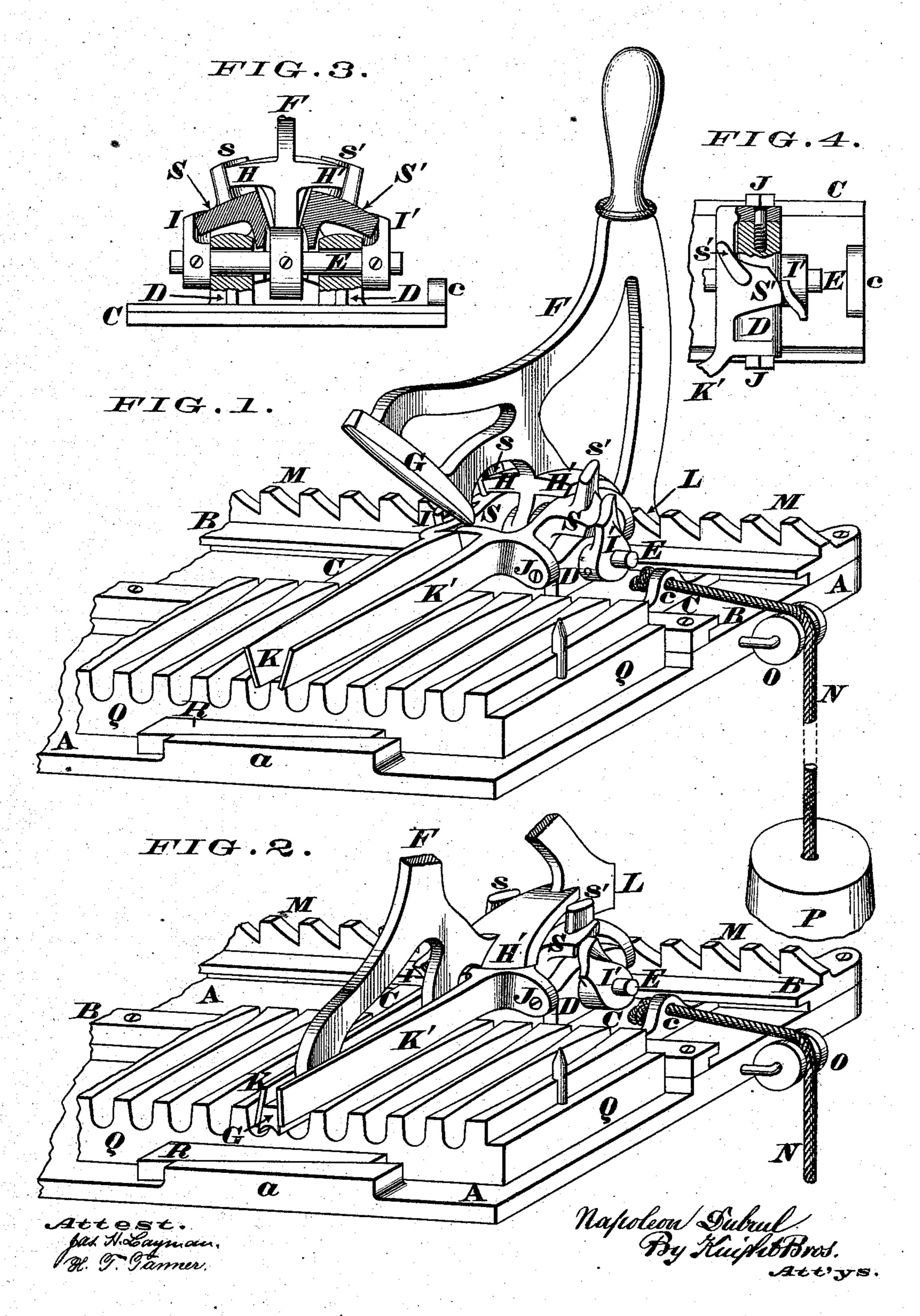
N. DUBRUL.

Machine for Charging Cigar-Molds.

No. 161,015.

Patented March 23, 1875.



