No. 811,776. PATENTED FEB. 6, 1906.

H. L. KOEHLER.

INTERCHANGEABLE CURVED TYPE AND PLATE.

APPLICATION FILED MAR. 20, 1905.

FIG. 1.

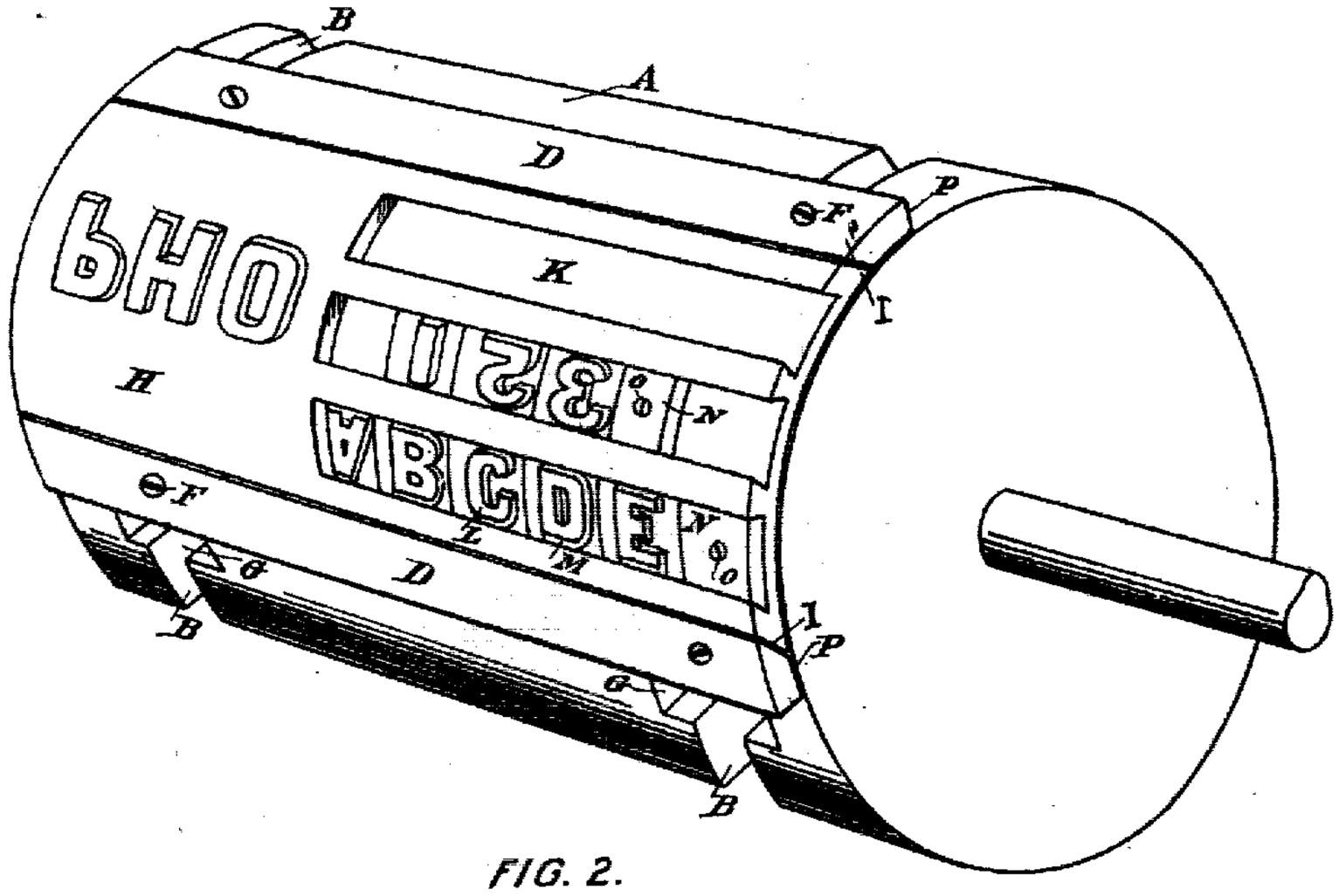


FIG. 2.

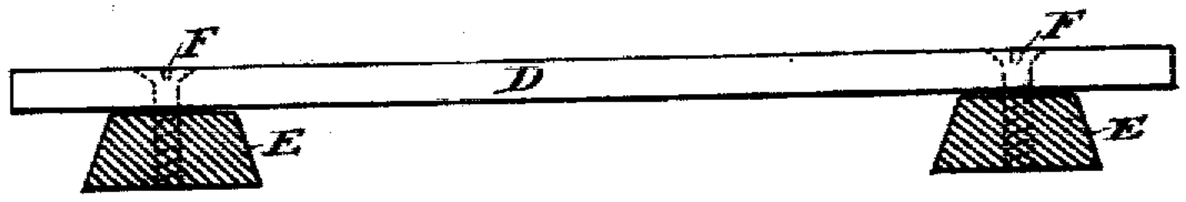


FIG. 3.

