

A.D. 1806 N° 2931.

Casting Types and Ornaments for Printing.

BERTE'S SPECIFICATION.

TO ALL TO WHOM THESE PRESENTS SHALL COME, I, ANTHONY FRANCIS BERTE, of the Parish of Saint Dunstan in the West, in the City of London, Merchant, send greeting.

WHEREAS His most Excellent Majesty King George the Third did, 5 by His Letters Patent under the Great Seal of the United Kingdom of Great Britain and Ireland, bearing date at Westminster, the Twenty-ninth day of April, in the forty-sixth year of His reign, give and grant unto me, the said Anthony Francis Berte, my exors, admors, and assigns, His especial licence that I, the said Anthony Francis Berte, my exors, admors, and assigns,

- 10 during the term of years therein mentioned, should and lawfully might use, exercise, and vend, within England, Wales, and the Town of Berwick-upon-Tweed, an Invention of "A MACHINE FOR CASTING OR FOUNDING TYPES, LETTERS, AND ORNAMENTS USUALLY MADE USE OF IN PRINTING;" in which said Letters Patent there is contained a proviso obliging me, the said Anthony Francis
- 15 Berte, by an instrument in writing under my hand and seal, to cause a particular description of the nature of the said Invention, and in what manner the same is to be performed, to be inrolled in His Majesty's High Court of Chancery within six calendar months after the date of the said recited Letters Patent, as in and by the same, relation being thereunto had, may more 20 fully and at large appear.

NOW KNOW YE, that in compliance with the said proviso, I, the said Anthony Francis Berte, do hereby declare that the said Invention is described in manner following, that is to say:—

Berte's Machine for Casting Types and Ornaments for Printing.

I do construct a vessel of iron, or other fit material for containing type metal in the fused state, or for bringing it into fusion and keeping it at the proper heat for casting, and I do make in the side or sides of the said vessel one or more apertures, out of which the fluid type metal is suffered to flow at the time of casting. The operation of casting is performed by applying 5 a mould for casting letters on types, either singly or more than one at the same time, or other articles for printers' use into one of the said apertures, which at that instant, by means of a lock or valve, or any other well-known similar contrivance, is opened, in consequence of which the metal suddenly flows into the mould, and applies itself to the matrix or matrixes with a force, 10 which is greater or less according to the height of the level surface of the type metal in the vessel first before mentioned, according to the magnitude of such additional pressure, as may be applied in the manner herein-after to be And I do further declare, that though the said aperture or apertures may be made on any side of the vessel, that is to say, at top or bottom, 15 or elsewhere, yet I do give the preference to a surface or face which shall be nearly horizontal, so that the fluid metal shall spout upwards into the mould. And I do prefer as the most simple and easy method, that each aperture shall be kept closed by a plate of metal lying upon the said horizontal surface, and And that I do make and fashion the lower part of my 20 well fitted thereto. mould flat and true, in order that the same may be applied in like manner, and slided along upon the said horizontal surface. And that I do slide the said mould by pushing the same against the said flat plate until the plate shall become displaced, and the aperture of the mould shall become directly opposite the aperture in the vessel, and shall accordingly receive its charge of 25 metal, after which, the mould being again drawn back, the plate of metal, by means of a weight or spring, or other well-known agent suitable to the purpose, is made to follow the mould, and close the aperture by resuming its first situation; and in order that the said motions and effects may be performed and produced without any particular skill or attention in the workman, I do make and 30 apply guides, sliders, stops, or pins for confining, directing, and limiting the said motions, as will be sufficiently obvious and intelligible to artists employed in works of this nature. And, moreover, in order that the said fluid metal may rise with sufficient force into the mould, I do make my vessel of such a figure as that the quantity of type metal intended to be contained therein at any one 35 time shall have its upper surface sufficiently high above the level of the aperture or apertures before mentioned. And that I do, in preference, form my vessel of the figure of a box, or closed receptacle having a pipe or tube rising out of the same, so that the pressure afforded by the statical action of the metal

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Berte's Machine for Casting Types and Ornaments for Printing.

in the said pipe or tube, shall produce the desired effect at the aperture or place of casting. Or otherwise, I produce or increase the said pressure by the statical action of water, or any other fluid, which may be used by the wellknown means to compress a body of air against the surface of the type metal 5 for the purposes aforesaid. And the said machines, consisting of vessels so fitted up, together with the moulds and other parts respectively as before described, may be used by one or more workmen to cast different letters and sorts at the same time from the same mass of metal; but in case different metallic mixtures should be required to be used, or in case local circumstances 10 should render it needful that the workmen should be considerably distant from each other, recourse must then be had to a number of distinct and separate machines of my said Invention.

In witness whereof, I, the said Anthony Francis Berte, have hereunto set my hand and seal, this Twenty-ninth day of October, in the year of our Lord One thousand eight hundred and six.

> A. T. BERTE. (L.S.)

AND BE IT REMEMBERED, that on the Twenty-ninth day of October, in the year of our Lord 1806, the aforesaid Anthony Francis Berte came before our said Lord the King in His Chancery, and acknowledged the Specibefore our said Lord the King in His Chancery, and acknowledged the Speciform above written. And also the Specification aforesaid was stampt according to the tenor of the Statute made for that purpose.

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Inrolled the Twenty-ninth day of October, in the year of our Lord One thousand eight hundred and six.

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