

No. 811,727.

PATENTED FEB. 6, 1906.

H. L. KOEHLER.  
ADJUSTABLE CURVED TYPE AND CYLINDER.  
APPLICATION FILED OCT. 19, 1904.

Fig. 1.

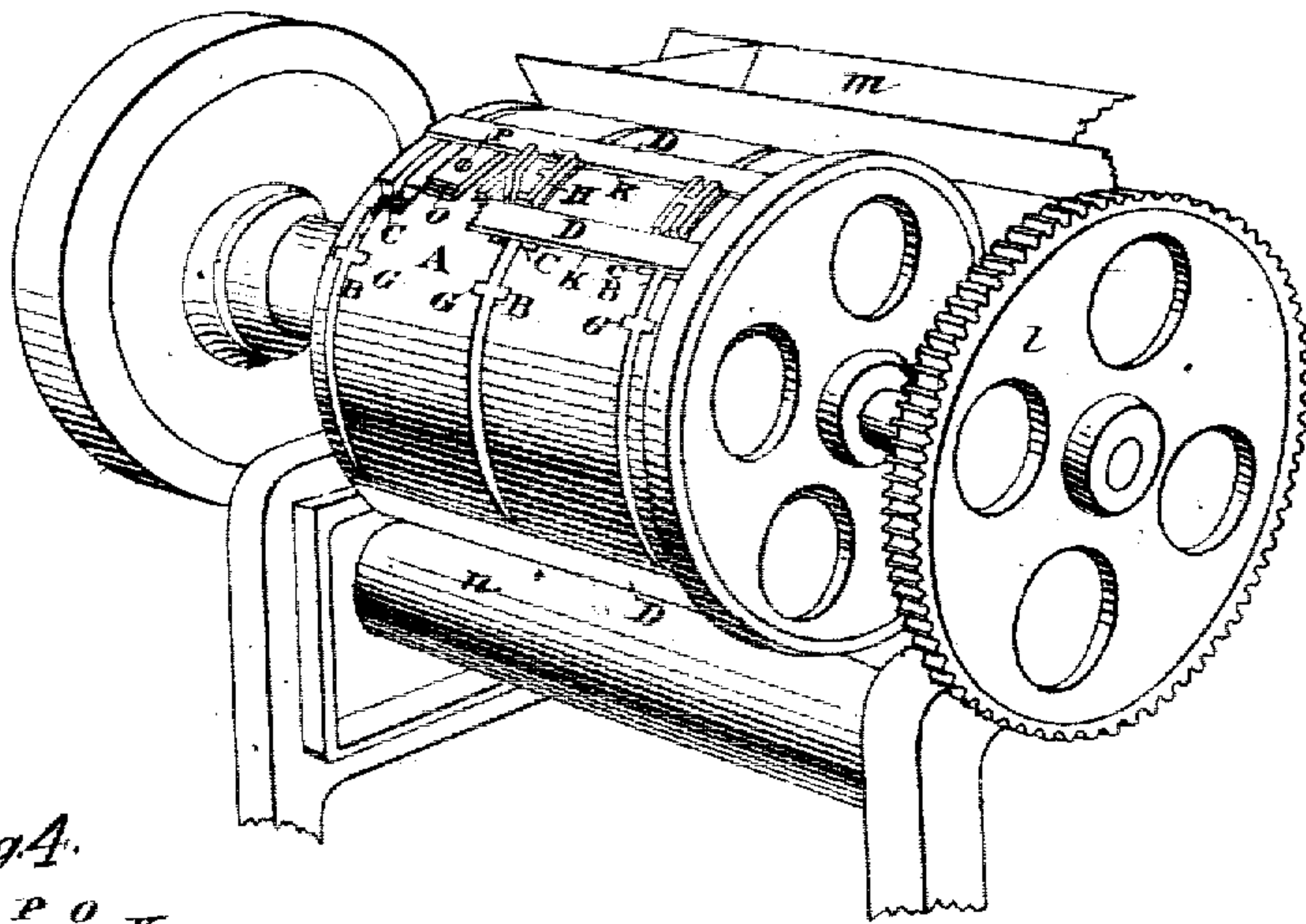


Fig. 4.

