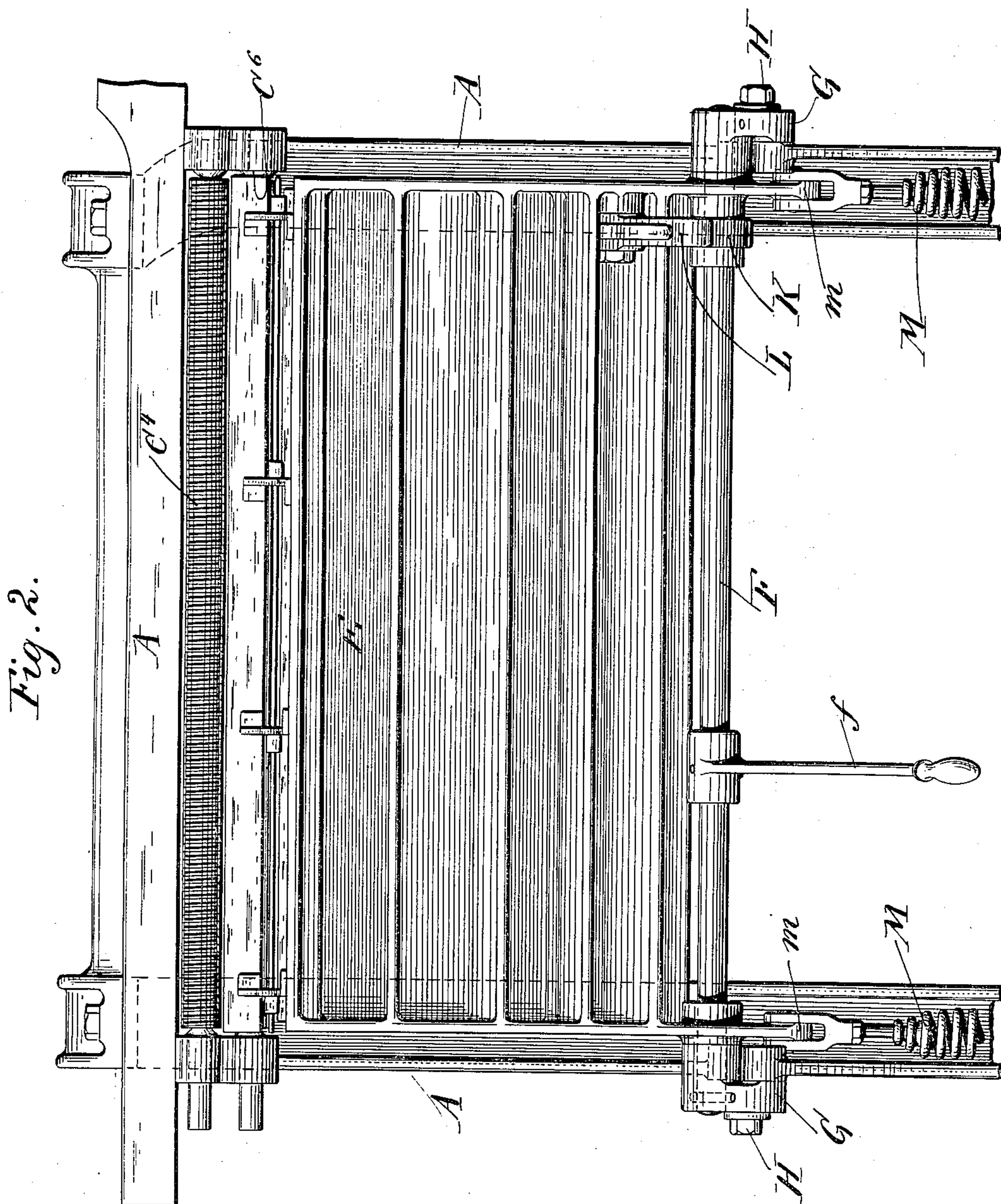


No. 848,308.

PATENTED MAR. 26, 1907.

D. S. KENNEDY.
LINOTYPE MACHINE.
APPLICATION FILED AUG. 17, 1906.

2 SHEETS—SHEET 2.



Witnesses
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UNITED STATES PATENT OFFICE.

DAVID S. KENNEDY, OF BROOKLYN, NEW YORK, ASSIGNOR TO MERGENTHALER LINOTYPE COMPANY, A CORPORATION OF NEW YORK.

LINOTYPE-MACHINE.

No. 848,308.

Specification of Letters Patent.

Patented March 26, 1907.

Application filed August 17, 1906. Serial No. 330,988.

To all whom it may concern:

Be it known that I, DAVID S. KENNEDY, of the borough of Brooklyn, county of Kings, and State of New York, have invented a new and useful Improvement in Linotype-Machines, of which the following is a specification.

My invention has reference to linotype-machines wherein one or more distributors are arranged to deliver the matrices downward through a channeled throat or entrance into a corresponding magazine or magazines. In these machines the throat or entrance is commonly mounted on a horizontal axis, so that it may be swung backward and downward in the arc of a circle in order to give access thereto and to the distributor and upper end of the magazine. In practice it occasionally happens that a matrix will lodge in the upper end of the channeled throat in engagement therewith and with the distributor members in such manner as to prevent the throat from swinging open.

The object of the present invention is to overcome difficulty in this regard; and it consists in mounting the throat in such manner that it may be lowered or otherwise moved directly away from the distributing devices in the direction in which the matrices travel in order to release the interlocking matrices, the throat being preferably mounted on a pivot so that it may turn backward after being lowered.

