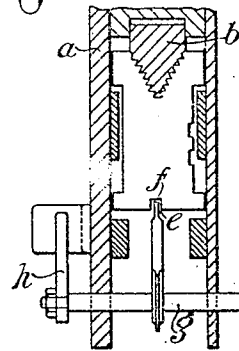
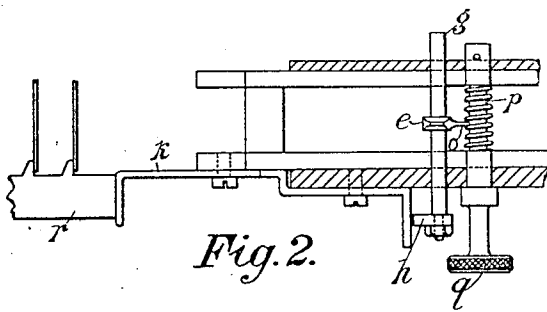
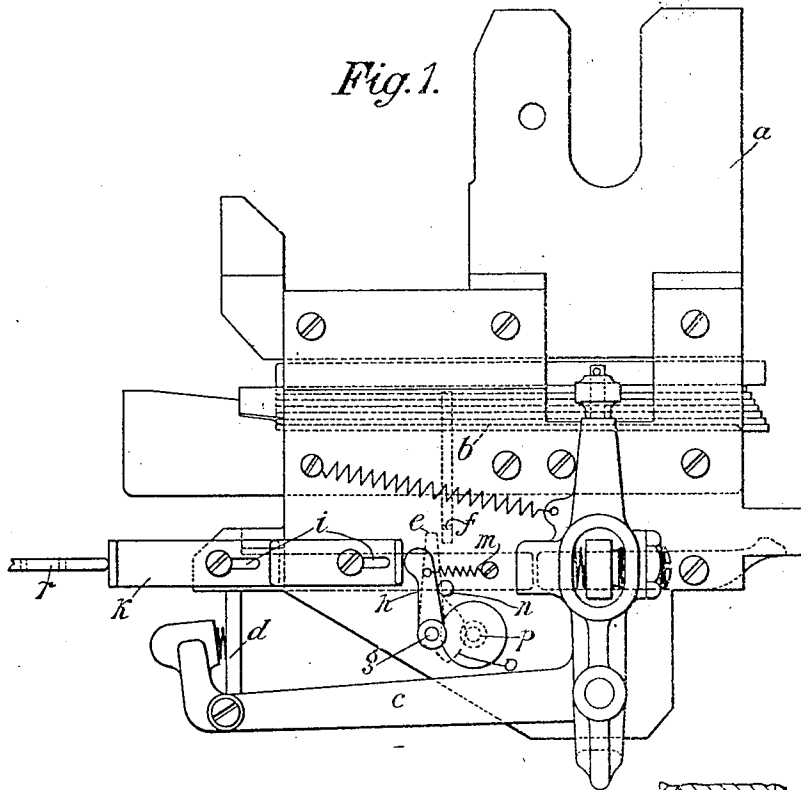


G. LAEMMER.
 TYPOGRAPHICAL MACHINE.
 APPLICATION FILED JAN. 7, 1913.

1,063,979.

Patented June 10, 1913.



Witnesses
E. J. Tamm
James C. McKim

Inventor
Gustav Laemmer
per Rogers, Kennedy & Co.
Attorneys

UNITED STATES PATENT OFFICE.

GUSTAV LAEMMER, OF GEBWEILER, GERMANY, ASSIGNOR TO MERGENTHALER
LINOTYPE COMPANY, A CORPORATION OF NEW YORK.

TYPOGRAPHICAL MACHINE.

1,083,979.

Specification of Letters Patent.

Patented June 10, 1913.

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To all whom it may concern:

Be it known that I, GUSTAV LAEMMER, a subject of the German Emperor, residing at 135 Hauptstrasse, Gebweiler, in Alsace-Lorraine, in the Empire of Germany, have invented new and useful Improvements in Typographical Machines, of which the following is a specification.

This invention relates to clutch controlling mechanism for distributors of typographical machines, said mechanism automatically operating when matrices of a font foreign to that for the time-being in use in the machine, and hereinafter termed "foreign matrices," are introduced into the so-called distributor box.

For the operation of the mechanism according to this invention, there may be used the known font distinguishing device arranged in the so-called distributor box, consisting of an adjustable pin adapted to cooperate with notches differently positioned in the matrices of the different fonts.

The drawings show one method of carrying out the invention.

Figure 1 is a rear elevation of the distributor box, together with the clutch controlling mechanism; and Figs. 2 and 3 are respectively a horizontal section and a vertical section of parts of the same.

The distributor box *a* is formed in the known manner, and has a rail *b* with a full complement of ribs or teeth adapted to engage with the toothed V-shaped recesses of the matrices, on to which teeth the composed line of matrices is pushed from the second elevator matrix rail which as ordinarily, conveys the matrices from the first elevator to the distributor. The matrices are, in the known manner, transferred to the actual distributor bar by the angle lever *c* and the lifter *d* pivoted to the said lever, which latter is, as ordinarily, operated from the shaft of one of the distributor screws.

