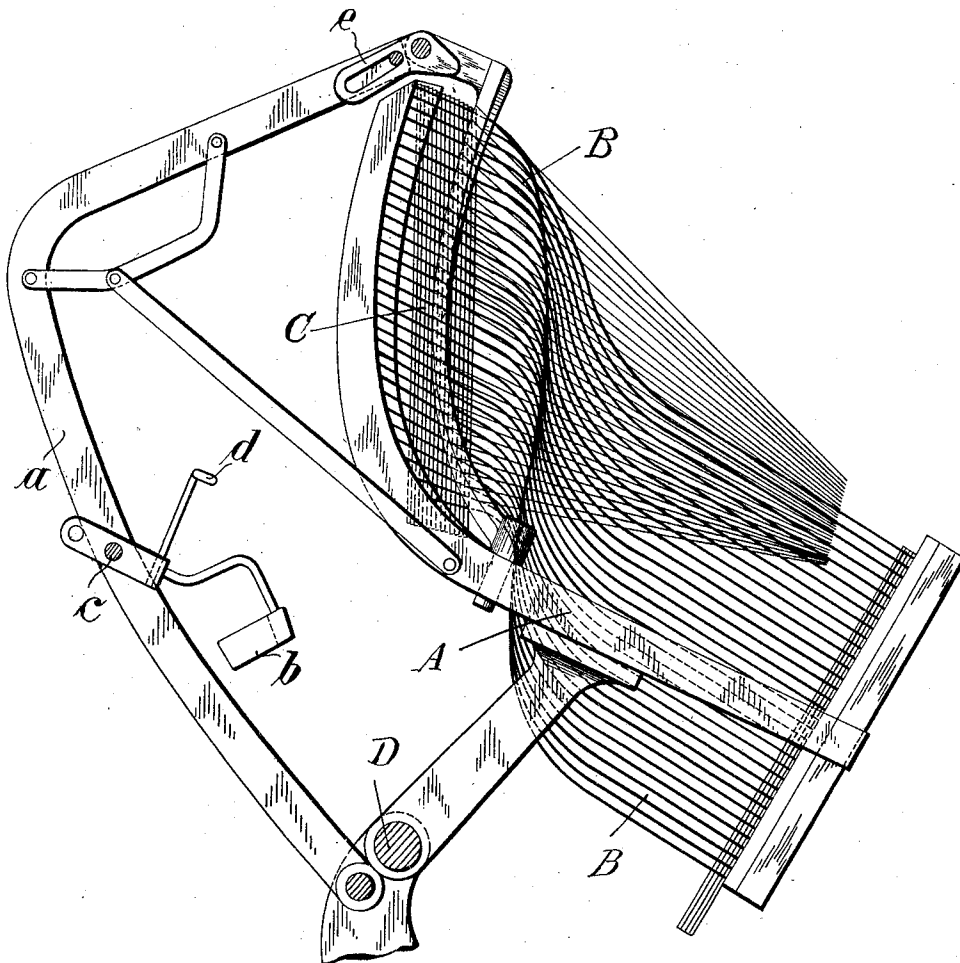


J. DORNETH.
TYPE SETTING AND CASTING MACHINE.
APPLICATION FILED SEPT. 18, 1912.

1,058,735.

Patented Apr. 15, 1913.
2 SHEETS—SHEET 1.

Fig. 1.



