vertical side clamps extending up from the same side of the machine, substantially as set forth.

5. In a machine for holding carriage-tops while being formed, the combination, with the base and the end clamps extending up from
60 the opposite ends, of the brackets *p p*, secured at their inner ends to the base, near its opposite ends, and the clamps *N N*, having pivot-pins *q* on their lower ends extending through
65 the outer ends of the brackets, and nuts on said pivots, for adjusting the said clamps, substantially as set forth.

6. In a machine for holding carriage-tops while being trimmed, the combination, with the stand *A* and the base *B*, provided with
70 end clamps, *E E*, and side clamps, *N N*, of the rod *D*, having a screw-eye, *d*, on its lower end to enter the floor, and extended up through the stand and base, and provided with the nut
75 *d'* on its upper end, for clamping the base to stand, substantially as set forth.

7. A machine for holding carriage-tops while being trimmed, consisting in a stand, a base thereon, having a longitudinal central slot, *c*, side slots, *e e f f*, at opposite ends and
80 sides of the base, parallel with the slot *c*, and two short transverse slots, *s*, of the end clamps, *E*, having pivoted clamping-jaws on their outer faces, and guide-pins and adjusting-screws working in the slots *c e f*, the brackets *p*,
85 screws *H*, extending through the said brackets into the transverse slots *s*, the clamps *N N*, pivoted at their lower ends to the outer ends of the brackets, and the rod *D*, pivotally connecting the base and stand, and the nut *d'* and
90 screw-eye *d*, all constructed and combined substantially as set forth.

JAMES FRANCIS KIRKLAND.

Witnesses:

JAMES DAVISON,
J. W. WACK.