The font distinguishing pin *e* is arranged inside the distributor box *a*, and, in the known manner, cooperates with notches *f* in the feet of the matrices; matrices of different fonts have the notches *f* in respectively different positions in their feet, so that only matrices of the font then in use are free to pass the pin *e*. While with previous arrangements the matrices were simply blocked in the distributor box and the second elevator was prevented from descending to its

lower position, according to the present invention; this pin *e* is connected with or forms part of, clutch controlling mechanism which stops the distributor, so that the attention of the operator is at once called to the presence of a foreign matrix, which he can remove before it causes any damage.

The pin *e* is independently movable along, but not angularly upon, a guide rod or shaft *g*. At the end of the shaft *g* and rigidly secured to it, is a lever arm *h* which, by means of a longitudinally movable bar *k* provided with slots *i* engages with the known distributor stop rack *r* capable of being, as ordinarily, moved longitudinally by the matrix guide plates in the so-called magazine entrance.

When a foreign matrix is delivered into the distributing box, the notch *f* thereof not being alined with the pin *e*, its foot strikes against the said pin, so that the latter, in opposition to a spring *m* is tilted, and thereby the shaft *g* and lever arm *h* are turned so as to push the bar *k*, and through the stop rack *r*, effect the opening of the distributor clutch and the consequent stoppage of the distributor. The return movement of the lever arm *h* is limited by a stop pin *n*. In order that the pin *e* may be adjusted for different fonts of matrices, this pin, which, as previously stated, is slidable on its shaft *g*, has a segmental projection *o*, which engages with the thread of a screwed spindle *p* rotatably mounted in the distributor box; by turning the spindle *p* by means of the milled head *q* fast thereon, the pin *e* can be adjusted to any desired position to suit the respectively different fonts of matrices to be used in the machine.

The before described device will be operated whenever there reaches the pin *e* a matrix whose notch *f* is not alined with the said pin; for instance, this would happen in the case of a matrix reaching the distributor box in a reversed position.

Having described my invention, what I claim and desire to secure by Letters Patent is:—

1. In a typographical machine, the combination of distributor stop mechanism and means for actuating the same when matrices of improper font are presented for distribution.

2. In a typographical machine, the combination of means for permitting the distri-

bution of matrices of one font and for preventing the distribution of those of a different font, and distributor stop mechanism adapted to be operated by said means.

5 3. In a typographical machine, the combination of a font distinguisher to permit the distribution of but one font of matrices at a time, and distributor stop mechanism adapted to be actuated by the font distinguisher in the event that a matrix of improper font is presented for distribution.

10 4. In a typographical machine, the combination of a font-distinguishing device to arrest a matrix of improper font prior to its distribution, and distributor stop mechanism actuated thereby.

15 5. In a typographical machine comprising traveling matrices, the combination of means arranged to permit the passage of matrices of like form and to arrest a matrix of unlike form, and distributor stop mechanism adapted to be actuated when a matrix is so arrested.

25 6. In a typographical machine comprising matrices formed with recesses in their edges, the combination of distributor stop mechanism, and a device to register with the recesses of the matrices and adapted to actuate the distributor stop mechanism when it does not register therewith.

30 7. In a typographical machine, the combination with the distributor box through which the matrices pass and distributor stop mechanism, of a movable matrix arresting device in the path of the matrices, and means connected to said device to actuate the distributor stop mechanism.

35 8. In a typographical machine comprising recessed matrices, the combination with the distributor box through which the matrices pass and distributor stop mechanism, of a pin to register with the recesses of the matrices as they pass through the distributor box and a lever arm operatively connected to the said pin and adapted to actuate the distributor stop mechanism when a matrix fails to present its recess in position to register with the pin.

45 9. In a typographical machine comprising matrices formed with differently located recesses in their bottom edges, the combination with the distributor box through which the matrices pass, and distributor stop mechanism, of a pin to register with the recesses

of the matrices as they pass through the distributor box; means connected to the pin for actuating the distributor stop mechanism, and devices for adjusting the pin to different positions to correspond with the different locations of the recesses in the matrices.

60 10. In a typographical machine, the combination of a font-distinguisher adapted to occupy different positions corresponding to different fonts of matrices, and distributor stop mechanism adapted to be actuated by the font distinguisher in the event of the improper presentation thereto of a matrix foreign to the font for which it is positioned.

65 11. In a typographical machine, the combination with the distributor lift box through which the matrices pass, and distributor stop mechanism, of a pin in the path of the matrices, movable in that box, a shaft on which the said pin is axially movable, means manually operative to move the pin axially along the shaft, and a lever arm fast to the shaft, adapted to actuate the distributor stop mechanism.

70 12. In a typographical machine, the combination with the distributor lift box through which the matrices pass, and distributor stop mechanism, of a pin in the path of the matrices, movable in that box, a shaft on which the said pin is axially movable, a lever arm fast to the shaft, adapted to actuate the distributor stop mechanism, a stop for the lever arm, and a spring operative to normally hold the lever arm against the stop.

75 13. In a typographical machine, the combination with the distributor lift box through which the matrices pass, and distributor stop mechanism, of a pin in the path of the matrices, movable in that box, a shaft on which the said pin is axially movable, a lever arm fast to the shaft, adapted to actuate the distributor stop mechanism, a segment fast to the pin, a screw rotatable in the distributor lift box, engaging with the segment to move the pin along its shaft, and means for manually rotating the screw.

80 In witness whereof I have hereunto set my hand in the presence of two witnesses.

G. LAEMMER.

Witnesses:

FRANCES R. JEWETT,
JACOB SCHMIDT.