Witness:
A. R. Bridges
Edwin L. Jewell

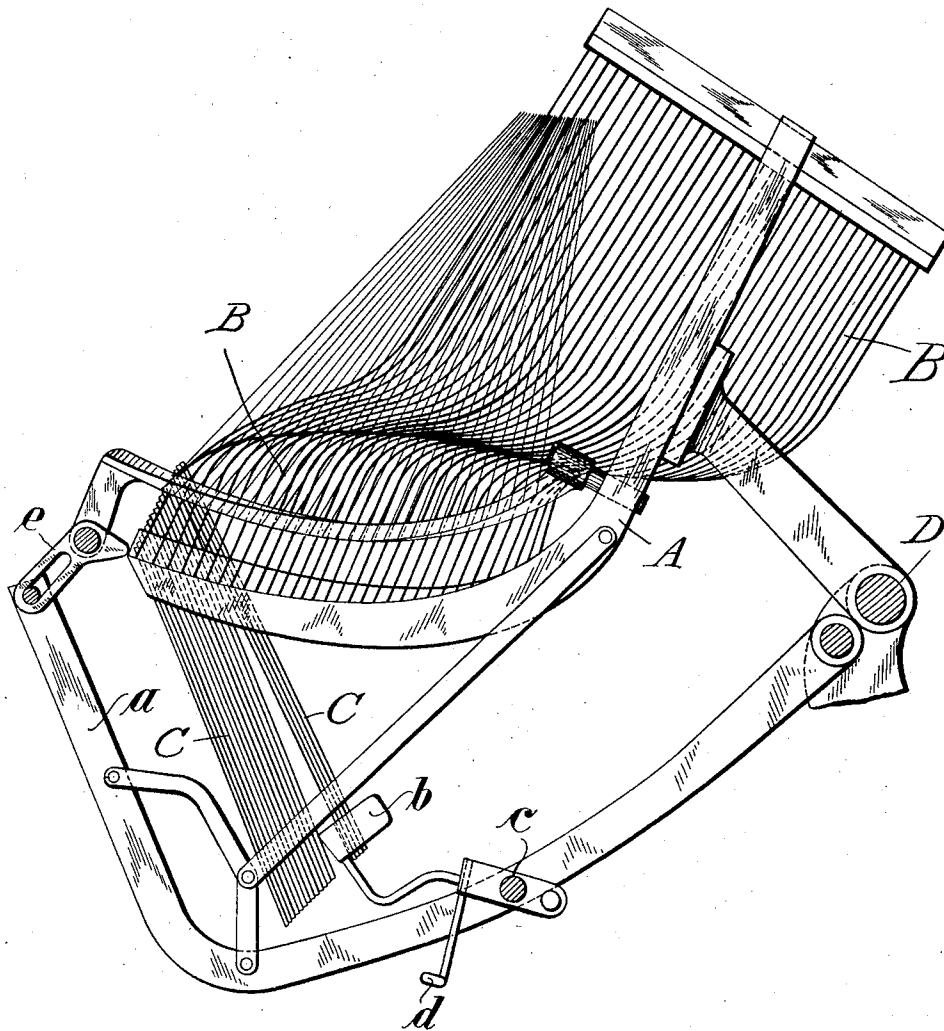
Inventor.
Julius Dorneth
By *Davis & Davis*
Attorneys

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Fig. 2.



Witness:
Edwin L. Jewell

Inventor,
Julius Dorneth
By David D. Davis
 Attorney

UNITED STATES PATENT OFFICE.

JULIUS DORNETH, OF BERLIN, GERMANY, ASSIGNOR TO TYPOGRAPH G. M. B. H., OF
BERLIN, GERMANY.

TYPE SETTING AND CASTING MACHINE.

1,058,735.

Specification of Letters Patent.

Patented Apr. 15, 1913.

Application filed September 18, 1912. Serial No. 721,029.

To all whom it may concern:

Be it known that I, JULIUS DORNETH, a subject of the German Emperor, and residing at Berlin, Germany, have invented certain new and useful Improvements in Type Setting and Casting Machines, of which the following is a specification.

My invention relates to improvements in matrix setting and type casting machines and more particularly to that class of machines in which lines of type are cast from a plurality of matrix bars each of which is guided to and from the line casting means or mold holder on ways or guides formed of wires arranged in the frame to form a matrix carrier.

In distributing matrix bars guided on wires, in that class of machines described herein, it very frequently happens that the matrices when being distributed and returned to their normal suspended position after the casting operation, strike with their bottom edges the weak lateral walls of the matrices contained in the magazine or case, frequently resulting in injury to the walls of the matrices. It is, of course, manifest that any injury to the thin side walls of the matrices will result in defective lines and defective type.

In order to protect the matrices suspended in the frame from being injured by the returning matrices, I provide a movable or swinging buffer which is adapted to be brought into the path of the returning matrices and to be temporarily held there during the distributing operation, said movable buffer being moved away from the matrix bars when the matrix holding basket or frame is returned to its normal setting position. This movable buffer is adapted to be brought into the path of the matrix bars and to receive the bottom ends of said bars as they are distributed.

In the drawings, Figure 1 is a detail side elevation of a portion of a matrix setting machine showing the basket or carrier in its normal or setting position; Fig. 2 a similar view showing the matrix carrier or basket turned rearwardly and in its distributing position the movable buffer being in position to protect the matrix bars in the carrier.

Referring to the various parts by reference characters, A designates a portion of the matrix carrying basket or frame; B the

matrix supporting and guiding wires and C the matrix bars.

