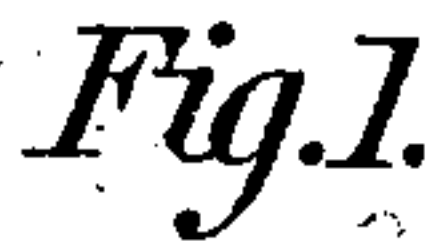


924,001.

Patented June 8, 1909.



Section at 2-2.

WITNESSES:

Raymond F. Barnes.
L. E. Garrison.

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UNITED STATES PATENT OFFICE.

JOHN R. ROGERS, OF BROOKLYN, NEW YORK, ASSIGNOR TO MERGENTHALER LINOTYPE COMPANY, A CORPORATION OF NEW YORK.

LINE-CASTING MACHINE.

No. 924,001.

Specification of Letters Patent.

Patented June 8, 1909.

Application filed December 4, 1908. Serial No. 465,929.

To all whom it may concern:

Be it known that I, JOHN R. ROGERS, of borough of Brooklyn, county of Kings, and State of New York, have invented a new and
5 useful Improvement in Line-Casting Machines, of which the following is a specification.

This invention is intended more particularly as an improvement on the line casting
10 machine represented in Letters Patent of the United States to J. R. Rogers #679481.

In machines of this class, a composed line of matrices, suspended from parallel guide wires, is pushed forward by a finger from the
15 composing position to the casting position in front of the mold, all the parts being driven through a friction clutch which slips in the event of its meeting excessive resistance.

20 The carrying finger is attached to an endless power driven chain, and in practice it occasionally happens that the momentum of the parts is such that they carry the finger and the matrix line beyond the proper position at the casting point.

25 The object of the present invention is to effect a positive stoppage of the line at the proper point, and to this end it consists in a mechanically actuated stop, arranged to
30 arrest the line carrying finger at the proper point.

With the exception of the parts herein-after described, the machine may be in all respects of the ordinary construction.

35 Figure 1 is a perspective view showing a composed line of matrices at the casting position, together with the adjacent parts of the machine, having my improvement embodied therein. Fig. 2 is a cross section
40 on the line 2—2, Fig. 1.

Referring to the drawings, A represents the inclined guide wires from which the matrices Z are suspended.

J represents the finger by which the composed line of matrices is carried forward from the composing position to the casting position, as shown in Fig. 1. This finger is attached to and depends from an endless carrying chain L, suitably guided and, driven by
45 mechanism so arranged that when the finger has advanced the matrices to the casting position the driving devices are automatically disengaged, so that the chain and finger may stop.

All of the foregoing parts may be constructed and arranged to operate as in
55 Patent 679,481, the parts indicated by like letters corresponding to those herein; the connection of the finger with the chain being preferably such as shown in Letters Patent
60 779,969.

In practice the momentum of the carrying chain, the finger, and the matrix line is such that the line is occasionally carried beyond the proper casting position, and it is to overcome this difficulty that my invention is
65 intended.

S represents a rigid arm on the top of and forming a part of the movable metal pot, which swings, as usual, toward and from the
70 matrices and against the intervening mold, the mold being omitted from the present drawings in order to expose the other parts to view.

In applying my improvement, I provide
75 an automatically actuated stop, by which the advance of the chain and carrying finger J is arrested as soon as the finger has advanced the line of matrices Z to the casting position. This stop may be made in various
80 forms, and operated from any suitable moving part of the machine, but I recommend the arrangement shown in the drawing in which C represents a stopping finger pivoted at c to the top frame of the machine and
85 bent laterally at the upper end, that it may be projected in front of the block which connects the finger J with the carrying chain L, in the manner indicated in Figs. 1 and 2, so that it will positively arrest the chain and
90 finger and prevent them from carrying the matrices beyond the proper position. The finger C is pivoted to and actuated by a horizontal bar D, resting on top of the pot arm S, and provided with downwardly projecting
95 shoulders, d and d', so located that as the pot swings to and fro it will move the bar D and actuate the stop C. The parts are so proportioned and arranged that the backward movement of the pot withdraws the
100 stop C in time to permit the proper advance of the chain and finger after the casting operation, when the matrix line is to be advanced rearward for distribution. The stop is thrown forward to an operative position
105 before the line reaches the casting position, and in time to arrest the chain and finger before the matrix line is overcarried.

The bar D may be provided with screws, d^2 and d^3 , to contact with the pot. The adjustment of these screws will permit the movement of the stop C to be controlled with

5 great nicety.

Having thus described my invention, what I claim is:

1. In a machine of the class described, in combination, pendent matrices, and guides
10 whereon they travel to and beyond the casting position, means for advancing the line to the casting position, and automatic means for positively arresting the advancing lines and preventing the line from being overcar-
15 ried through momentum.

2. In a machine of the class described, a chain and finger for advancing the matrix line to the casting position, in combination
20 with an automatically actuated stop to arrest the finger when the line is in the casting position.

3. In a machine of the class described, the guides, matrices suspended therefrom, and the power driven finger to advance the
25 matrix line to the casting position, in com-

bination with a movable stop to positively arrest the finger at the casting point.

4. In a line casting machine, a movable pot, a mold, and means for presenting a com-
posed line of matrices to the mold, in combi- 30 nation with means controlled by the pot to control the travel of the line and insure its location in the proper casting position.

5. In combination, the matrix carrying finger and chain, and stop C to limit the ad- 35 vance of the finger, movable pot S, and means through which the pot controls the stop.

6. In a machine of the class described, the matrix carrying finger, the swinging pot, and 40 means controlled by the pot to arrest and release the finger.

In testimony whereof I hereunto set my hand this twenty seventh day of November, 1908, in the presence of two attesting wit- 45 nesses.

JOHN R. ROGERS.

Witnesses:

ROBERT G. CLARK,
LUCY E. SMITH.