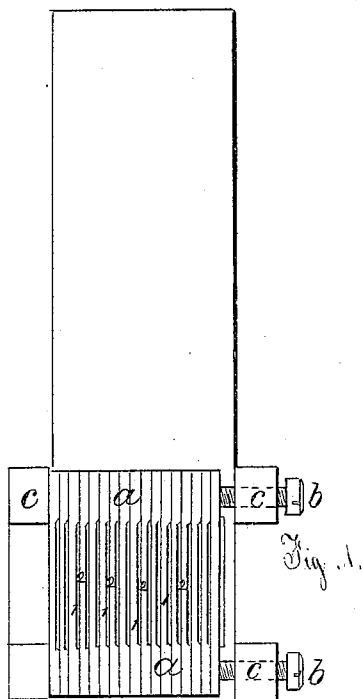
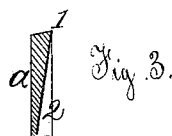
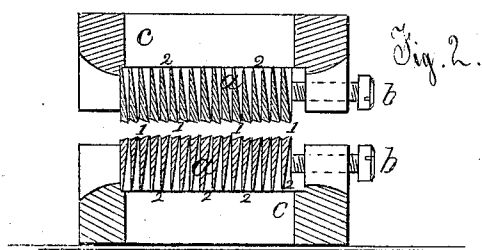


W. Moore,
 Type Machine.
 No. 39,916. Patented Sept. 15. 1863



Witnesses.

Samuel W. Smith

John H. Harold

William Moore

UNITED STATES PATENT OFFICE.

WILLIAM MOORE, OF BROOKLYN, NEW YORK.

APPARATUS FOR RUBBING TYPE.

Specification forming part of Letters Patent No. **39,916**, dated September 15, 1863; antedated October 18, 1862.

To all whom it may concern:

Be it known that I, WILLIAM MOORE, of Brooklyn, in the county of Kings and State of New York, have invented, made, and applied to use a certain new and useful Improvement in Machinery for Rubbing or Dressing Types; and I do hereby declare that the following is a full, clear, and exact description of my said invention, reference being had to the annexed drawings, making part of this specification, wherein—

Figure 1 is a plan of the cutters employed by me, and Fig. 2 is a vertical section of a pair of said cutters in place for use.

Similar marks of reference denote the same parts.

My said invention consists in a certain improvement in cutters employed in machinery for rubbing or dressing types.

My cutters are applicable with any machine that will convey the types along and in contact with my improved cutters; but for the better understanding of the nature of my improvement, I remark that said cutters are intended for use especially with a type-dressing machine on the general plan of that patented by Daniel Moore, December 11, 1855. The types are cast with burrs or projections at the base of the letters, which burrs have to be dressed off and the sides of the types made exactly parallel, in order that they will set up correctly in line as composed. Sometimes these burrs are entirely on one side of the base of the letter, or more on one side than on the other. In dressing these burrs off by forcing the types through between cutters many difficulties are experienced, particularly with thin types. The cutting operations have to be very gentle, and although the projections are not generally very large, still the speed of the machinery will often produce a friction on the cutters that heats the types and injures them, especially with thin types having large projections, and where the burr or projection is larger on one side than the other, the operation of dressing must commence on the larger projection first and reduce that, or else the letter at the side where there was but little projection, would itself be cut away and the body of the type dressed off unequally.

My improved cutters remedy all the diffi-

culties heretofore experienced in dressing types, and allow provision to be made for all the various circumstances that are connected with the rubbing of different kinds of types. I employ plates of steel that are dressed down on their sides, so that one edge is thicker than the other, and the parts thus removed from openings or mouths 2 2, between the plates as said plates are set together. The cutting-edge 1 is formed on these plates by dressing or grinding the edge at a little less than a right angle. The section, Fig. 3, shows one of these cutting-plates in larger size, so as to represent the shape which I find practically the most efficacious in the dressing of types. I place several of these cutting-plates *a a* side by side, and confine them by screws *b b*, or other suitable means within the stock *c*, taking care that the cutting-edges are exactly in the same plane, but in consequence of the edges of the plates being ground off at less than a right angle the cutting-edges are higher than the other part of the edge of each of said plates. Two of these stocks, *c c*, each fitted with cutting-plates, are to be provided, the one above the other, and sustained by any suitable device on the bed of the machine, and properly adjusted so that the necessary space is left between the cutters for the type to be rubbed. Two or more pairs of such cutters may be employed on one machine, so as to remove the burrs or projections very gradually. The types are carried through between these cutters by suitable mechanism, and the fine shavings cut off pass away by the mouths 2 2. It will be seen that if the plates *a a* have their edges dressed off at right angles to the sides, the edge that acts to dress the types may be slightly elevated by said plates, standing each slightly diagonally in the stock *c*. The mouths 2, being of a wedge form, clear themselves of the fine cuttings easily, and might be made in a solid piece of metal by the employment of a suitable cutter, but the cost of the same would be greatly increased.

In order to dress off one side of the projection before the other, I introduce any desired number of blanks in the cutter that is not to act first. These blanks are formed similar to the cutters, but the cutting-edge is dulled or ground off so that it will not cut, hence such

blanks will simply press the types to the operative cutter, and do not themselves become heated or produce heat or friction on the types, thus avoiding the difficulties heretofore experienced in the use of a solid block pressing the type to the cutter. In the present instance the openings or mouths between the plates lessen friction and keep the plates cool.

What I claim, and desire to secure by Letters Patent, is—

1. The employment of cutting plates formed

with wedge shaped mouths, substantially as specified, and for the purposes set forth.

2. The employment of plates with openings between them to press the type to the cutters and avoid heating, as set forth.

In witness whereof I have hereunto set my signature this 26th day of March, 1862.

WILLIAM MOORE.

Witnesses:

LEMUEL W. SERRELL,
THOS. GEO. HAROLD.