The matrix basket or frame is pivoted at D and is adapted to be turned rearwardly and downwardly to its distributing position. This basket or frame normally is in its upward or forward position as shown in Fig. 1, and is adapted to be turned rearwardly and downwardly for the purpose of distributing the matrix bars after the casting operation.

To any part of the machine which participates in the turning movement of the matrix basket or carrier when said carrier is swung rearwardly and downwardly to bring it into position for distributing the matrix bars, as for instance, to arm *a*, is pivoted at *c* a bracket *b*. This bracket is preferably faced with a soft material such as felt, leather or the like, said facing being so disposed that when the matrix bars are being distributed they will engage said facing, as will be more fully hereinafter described. In the normal position of the carrier the bracket *b* extends forwardly and downwardly and is in a position in the rear of, and slightly below, the lower ends of the suspended matrix bars, the center of gravity of said bracket in the normal or setting position of the basket being forward of its pivot. When, however, the basket or matrix carrying frame is turned rearwardly and downwardly the bracket *b* participates in said turning movement and is so disposed that its center of gravity shifts to a point in the rear of its pivot and consequently said bracket rotates throwing the cushion part upwardly and rearwardly into the path of the rearwardly and downwardly moving matrix bars. In order to facilitate the rearward swinging movement of the bracket *b* said bracket is provided with an arm *d* which normally projects into the path of movement of the matrix bars contained in the basket so that as said basket is turned rearwardly the matrix bars at rest therein first engage the arm *d* and assist in rearwardly swinging said bracket on its pivot. This swinging movement of the bracket brings the cushion portion *b* up in front of the matrix bars which are in their rearward normal position in the carrier frame or basket and protects those matrix bars from the rearwardly moving bars which are being

distributed. As shown in Fig. 2, the distributed matrix bars are shown as resting against the forward side of the bracket on bracket *b*, the other bars carried by the frame being in the rear of said bracket. 5
When the carrier frame or basket is again returned to its normal or setting position as shown in Fig. 1, the matrix bars move upwardly or forwardly away from the arm *d* and said frame then returns to its normal forward position as shown in said figure. 10

It will, of course, be understood that the movable buffer may be brought into its operative or protecting position in any suitable manner and I desire it understood that I am not to be limited to a pivoted or swinging bracket carrying a buffer device, as many changes in the form of device may be made within the scope of this invention. 15

What I claim is: 20

1. A matrix setting and line casting machine comprising a matrix carrying basket adapted to be swung rearwardly into its distributing position, matrix supporting wires carried thereby, matrix bars supported by said wires, and a movable buffer normally out of the path of the matrix bars and adapted to be moved into the path of said matrix bars when the matrix carrying frame is swung rearwardly to its distributing position. 25
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2. A matrix setting and line casting machine comprising a matrix carrying basket adapted to be swung rearwardly into its distributing position, matrix supporting wires carried thereby, matrix bars supported by said wires, a pivoted buffer normally out of the path of the matrix bars and adapted to swing into the path of the matrix bars when the matrix carrying frame is swung rearwardly to its distributing position. 35
40

3. A matrix setting and line casting machine comprising a matrix carrying basket adapted to be swung rearwardly into its distributing position, matrix supporting wires carried thereby, matrix bars supported by said wires, a pivoted bracket normally out of the path of the matrix bars and having its center of gravity normally forward of its pivot, an arm carried by said bracket and adapted to be engaged by the matrix bars at the rear of the matrix basket when said basket is swung rearwardly to its distributing position to swing the pivoted bracket rearwardly and thereby bring it into the path of the matrix bars being distributed. 45
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4. A matrix setting and line casting machine comprising a matrix carrying basket adapted to be swung rearwardly into its distributing position, matrix supporting wires carried thereby, matrix bars supported by said wires, a movable buffer normally out of the path of the matrix bars, and means adapted to be engaged by the matrix bars suspended in the basket or carrier to bring the buffer into the path of the matrix bars being distributed. 60
65

5. A matrix setting and line casting machine comprising a matrix carrying basket adapted to be swung rearwardly into its distributing position, matrix supporting wires carried thereby, matrix bars supported by said wires, a movable buffer normally out of the path of the matrix bars, and means to swing said buffer into the path of the matrix bars to be distributed. 70
75

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

JULIUS DORNETH.

Witnesses:

WOLDEMAR HAUPT,
HENRY HASPER.