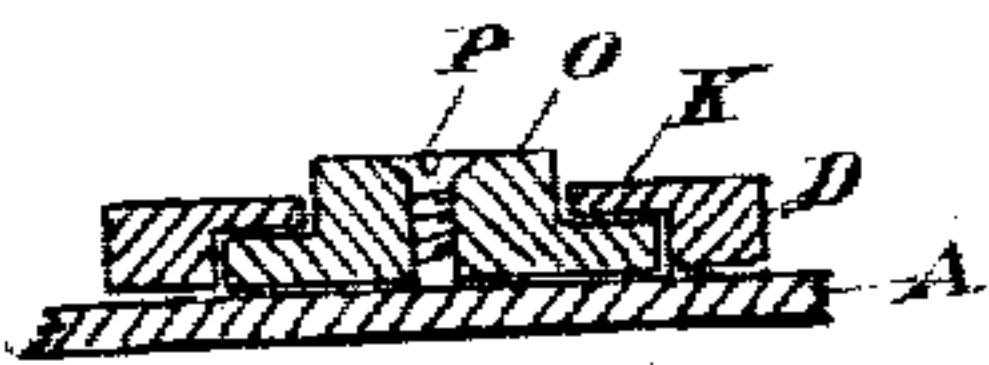


Fig. 2.



Fig. 5.

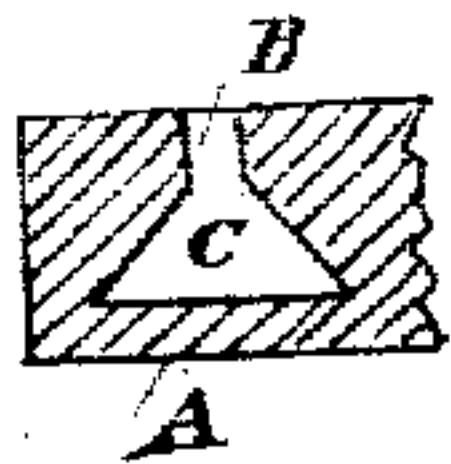
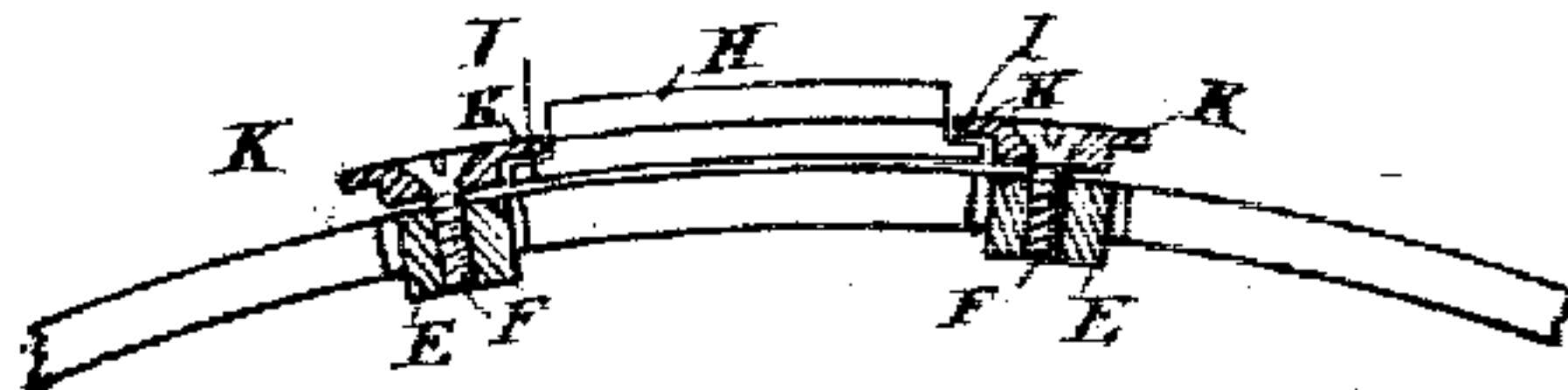


Fig. 3.



WITNESSES

Frank Pardon  
Wilkins G. Anderson.

Henry L. Koehler INVENTOR.  
by A. Lincoln Semblitz  
Attorney



# UNITED STATES PATENT OFFICE.

HENRY L. KOEHLER, OF DEER PARK, KENTUCKY.

## ADJUSTABLE CURVED TYPE AND CYLINDER.

No. 811,727.