THE GRAPHIC CO.PHOTO-LITH. 39 & 41 PARK PLACE, N.Y.

UNITED STATES PATENT OFFICE.

NAPOLEON DUBRUL, OF CINCINNATI, OHIO.

IMPROVEMENT IN MACHINES FOR CHARGING CIGAR-MOLDS.

Specification forming part of Letters Patent No. 161,015, dated March 23, 1875; application filed April 13, 1874.

To all whom it may concern:

Be it known that I, Napoleon Dubrul, of Cincinnati, Hamilton county, Ohio, have invented a new and useful Machine for Charging Cigar-Molds, of which the following is a

specification:

My device is designed to enable a cigarmaker to charge the molds with greater ease, rapidity, and uniformity than can be done by hand; and consists essentially of two jaws, which operate to compress the bunch of tobacco equably and simultaneously at every part, and a plunger which operates to push the tobacco thus compressed into the mold, as hereinafter more fully set forth.

My device further comprises an arrangement whereby the said charging mechanism is automatically shifted from the mold last

filled to the next unfilled mold.

Figure 1 is a perspective view of my device, having the plunger elevated, and the jaws or compressors open. Fig. 2 is a perspective view, showing the jaws closed and the plunger depressed. Fig. 3 is a vertical section, through the bearings, of the operating handle, the latter being elevated. Fig. 4 is a plan of a portion of the slide or carriage, the handle and its attachments being removed, and one of the bearings being shown in section.

A base, A, has firmly attached to it a track or way, B, for the sliding foot C, whose elevated portions D afford bearings for pivots E of bent lever, having a handle, F, a plunger, G, and two pairs of cams, H H' and I I'. Pivoted at J, at right angles to the pivots E, and, like said pivots, in a horizontal plane, are one pair of jaws, K K', having ears S S', armed with projecting lugs ss', against which the paired cams H H' and I I' alternately impinge as the handle F is vibrated forward and backward, operates by turn to close and open said jaws. The lever F also has a heel, L, which, at each backward stroke, engaging in the successive teeth of a ratchet, M, operates to shift the jaws and plunger accurately to the next mold. A cord, N, attached at c to the advancing end of the slide, and passing over a pulley, O, carries at its free extremity a weight, P. Q represents a gang of molds secured to base A, by means of wedge R, which is inserted between said gang and a stud, a, upon the base.

The slab or gang of molds Q, being secured in position by wedge R, and the charger being placed at the left-hand notch of ratchet M, the operator grasps a quantity of tobacco, and, placing it between the open jaws K K', draws forward the handle F, so as to depress the plunger G, and at the same instant to close the jaws K K', so as to squeeze the bunch of tobacco equally and simultaneously on all sides, and at all parts of its length.

The operator having by this means compressed and fed down the tobacco into the mold, pushes back the handle, and permits the weight P to draw the charger sufficiently along to engage on the next tooth of the ratchet. The lever being then pressed fully backward operates in conjunction with said weight and the sloping edge of the ratchet-tooth to bring the heel L hard against the vertical surface of the succeeding tooth, and the distance from tooth to tooth being precisely the same as from mold to mold, it follows that the charger is brought precisely opposite the succeeding mold, when the action is repeated, and so on for each mold in succession, until all have been filled.

It will be perceived that my jaws K K' have no tendency to press one end of the bunch more than the other, nor to push the same out of place, but that they act equally on all parts thereof.

I claim as new and of my invention—

1. The lever F and plunger G, having cams H H', the pivot E, having cams I I', in combination with the upwardly-closing jaws K K', having ears S S', and lugs s s', adapted to operate in the manner and for the purpose set forth.

2. The lever F, having heel L, for adjusting the filling mechanism by the upward stroke of said lever, in combination with a ratchet, M, and with jaws K K', plunger G, slide C, and a suitable mold, substantially as and for the purpose set forth.

In testimony of which invention I hereunto set my hand.

NAPOLEON DUBRUL.

Witnesses:
GEO. H. KNIGHT,
JAMES H. LAYMAN.