

No. 651,221.

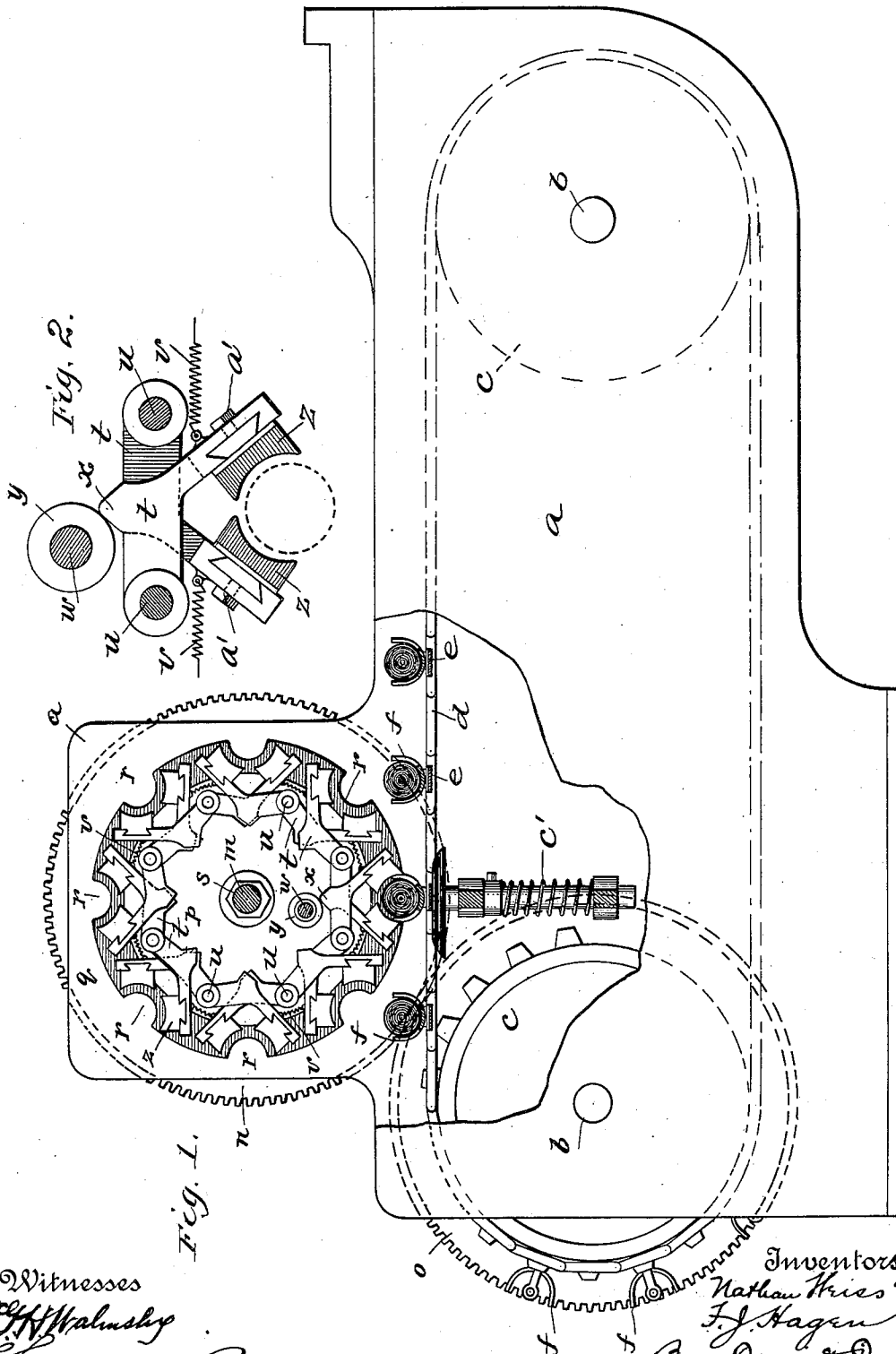
Patented June 5, 1900.

N. WEISS & F. J. HAGEN.
CIGAR MARKING MACHINE.

(Application filed Oct. 5, 1899.)

(No Model.)