Specification of Letters Patent.

Patented Feb. 6, 1906.

Application filed October 19, 1904. Serial No. 229,065.

*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 Adjustable Curved Type and Cylinder, of which the following is a specification.

My invention relates to a device by which detachable rigid type may be rigidly arranged in one or more lines on the outer surface of a revoluble rigid cylinder in such manner that the face of the type in one direction shall form part of a perfect cylinder and in such manner that one or more type may be added or removed separately. I attain these objects 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, type, and cylinder below described. Fig. 4 is a section of the end piece and its inclosing flanges. Fig. 5 is a section of the groove and mortise.

The same letters represent the same parts in the various drawings.

A is a revoluble rigid cylinder encircled by grooves B B B. These grooves widen inward, forming the mortises C C C. D D are strips or guard-bars, having loosely attached to them dovetails E. These dovetails fit loosely into the mortises. F F are countersunk screws which pass through the strips and the dovetails and by which said strips can 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 as well. At one place on the cylinder G G G the grooves extend at the circumference to the full width of the mortises, thus permitting the entrance of the dovetails into the grooves and mortises, and thus the strips are permitted to slide freely but securely around the cylinder, except when screwed fast.

H is the 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 surface curves similarly with the cylinder, against which it fits, and has at the top and bottom flanges I I, which fit loosely between the cylinder, and flanges K K

on the strips. There is no rim or flange around the ends of the cylinder, and the type may ordinarily be slid onto and from the cylinder between the strips. When it is desired to fix the type in their places, the flanged end pieces O are slid against them between the strips and are secured by the screws P P, acting in the manner explained in the case of the screws F F.

*l m n* represent mechanism for using the cylinder in connection with a printing-machine.

My contrivance operates as follows: The dovetails on the strips are first inserted through the enlargements G into the mortises, so that the strips may be freely slid around on the cylinder. I then arrange a line of type in their order, placing their flanges beneath the flange of a strip which is screwed fast to the cylinder. I then bring around another strip against the other end of the line of type, so that its flange overlaps the flange of this other end, or instead of all this I fasten the strips at the required distance apart and slide the type between in their proper order. I then proceed to slide in up against each end of the line an end piece, which is fixed in place by its screw, as above fully described. In the same manner various lines of type may be firmly adjusted at different parts of the cylinder. Any line or part of a line of type may be removed by unscrewing an end piece and simply sliding them out between the strips.

Instead of having flanges on the type and overhanging flanges on the strips, as heretofore shown, I sometimes substitute beveled edges on the type or plate-types and corresponding bevels on the strips, adapted to hold the type or plates down, and similarly in using type fitting in the mortises on the plates the edges of the type may be beveled and the interior of the mortise properly arranged for their reception. I consider this substitution, however, as a mere mechanical change and not as one affecting the principle or nature of the contrivance.

I have thus set forth various minor points and conveniences of my contrivance; but its main merit consists in providing a means for holding rigid type in true cylindrical form on the outer surface of a rigid cylinder and for inserting or removing at pleasure one or more lines or parts of lines.

Having now fully described my contriv-

ance, what I claim as my invention, and desire to secure by Letters Patent, is --

1. The combination of a revoluble cylinder encircled by mortises, flanged strips having dovetails fitting loosely in the mortises, curved type having flanges adapted to slide between the cylinder and the flanges on the strips, means for fastening the strips to the cylinder and means for securing the type between the strips all as and for the purposes set forth.

2. The combination of a revoluble cylinder encircled by mortises, flanged strips having dovetails fitting loosely in the mortises, circularly-curved type having flanges adapted to slide between the cylinder and the flanges on the strips, screws passing through the dovetails for fastening the strips to the

cylinder, and plates and screws for securing the type between the strips all as and for the purposes set forth.

3. The combination of a revoluble cylinder, adjustable flanged strips, extending along said cylinder, adapted to freely slide around said cylinder and to be firmly attached thereto at any point thereon, curved flanged type adapted to be secured between a pair of such strips, and means for firmly attaching said strips to the cylinder at any point, substantially as described.

Signed at Louisville, Kentucky, this 14th day of October, 1904.

HENRY L. KOEHLER

Witnesses:

A. LINCOLN DEMBITZ,  
LEWIS N. DEMBITZ.