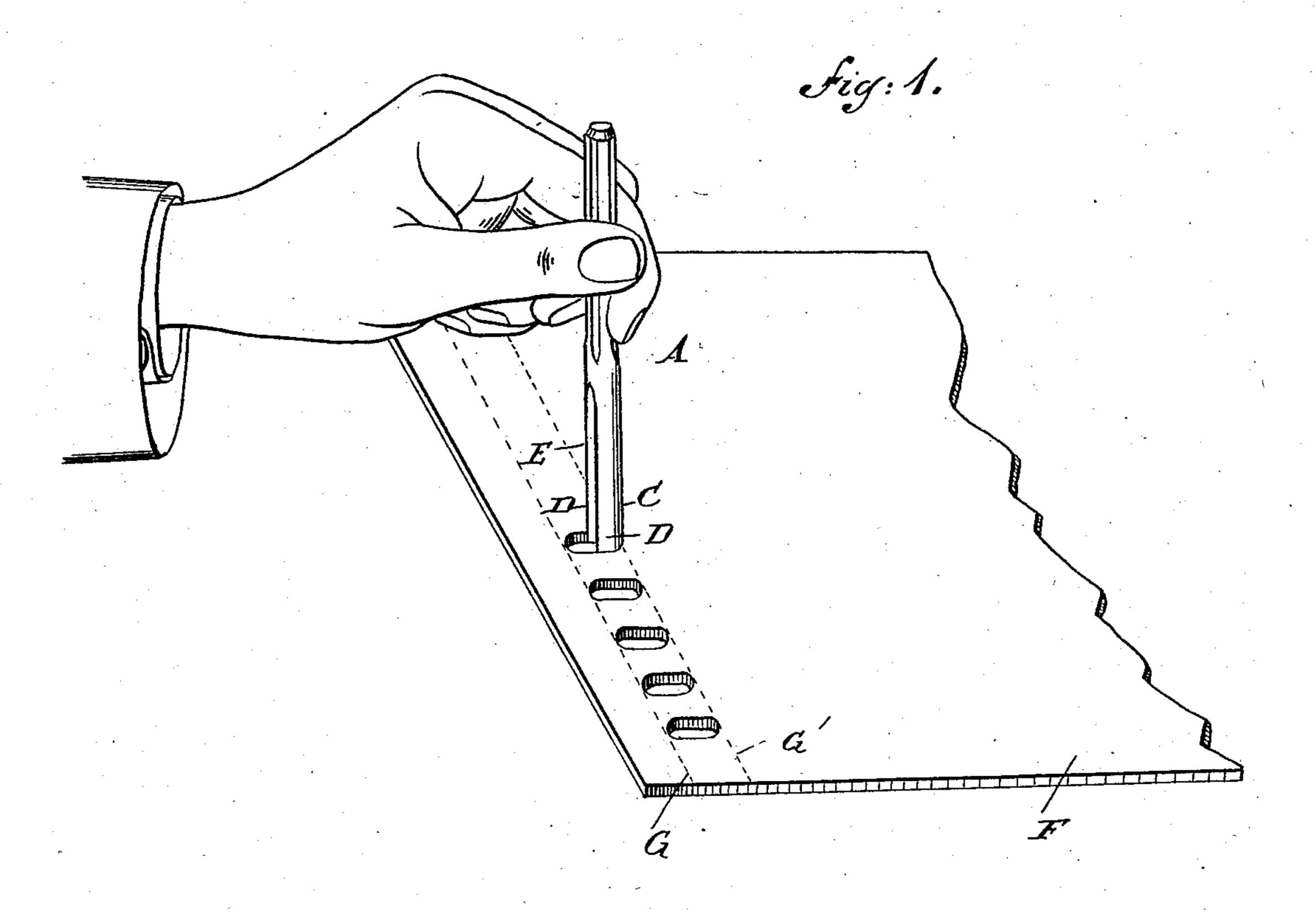
(No Model.)