2 Sheets—Sheet 1.



Witnesses
W. H. Walmsley
Thomas Powell

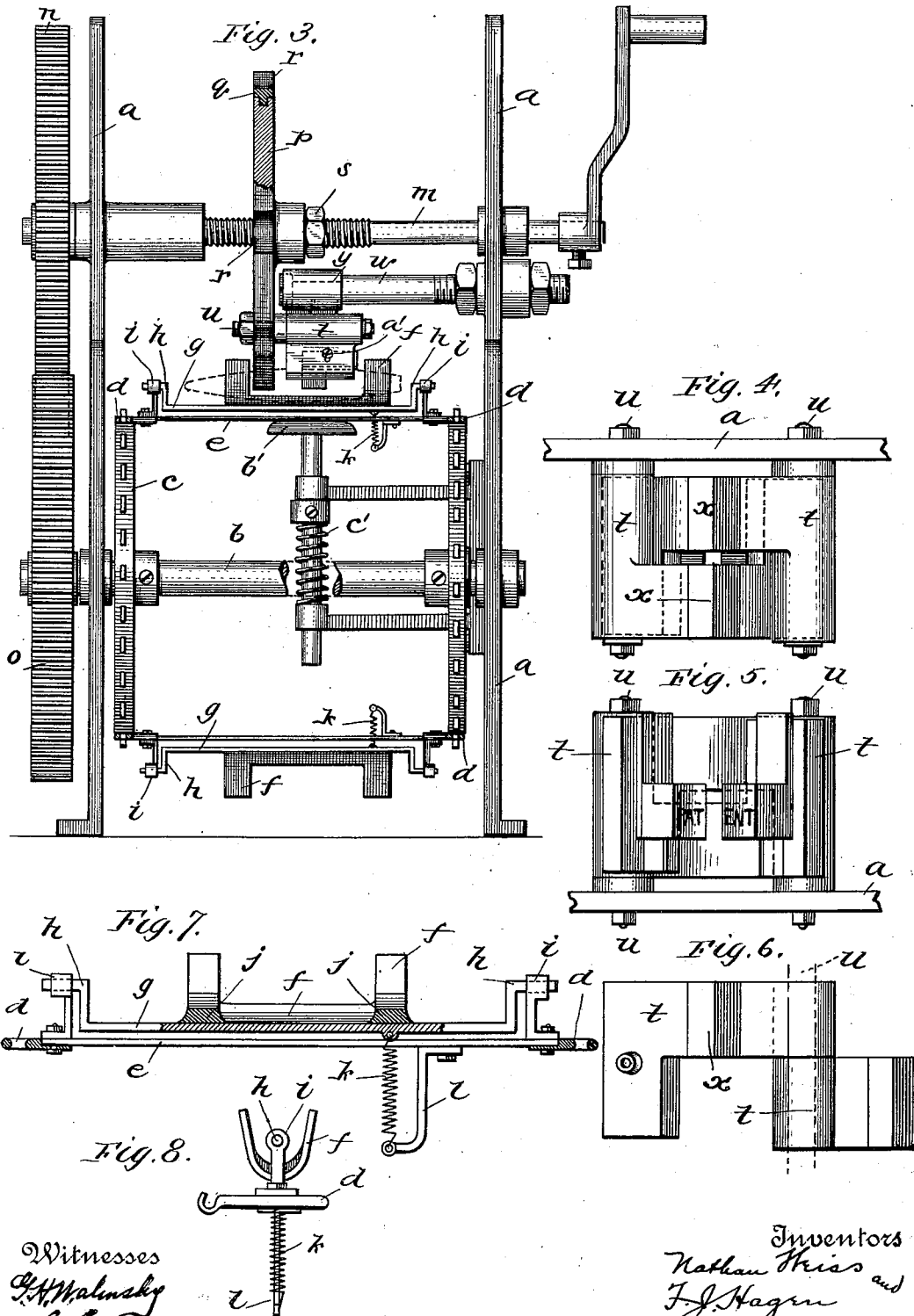
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(No Model.)

2 Sheets—Sheet 2.



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UNITED STATES PATENT OFFICE.

NATHAN WEISS AND FERDINAND J. HAGEN, OF NEW YORK, N. Y.

CIGAR-MARKING MACHINE.

SPECIFICATION forming part of Letters Patent No. 651,221, dated June 5, 1900.

Application filed October 5, 1899. Serial No. 732,676. (No model.)

To all whom it may concern:

Be it known that we, NATHAN WEISS and FERDINAND J. HAGEN, citizens of the United States, and residents of the city of New York, borough of Manhattan, State of New York, have invented certain new and useful Improvements in Cigar-Marking Machines, of which the following is a specification, reference being had therein to the accompanying drawings, in which—

Figure 1 is a side elevation, partly in section, of our machine; Fig. 2, a detail, partly in section, of one set of the impressing devices; Fig. 3, an end elevation of the machine, partly in section and showing but one set of impressing or marking devices; Figs. 4 and 5, respectively, top and bottom views of the impressing devices; Fig. 6, a detail plan of one of the sections of the impressing devices; Fig. 7, a detail side elevation, partly in section, of one of the cigar-holding troughs; Fig. 8, an end elevation of the same.