In the accompanying drawings I have shown my invention embodied in mechanism having four distributors and four superposed magazines with a corresponding intermediate throat with four series of passages therethrough.

Figure 1 is an end elevation of the distributing mechanism, the magazines, and adjacent parts. Fig. 2 is a rear elevation of the throat.

Referring to the drawings, A represents the main frame, which may be of any suitable form; B B', &c., the four horizontal distributor-bars of the ordinary Mergenthaler construction with permuted teeth at their lower edges to sustain and carry the toothed matrices.

C C' are a series of parallel feed-screws extended lengthwise of the distributor-bars for the purpose of engaging the edges of the sus-

pending matrices and moving them along the bars until they arrive at the proper points for delivery, as usual in this class of machines.

D D', &c., are the superposed magazines arranged at inclined positions and provided with internal longitudinal channels, as usual, to guide the matrices.

E represents the throat or entrance arranged to receive the matrices falling from the distributors and guide them into the respective magazines. This throat embraces four superposed channels or sections, one leading to each magazine, each section divided, as usual, into a series of channels to direct the matrices to the appropriate channels of the magazines. The throat, so far as each section is concerned, closely resembles that used in the commercial linotype-machines of the present day.

The entire throat is supported at its lower end on a horizontal shaft F, serving as a pivot therefor, and provided at its ends with cranks G, which are in turn connected to the main frame by pivots H.

The shaft F is provided with a rigid handle f, by means of which the shaft and cranks may be turned. When the throat is in operative position, the parts stand in the relation shown in Figs. 1 and 2, the upper end of the throat standing immediately under the distributors and in position to receive the matrices therefrom.

If a matrix is lodged between the upper end of the throat and the distributor, it is only necessary to turn the handle f downward, the effect of which is to lower the throat bodily, moving its upper end away from the distributor in the direction in which the matrices travel toward the magazine—that is to say, lengthwise of the matrices—so that the intermediate matrix will be released. After being thus lowered the throat may be turned downward and backward around the shaft F as a center.

In order to hold the parts in operative position, the shaft F is provided with a rigid arm K, arranged to be engaged by a spring-actuated latch L, pivoted to the throat, as shown in Fig. 1.

In order to counterbalance the throat and admit of its being easily operated, one or more springs M, secured to the main frame, are connected at their upper ends with the

crank-arms *m*, extending downward from the throat, as shown in Figs. 1 and 2. These springs may be of sufficient strength to hold the throat normally in its operative position.

5 When it is swung downward and backward, the pivotal points will change their relations in such manner that the throat will remain in its lowered or open position.

When the arm *K*, before referred to, is turned upward and secured by the latch, as shown, it serves to hold the throat positively in an operative position.

The springs are usually made of such strength that the throat will remain in its upright position after being lowered and until it is pulled backward by hand.

The essence of the invention resides in so mounting the throat *E* that it may be moved directly toward and from the distributors as distinguished from its usual motion around a pivot transversely to the distributor, and it is to be understood that the details may be varied at will, provided this mode of action is retained.

25 While I have shown the invention embodied in a throat with four sections or channels, it will of course be understood that it is equally applicable to a throat having but one section to coöperate with a single magazine.

30 Although my invention is intended more particularly for use in linotype-machines, it is of course applicable to logotype-machines and all kindred typographic machines in which matrices or type are permitted to fall from a distributor into a receiving throat or channel.

Having described my invention, what I claim is—

1. In a typographic machine, the combination of a distributor and a normally stationary receiving-throat thereunder, the throat movable at will directly away from the distributor in the direction in which the matrices descend; whereby the release of lodged or interlocking matrices may be effected.

2. In a typographic machine, a distributor and a receiving-throat thereunder, said throat mounted for movement directly away

from the distributor and also for a distinct movement around a pivot. 50

3. In a typographic machine, the combination of a distributor *B*, a magazine *D*, an intermediate throat for guiding the matrices from the distributor to the magazine, a pivotal support around which the throat may swing away from its operative position, and means for moving the throat toward and from the distributor lengthwise of the matrices independently of the pivotal motion. 55

4. In combination with a distributor, a receiving-throat, and cranked supports for said throat serving to move the same to and from the distributor and also to admit of its swinging away from its operative position. 60

5. In combination with a fixed distributor, a receiving-throat *E*, a shaft or pivot-rod *F* around which the throat may turn, cranked supports for said rod to effect the raising and lowering of the throat, and means for turning and locking said rod. 65

6. In combination with an overlying distributor, a receiving-throat *E*, a shaft *F* whereon the throat is pivoted, supporting-cranks for said rod, an arm *K* on said shaft, and means for locking said arm. 70

7. In combination with the throat *E*, the shaft *F* on which it is free to turn, supporting-cranks for said shaft, means for turning and fixing said cranks, and springs connected with the throat, tending to hold the same upward, substantially as described. 75

8. In a linotype-machine, a distributor, a receiving-throat thereunder, a pivot around which said throat is mounted to swing, and means for moving the pivot toward and from the distributor; whereby the throat may be given a movement bodily away from the distributor independent of its swinging motion. 80

In testimony whereof I hereunto set my hand, this 13th day of August, 1906, in the presence of two attesting witnesses. 90

DAVID S. KENNEDY.

Witnesses:

J. R. ROGERS,

ROBERT G. CLARK.