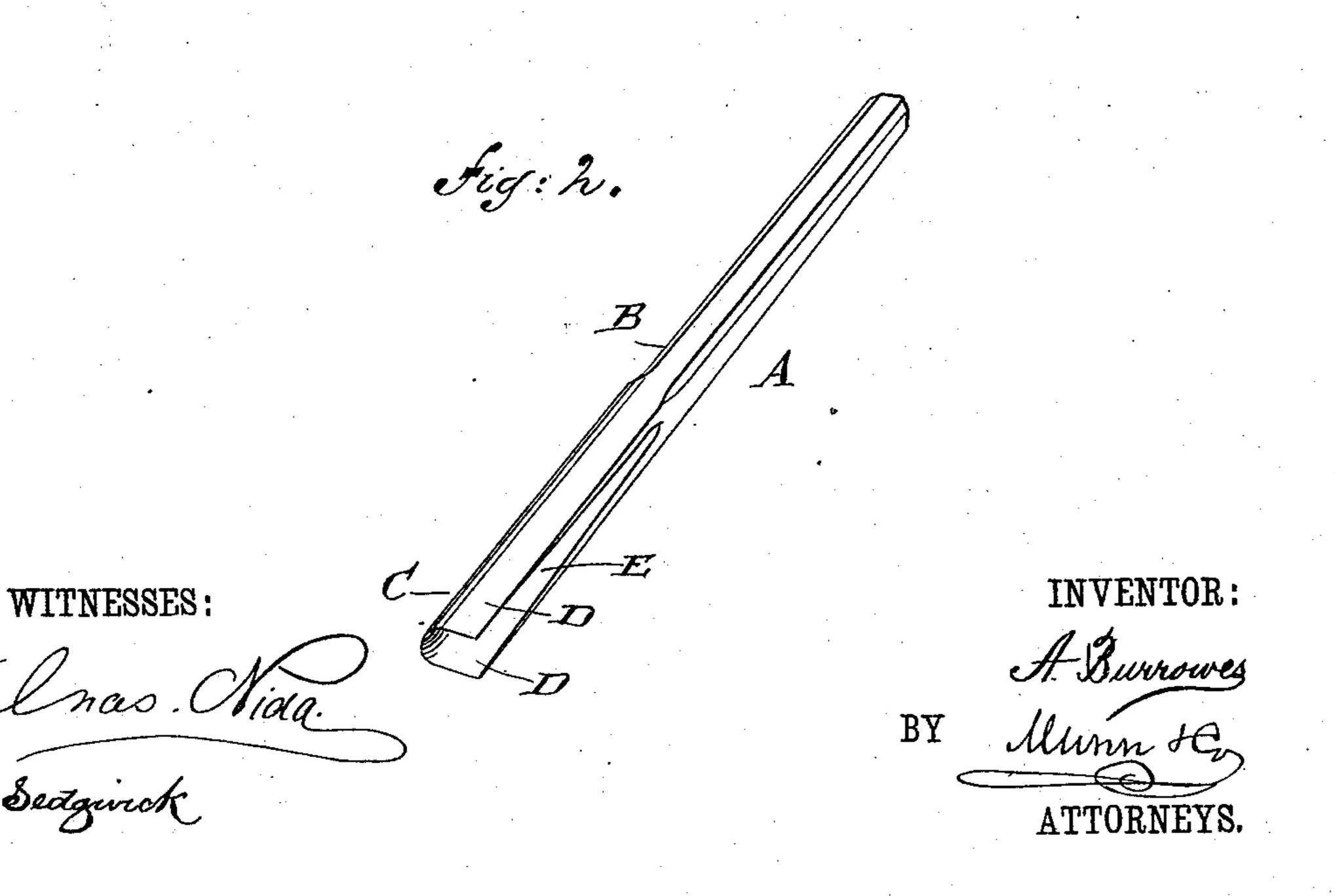
A. BURROWES.