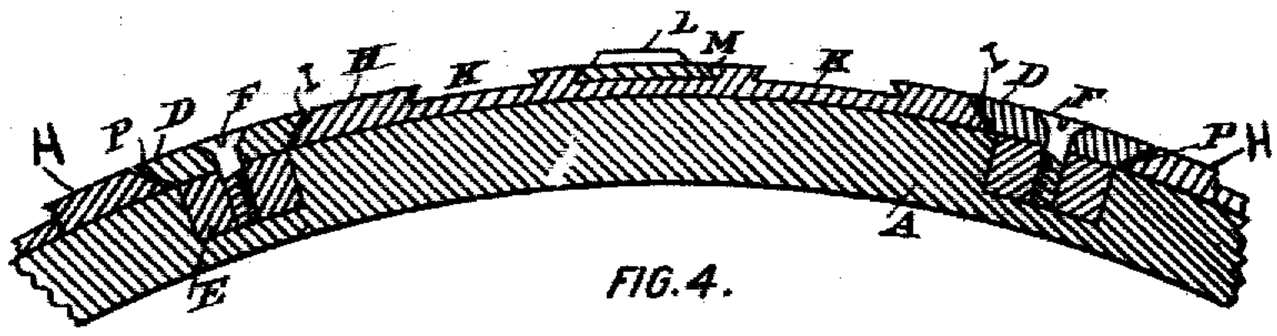
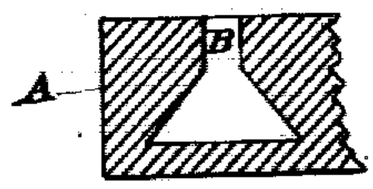


FIG. 4.



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HENRY L. KOEHLER, OF DEER PARK, KENTUCKY.

INTERCHANGEABLE CURVED TYPE AND PLATE.

No. 811,776. Specification of Letters Patent. Patented Feb. 6, 1906.

Application filed March 20, 1905. Serial No. 251,027.

To all whom it may concern:

Be it known that I, HENRY L. KOEHLER, a citizen of the United States, and a resident of Deer Park, in the county of Jefferson and State of Kentucky, have invented a new and useful Improvement in Interchangeable Curved Type and Plates, of which the following is a specification.

My invention relates to a device by which detachable plates arranged to hold type may be secured on the outer surface of a revoluble cylinder and by which curved type may be added or removed separately on the surface of said plate in such manner that the face of said plate-type and of said type shall form part of the surface of a perfect cylinder.

I have on October 19, 1904, filed my application, Serial No. 229,065, which is still pending, for a patent on adjustable curved type resting directly on the cylinder.

My present objects I attain by the contrivance illustrated in the accompanying drawings, in which—

Figure 1 is a perspective of the entire contrivance. Fig. 2 is a view of the strip below described. Fig. 3 is a section through the strip, plate-type, and part of the cylinder below described. Fig. 4 is a section of the groove and mortise.

A is a revoluble rigid cylinder encircled by grooves B B, which widen inward, forming mortises.

D D are strips or guard-bars having loosely attached to them the dovetails E. These dovetails fit loosely into the mortises.

F F are countersunk screws which pass through the strips and the dovetails by which said strips may be firmly fastened to the cylinder. This is done by turning the screws until they meet resistance from the cylinder. The dovetails are thus forced upward against the sides of the mortises and are firmly held, and the strips are thus firmly secured in position on the cylinder. At one place on the cylinder (indicated by G G) the grooves extend at the circumference to the full width of the mortises, thus permitting the entrance of the dovetails into the mortises, after which the strips may slide freely around the cylinder, except when screwed fast.

H is a cylindrically-curved plate which may have considerable arc and may have a length equal to the entire breadth of the cylinder. It has at its two sides—that is, at the extremes of its arc—beveled edges I I, which fit snugly between the cylinder and the overhanging bevels P P on the strips. On the outer surface of this plate there may be fixed raised letters. On the outer surface of this plate are also mortised or beveled grooves K K.

L is a type, made, preferably, of metal, having a raised letter or other figure upon its face, both type and figure being curved circularly from top to bottom of the face of the type. Its inner face curves similarly with the plate against which it fits, and its upper and lower edges are beveled from top outward, as at M M. These type are adapted to be slid within the grooves on the plate and are retained in position by these bevels. To prevent their sliding out of the grooves, I use the end piece N and the screw O, which operate in the mortise in the same manner as the dovetails and screw above mentioned. The faces of the type when inserted into these mortises are elevated to exactly the same height above the cylinder as are the fixed type on the plates, if there be any.

My contrivance operates as follows: The dovetails on the strips are first inserted into the mortises so that the strips may be freely slid around on the cylinder. I place a plate-type between two strips, its beveled edges being held firmly against the cylinder by the beveled edges of the strips, which are screwed fast thereto. It may be prevented from sliding out in various convenient ways, such as by wedging slivers of metal between its beveled edges and the bevels of the strips. When I desire to employ movable type on the plate in part or altogether, they are arranged in the desired order by sliding them into mortises in the plate, and they are secured from sliding out, preferably by means of an end piece N and screw O.

In describing my contrivance I have spoken of the bevels on the strips and at the sides of the type-plates as means for holding the plate in position, and similarly I have spoken of the beveled type fitting into the mortises. However, it would be feasible to secure the plates to the cylinder and the type upon the plate by means of flanges, as indicated in my application for patent on adjustable curved type.

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

1. The combination of a revoluble cylinder encircled by mortises, beveled strips having dovetails fitting loosely in the mortises, and a beveled curved plate having on its outer

surface, mortises, and beveled curved type and screws and end pieces fitting therein, and means for fastening the strips to the cylinder, all substantially as described.

2. The combination of a revoluble cylinder encircled by mortises, beveled strips having dovetails fitting loosely in the mortises, a beveled curved plate having on its outer surface, mortises, beveled curved type fitting therein, and means for fastening the strips to the cylinder, all substantially as described.

Signed at Louisville, Kentucky, this 18th day of March, 1905.

HENRY L. KOEHLER.

Witnesses:
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