(No Model.)

W. H. COTHREN.

METHOD OF PRODUCING STENCILS, &c.

No. 414,104.

Patented Oct. 29, 1889.

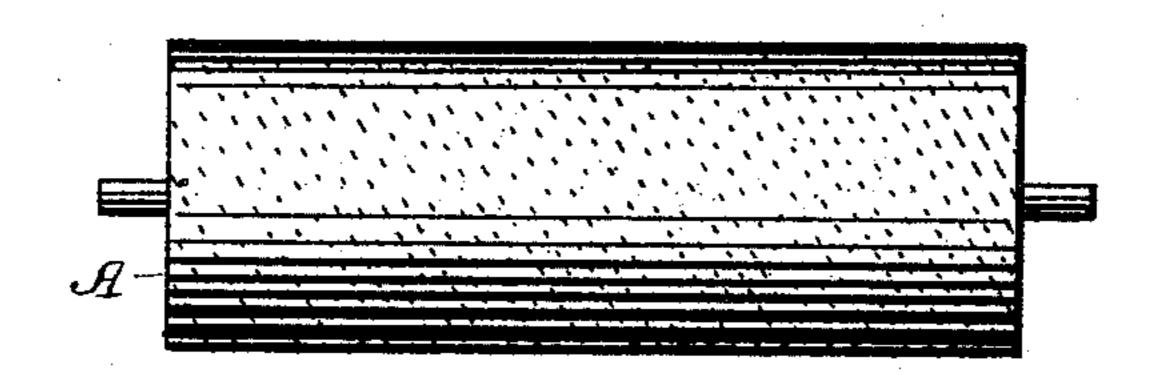
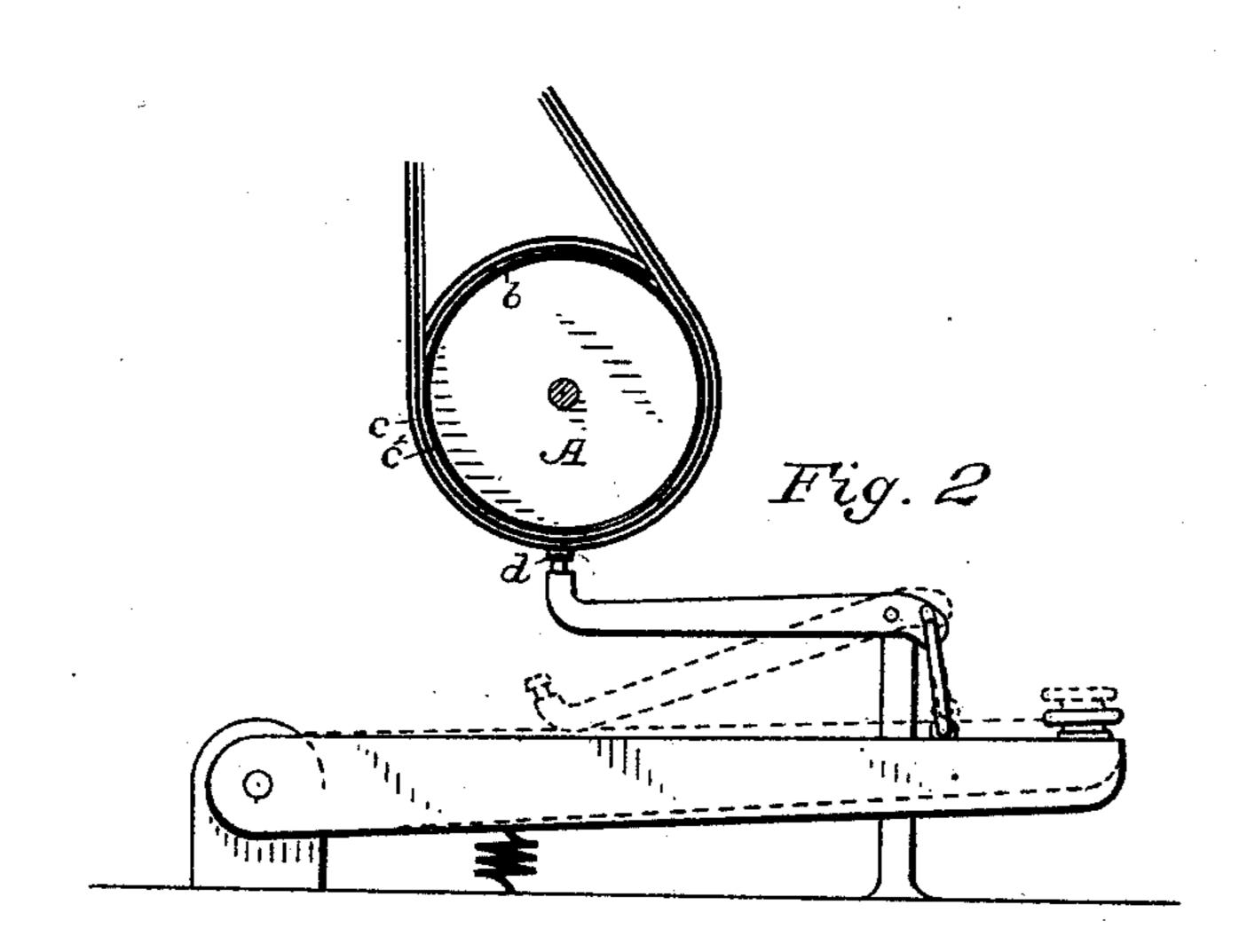