Our invention is designed to provide a simple machine for continuously and successively marking cigars without injuring the wrappers thereof and without the employment of heated dies, as more fully hereinafter set forth.

In the main frame *a* are journaled two shafts *b*, carrying sprocket-wheels *c*, and on these sprocket-wheels run two endless sprocket-chains *d*, which, in connection with the transverse connecting-bars *e*, (connecting each pair of opposite links,) constitute the endless cigar-carrier. Each cigar is supported in a trough *f*, supported upon a bar *g*, running transversely of the carrier and having its upward-extending extremities bent horizontally outward in opposite directions to form pivots or trunnions *h*, journaled in brackets *i*, mounted on the chains, these trunnions being in axial alinement, so that the cigar-holding device may swing in the arc of a circle of which the trunnion *h* is the center. Suitable rubber cushions *j* are placed in each trough *f*, and to normally hold the troughs in position a small spring *k* may be attached to bar *g* of each trough and connected to the stationary bracket *l*, depending from one of the adjacent bars *e*.

Journaled in the frame above and a little forward of the rear sprocket-wheels is a trans-

verse shaft *m*, provided at one end with a gear *n*, meshing with the gear *o* on the shaft of the rear sprockets, whereby said shaft *m* is rotated in unison with the cigar-carrier. On the shaft *m* is fixed a disk *p*, provided with a soft rubber periphery or band *q*, provided with notches *r* at equal intervals to fit over and resiliently clamp the cigars as they pass through the machine. The disk *p* is adapted to press upon the cigars at a point between the ends of the trough *f*, said troughs having their sides cut away to permit this to be done, and in order that the disk may be adjusted along its shaft to bring its point of engagement with the cigar to the proper point the shaft is threaded and the hub of the disk is correspondingly threaded, a lock-nut *s* being employed to lock the disk at its adjusted position.

The clamp-disk *p* carries the marking devices, which are used in sets, one set for each notch *r*, eight sets being shown in Fig. 1 and one set in Fig. 3. Each set of marking devices consists of two sections or levers *t*, pivoted on pins *u*, projecting from the face of the disk, said levers having an angular formation and crossing each other at a point about midway between the pins *u* and their free ends normally lying at substantially right angles to each other and terminating near the periphery of the disk and equidistant from the center of the adjacent one of the semicircular notches *r*, whereby when the levers are swung outward on their pins *u* their free ends move toward the center of said notch. These levers are normally drawn inward away from said notch by spiral springs *v*, and to force them outward against the tension of the springs a stationary roller-carrying pin *w* is mounted on the frame in such manner as to automatically impinge against an inward-extending cam *x* on each lever. The cams of the levers are approximately V-shaped and are in alinement with each other, so that the levers will be swung outward simultaneously. The pin *w* projects inward from one side of the frame *a*, and its roller *y* is journaled on its extreme inner end and is broad enough to contact with both cams at once as the disk rotates. Where the disk carries but one set of marking devices and each lever or section has the entire length of one of the pins *u* for a bearing, the

bearing of the lever is extended the full length of the pin, as shown in Figs. 4, 3, and 5; but where a series of the marking devices is carried by the wheel, as shown in Fig. 1, (and as is preferable,) the adjacent levers of adjacent sets are pivoted upon the intermediate pin *u*, thereby requiring the bearing to be shortened, as shown in Fig. 6, but dispensing with a double set of pins.

- 10 The marking devices are attached to the inner faces of the levers *p* and are adapted to press upon the cigar upon opposite sides thereof when the roller *y* presses the levers simultaneously outward. In the present instance
15 the marking devices consist of a die-block *z*, dovetailed into the inner face of each lever and secured adjustably and removably therein by a suitable set-screw *a'*, said die-blocks having their inner die-carrying faces curved
20 to correspond to the curvature of the cigars to be marked.

It will be observed that in operation a cigar is placed in each trough as the carrier moves toward the marking devices. The notches *r*
25 being spaced correspondingly to the troughs or holders, they will successively grasp the cigars and resiliently clamp them against the cushions *j* during the marking operation, and the pivotal support of each trough will permit the cigar to nicely adjust itself to the clamping parts. Immediately after the cigar is firmly clamped the roller *y* strikes the cams
30 *x* and impresses the dies into the cigar, and when the roller has passed the cams the springs *v* normally release the cigar from the die-blocks and permit it to move on to the rear of the machine, where it is removed from the trough. In this way the cigars can be marked rapidly and continuously without injuring
40 their wrappers and without employing heated dies. Suitable devices may be employed to apply coloring-matter to the dies or type carried by blocks *z*. Directly under the carrier, at the marking-point, is arranged a presser-block *b'*, normally forced upward by a spring
45 *c'* to resiliently support the cigar-troughs during the marking operation.

