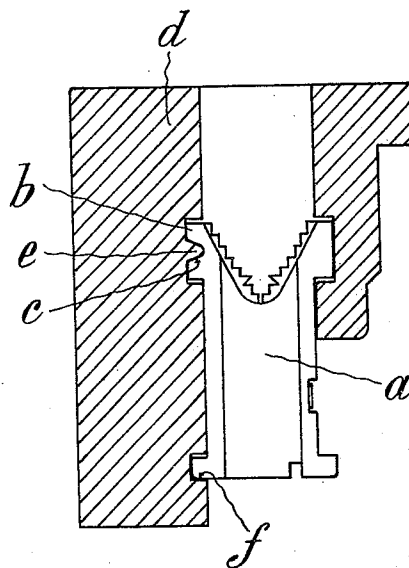


C. A. ALBRECHT.
MATRIX FOR LINOTYPE AND OTHER TYPE CASTING MACHINES.
APPLICATION FILED NOV. 27, 1907.

938,938.

Patented Nov. 2, 1909.



Attest:

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UNITED STATES PATENT OFFICE.

CHRISTIAN A. ALBRECHT, OF BALTIMORE, MARYLAND.

MATRIX FOR LINOTYPE AND OTHER TYPE-CASTING MACHINES.

938,938.

Specification of Letters Patent.

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Application filed November 27, 1907. Serial No. 404,124.

To all whom it may concern:

Be it known that I, CHRISTIAN A. ALBRECHT, a citizen of the United States, and resident of Baltimore, in the State of Maryland, (whose post-office address is 677 Columbia avenue, Baltimore, Maryland, to time: 23 Chausseestrasse, Berlin, N. 4, Germany,) have invented new and useful Improvements in Matrices for Linotype and other Type-Casting Machines, of which the following is a specification.

The ordinary matrices for linotype or other type-casting machines are, when applied to the mold or mold wheel, adjusted by means of their upper or lower ears or lugs or both of them at a time, which ears with their lower faces rest on shoulders in the mold or in the vertically movable yoke or both at a time. As the said lower faces of the lugs of each matrix also rest and slide on shoulders or ledges in other machine parts, and as the matrix constantly and repeatedly drops and strikes various machine parts and the other matrices, it is obvious, that the ears or lugs of the matrix are rapidly worn away on the said faces, so that it is then not possible to keep the several matrices in line, when they are applied to the mold. The consequence of this is, that the several letters in the cast linotype will no longer be alined.

My invention relates to an improvement in the matrix, whereby the alinement of the several matrices, when applied to the mold for the casting of the linotype, is insured for a much longer time than hitherto.

The improvement consists in providing the matrix with a special alining shoulder, which is adapted to rest on a special rib or ledge provided in the vertically movable yoke. The essential point is that the said shoulder on the matrix be protected from external influences, in other words, the shoulder is disposed within the ordinary outline of the matrix in either of the two side edges. Then this shoulder does not come in contact with any of the other machine parts or matrices, so that it is not liable to be worn away so rapidly as the lower faces of the ears or lugs.

I will now proceed to describe my invention with reference to the accompanying drawing, which shows a vertical cross section through a known vertically movable yoke and an elevation of a matrix therein

alined and ready to be applied to the mold (not shown).

In some linotype-machines the matrix *a* is alined in the vertically movable yoke *d* in the manner, that the lower face *f* of its lower rear ear or lug rests and slides on a corresponding shoulder of the yoke. From an examination of the drawing it will be obvious, that after the matrix *a* has been worn away on the said face *f*, it will occupy a lower position in the yoke *d* and consequently also when applied to the mold. To obviate this defect I provide a recess *c* in the upper rear ear *b* of the matrix *a* and a special alining rib or rail *e* in the yoke *d* and the rail *e* is made to engage in the recess *c* of each of the several matrices *a*. Then the upper inclined face in the recess *c* of the matrix serves as an alining shoulder, which can rest and slide on the upper inclined face of the rib *e* of the yoke. The recess *c* being within the ordinary outline of the matrix *a* as shown, it is evident, that its alining shoulder, that is the upper inclined face in the recess *c*, is protected from damage through external influences. Moreover, as the said alining shoulder is used exclusively for the alinement of the several matrices in the yoke *d*, it is also practically protected from wear and tear. Therefore the alinement of the several matrices when applied to the mold will be preserved. The recess *c* may be provided on some other place of the matrix *a*, but I prefer to place this recess *c* in the upper rear ear *b* of the matrix as shown. The recess *c* can be easily cut in old matrices, which being out of line were hitherto rendered useless, so that they can be again used. The rib or rail *e* may be in one piece with the yoke *d*, if new, or made separately and inserted in an old yoke. Of course the recess *c* may also be provided in matrices with two or more superposed intaglio letters, in which case a laterally movable rail corresponding to the rib *e* requires to be provided in the yoke *d*, so that after the casting operation the rail can be withdrawn to permit the raised matrices to drop and all the matrices will be in a line and can be pushed from the yoke *d* to the known rail or other machine part to be thence transferred to the top of the machine.

The recess *c* may be made square or rectangular or semicircular or otherwise shaped, but I prefer to make it triangular or trape-

zoidal as shown, as thereby not only the matrices *a* are enabled to better glide off, but also the withdrawal of the said laterally movable rail, if employed, is facilitated.

5 I claim:

1. A matrix for linotype and other type casting machines having guide shoulders on both sides above and below and having an additional guide or adjusting shoulder only
10 on the side of the matrix opposite the type, said additional shoulder being located within the ordinary outline of the matrix.

2. A matrix for linotype and other type casting machines having guide shoulders on
15 both sides above and below and having a recess in the matrix body on the side opposite the type forming an additional guide or adjusting shoulder only.

3. A matrix for linotype and other type

casting machines having guide lugs on both
20 sides thereof at each end, the upper lug on the side opposite the type having a recess therein for forming an additional guiding shoulder and the remaining lugs having
plain surfaces.

4. A matrix having guiding lugs on both
25 sides at the ends thereof, the upper lug on the side opposite the type having a recess therein of tapered form for forming an additional guiding shoulder and the remaining
30 lugs having plain surfaces.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHRISTIAN A. ALBRECHT.

Witnesses:

WOLDEMAR HAUPT,
HENRY HASPER.