Fig. 1.



H. B. Wyman

William Ho. Cathren By his Attorney L. Deauce.

United States Patent Office.

WILLIAM H. COTHREN, OF FARMINGTON, MAINE.

METHOD OF PRODUCING STENCILS, &c.

SPECIFICATION forming part of Letters Patent No. 414,104, dated October 29, 1889.

Application filed January 15, 1886. Serial No. 188,685. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. COTHREN, a citizen of the United States, residing at Farmington, in the county of Franklin and 5 State of Maine, have invented certain new and useful Improvements in Methods of Producing Stencils, &c., of which the following is a specification, reference being had therein to the accompanying drawings.

The object of the present invention is to produce a form, pattern, stencil, or other similar device which may be used with an ordinary printing-frame and ink-roller to make copies of the letters, figures, or other devices represented or made in the stencil; and the novelty consists in the process or method by which this object is put into practice or use.

description have been produced on a machine not unlike an ordinary type-writer, but by the use of types having on their faces numerous chiseled edges; but this method has so many and obvious disadvantages in use—such as cost, liability to get out of order, difficulty in operation, &c., not necessary now to particularize—that it has not come into general or ordinary use.

By the present process or method an ordi-

nary type-writer can be used.

o Having thus generally indicated the nature and scope of the invention, its details will now be more fully and exactly explained, reference being had to the accompanying drawings, in which—

Figure 1 is a front elevation of a roughened roller. Fig. 2 is a side elevation indicating the mechanism of a type-writer and showing a roller with roughened surface, adapted to

carry out this invention.

The surface of a metallic roller A or similar device is prepared with cutting-edges, file-like projections, numerous points, fine screwthreads, or roughened in any desired manner. Preferably there is used a fine thread, like an ordinary screw, which preferably lies at a considerable angle on the surface of the roller, the edges of the thread being brought down to the cutting-edges. The lines, projections, points, or edges for forming the letters may run in circles directly around the roller, but preferably at an angle of about forty-five degrees—that is, screw-threaded—which will give them a more uniform appear-

ance, and insure perfect stencils or forms,

and lessen the liability to blot in printing 55 the same. The roller having its surface suitably roughened is placed in the type-writer, and this surface is first covered by a sheet of waxed or other suitable paper b, and over this is placed a sheet or two of heavy paper c c', 60 as many as may be desired. The mechanism of the type-writer now being operated in the usual way, the types d strike against the heavy paper, and thus the points where the types strike the cutting or roughened edges 65 of the roller are forced through the waxed paper, forming a stencil or pattern. It will be seen that in this way the stencil is formed from the under side. When this operation is finished, the heavy paper is removed, and 70 then the waxed paper can be taken off the roller. If it is desired to use the type-writer in the ordinary way, no waxed paper is employed. The roller is covered, as above, with heavy paper and the type-writer is all ready, 75 simply as such. The backing formed by the thick paper will insure good and plain work from the types. Thus any type-writer fitted with this roller can be used in the ordinary way for copying purposes or for forming sten- 80 cils, as the faces of the types will not strike directly against the roughened surface howsoever formed. The sheet of waxed or other paper thus perforated becomes a forming pattern or stencil, which can be readily used 85 by hand and ink-brush, or be fitted into an ordinary printing frame or machine, and then in the usual way impressions can be made from it.

Having thus described my invention, what I 90 consider new, and desire to secure by Letters

Patent, is—

The within-described process of producing a stencil or pattern for printing or marking, which consists in placing on a roller provided 95 on its surface with points, projections, or other cutting-edges a waxed or other suitable paper and over that a thick paper, and then by the blows of the type apparatus of an ordinary type-writer perforating the inner paper with the desired letters, figures, or other patterns, substantially as described.

In testimony whereof I affix my signature in

presence of two witnesses.

WILLIAM H. COTHREN.

Witnesses:

BARNES POTTER, C. C. TORREY.