PUNCH.

No. 376,136.

Patented Jan. 10, 1888.





United States Patent Office.

ALBERT BURROWES, OF TORONTO, ONTARIO, CANADA.

PUNCH.

SPECIFICATION forming part of Letters Patent No. 376,136, dated January 10, 1888.

Application filed April 30, 1887. Serial No. 236,632. (No model.) Patented in Canada April 4, 1887, No. 26,388.

To all whom it may concern:

Be it known that I, Albert Burrowes, of Toronto, in the Province of Ontario and Dominion of Canada, have invented a new and improved Punch, of which the following is a full, clear, and exact description.

My invention relates to a punch for which Letters Patent of the Dominion of Canada, No. 26,388, dated April 4, 1887, were granted

10 to me.

The object of my invention is to provide a new and improved punch, especially adapted for punching oblong apertures in belts for lac-

ing the ends of the belts together.

The invention consists of a punch having a straight shank formed with a semicircle at one side, which semicircle continues into parallel sides, a groove being cut on the other side of the shank, so as to form a U shaped cutting-20 edge at the lower end of the shank, substantially as shown and described.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a perspective view of my improvement in the position for punching, and Fig. 2 is a perspective view of the punch.

Heretofore the tool employed for punching 30 holes into a belt or similar article consisted of a hollow punch of conical shape, so that the aperture formed by the punch was conical and more or less ragged at the edges, thus injuring the belt and preventing a secure and 35 tight lacing, and the aperture of the tool into which the cut piece of the belt passed became blocked by said pieces cut out of the belt. With my improved tool, presently to be described. I am enabled to cut clean oblong 40 holes of any desired length in the belt. Said holes will not draw at the sides and opposite points on which the lacing draws, but, on the contrary, will close the sides when drawing tightly on the lacing.

The punch A, of suitable length and thickness, is provided with the usual shank, B, provided on its lower part with the semicircular side C, which continues into the parallel sides D D. The lower part of the shank B is

50 formed with the groove E on the other side, so as to produce at the extreme end of the shank a cutting edge of U shape formed by the sharp edges of the two parallel sides D D and the semicircular side C, the front of the shank B being open.

The tool is used for cutting oblong apertures -in the belt F, for instance—by first drawing the two lines G and G' across the belt, indicating the length of the apertures to be formed, as illustrated in Fig. 1. The punch is then 60 placed on the belt with its sides D D lengthwise of the belt and with the top of the semicircle resting on the line G. The punch A is then pressed through the belt by the blow of a hammer, or other means, and then the punch is 65 withdrawn and is reversed so that the semicircular side rests on the line G', and the parallel sides D meet the cuts previously made. The punch is then again pressed through the belt, whereby an oblong piece is cut out of the 70 belt and an oblong hole is formed. Any number of said holes may be formed across the width of the belt between the lines G and G', the holes being preferably equal distances apart.

It will be seen that by drawing additional lines parallel to the line G' holes of any length may be formed in the belt. The sides of the holes are straight and stand at a right angle to the end of the belt.

It will be seen that if the punch should break at its cutting-edge by rough usage, then the broken end can be ground off and the lower end sharpened to any desired shape, as above described, thus forming a tool which is 85 as good as new. It will be seen that the groove E in the punch cannot be clogged up by the piece cut out of the belt, as the respective piece always projects at one side of said punch, and can thus be easily removed in case 90 it should adhere to the inside of the sides D D and the side C.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The punch herein described for forming oblong apertures in belts, having a straight shank formed with a semicircle at one side, which semicircle continues into parallel sides, and an open U-shaped groove cut in the other 100 side of the shank, terminating in a cutting-edge at the lower end of the punch, all substantially as shown and described.

ALBERT BURROWES.

Witnesses:

REGINALD M. MACDONALD, GEORGE C. BUCHANAN.