It will be observed that our invention is not confined to the details of construction
50 shown and described and that the machine may be employed for marking other articles than cigars.

Having thus fully described our invention, what we claim, and desire to secure by Letters
55 Patent, is—

1. In a machine for marking cigars or other articles, the combination of a carrier consisting of endless chains and transverse bars connecting the chains, transverse troughs or holders for the articles pivotally supported on said
60 transverse bars and having a partial rotary movement independently thereof, and marking devices adapted to mark the articles while the holder or trough is adjusting itself rotatively.

2. In a marking-machine, the combination of a frame, a carrier supporting holders for

the articles to be marked, said holders being pivotally supported on the carrier so that they may partially rotate while the articles are being marked, and a spring normally holding
70 each holder in position.

3. In a marking or impressing machine, the combination of a frame, a carrier for the cigars or other articles adapted to bring them into
75 juxtaposition to the marking devices, a clamping-disk rotatively supported above the carrier and provided with yielding clamping-notches adapted to grasp the articles in succession, and marking devices adapted to mark
80 the articles while thus clamped.

4. The combination of a frame, a movable support for the articles to be marked, a rotating disk journaled above the carrier and adapted to move in unison therewith, said disk carrying the clamping devices, and also means
85 for marking each article as it passes under the disk, said means consisting of devices movable independently of the disk and adapted to mark each article while clamped by said
90 disk.

5. The combination of a frame, a disk supported therein, means for rotating the disk, a carrier adapted to pass under the disk and to hold the articles to be marked, means carried
95 by the disk for marking the articles, said means consisting of a pair of movable sections each carrying a die-block, said die-blocks being adapted to grasp the articles simultaneously from opposite sides, and means for simultaneously operating said sections.

6. The combination of a frame, a rotary disk journaled therein, a carrier adapted to move under the disk, marking devices carried by the disk and adapted to clasp and mark each
105 article as it passes under the disk, substantially as set forth.

7. In a marking-machine, the combination of a frame, a carrier, adapted to support the articles to be marked, a clamping-disk supported above the carrier and adapted to engage the articles as they pass thereunder, this disk having a resilient clamping periphery, and means for rotating the disk and adjusting it longitudinally of the articles being
115 marked, and devices for operating the carrier and the disk, and marking devices.

8. In a marking-machine, the combination of a frame, a carrier, a rotary disk adjacent the carrier, marking devices carried by this
120 disk, said devices consisting of a pair of pivoted levers crossing each other and extending outward toward the periphery of the disk, dies carried by these levers, and means for automatically and simultaneously actuating
125 said levers to grasp and mark the article.

9. In a marking-machine, the combination of a frame, a carrier for the articles to be marked, a rotary part supported above the carrier and carrying the marking devices,
130 said devices consisting of a pair of crossed levers carrying the dies and provided with similarly-shaped cams, and a stationary part supported in the path of said cams and

adapted to operate them simultaneously to cause the dies to grasp the article.

10 10. In a marking-machine, the combination of a frame, a carrier, a rotating disk supported above the carrier and adapted to clamp the articles in succession, and marking devices carried by the disk and means adapted to grasp each article and mark the same while clamped by the disk.

15 11. In a marking-machine, the combination of a holder for the article, a set of marking devices consisting of a pair of levers carrying marking-dies and adapted to grasp the article simultaneously upon opposite sides, means for supporting said levers and means for operating them simultaneously.

20 12. In a marking-machine, the combination of a holder for the article, a pair of pivoted levers crossing each other and carrying marking-dies adapted to grasp the article upon opposite sides of the center thereof, and means for simultaneously operating said levers.

25 13. In combination, a frame, a carrier for the articles and means for moving the carrier, a device for clamping the articles while being marked, a pair of pivoted levers crossing each other and provided with means for

marking the articles, said levers being provided with cams, and a device adapted to contact with the cams and operate the levers 30 simultaneously.

14. In combination, a frame, an endless carrier and means for operating it to bring the articles in succession under the marking devices, a rotary disk supported above the carrier and provided with a series of sets of marking devices, each set consisting of a pair of movable sections adapted to grasp the article upon opposite sides and one or both the sections being provided with marking-dies, means 35 for normally holding the sections apart, away from the article, and a device for automatically operating each set of marking devices as it comes adjacent to the article to be marked, substantially as set forth. 40 45

In testimony whereof we hereunto affix our signatures in the presence of two witnesses this 3d day of October, 1899.

NATHAN WEISS. [L. S.]
FERDINAND J. HAGEN. [L. S.]

Witnesses:

WILLIAM GOTTGEBREU,
RAY WOLFSON.