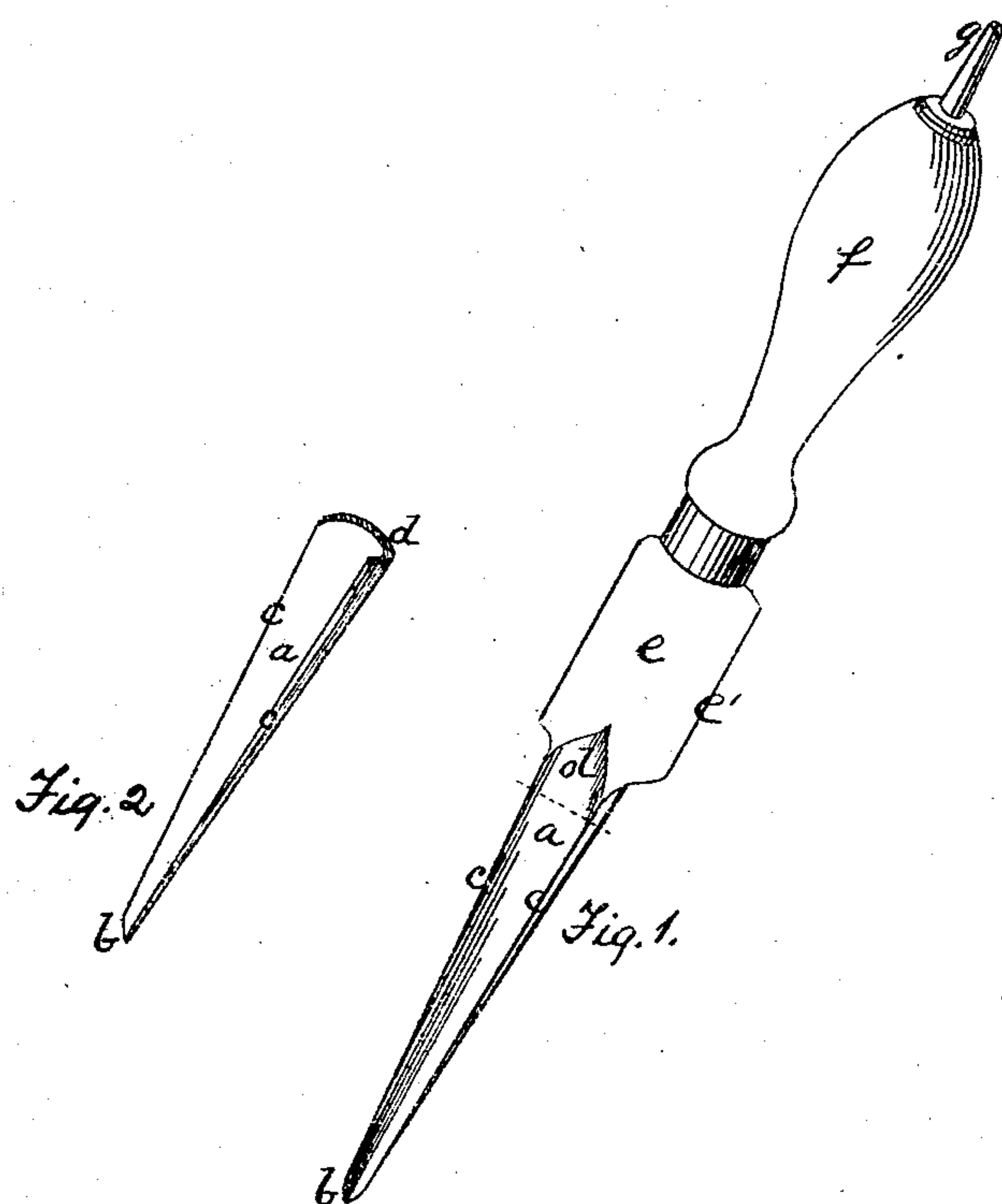


J. S. ALEXANDER.
Tools for Working in Leather.

No. 140,336.

Patented July 1, 1873.



WITNESSES
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JAMES S. ALEXANDER, OF PITTSBURG, PENNSYLVANIA.

IMPROVEMENT IN TOOLS FOR WORKING IN LEATHER.

Specification forming part of Letters Patent No. **140,336**, dated July 1, 1873; application filed March 5, 1873.

To all whom it may concern:

Be it known that I, JAMES S. ALEXANDER, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Tool for Working in Leather; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings forming a part of this specification, in which—

Figure 1 is a perspective view of my improved tool, and Fig. 2 is a perspective view of the concave side of the bit.

In working with leather separate tools are required for cutting and for making holes. No inconvenience is felt on this account by the saddler, shoe and belt makers, and other workers in leather, for they are always provided with such tools, and use them generally under circumstances attended with no inconvenience. But the farmer, mechanic, and others using the articles made by such operators, are in need of a light, cheap, portable tool, combining in itself the important or necessary tools used in working with leather, so as to enable them to alter or repair leather articles. In some circumstances it is very inconvenient to be hampered with a number of tools. This is especially the case with the mechanic when repairing belts extending along at a height in factories. Such a belt is reached by a ladder, upon which the mechanic stands while he works, such work ordinarily involving the operation of sewing. Heretofore it has been necessary for the mechanic in this case to have a knife, a punch for making holes, a mallet, a block, and an awl, and in many cases other tools. Hampered with so many tools the operator works slowly and with difficulty.

My invention consists of a bit for cutting holes of various sizes, and also of such a bit, combined in a single tool with a knife, and if desired, an awl.

To enable others skilled in the art to make and use my invention, I will describe its construction and manner of use.

The bit *a* tapers longitudinally, and is of concavo-convex form in cross-section. It is provided with two sharp cutting-edges, *c*, which extend from its point *b* to its butt end *d*. The point *b* is sharp so as to penetrate the leather. This bit is designed for cutting holes of various sizes. The point *b* is caused to penetrate the leather, and the bit pushed through until it is of sufficient width to equal the diameter of the hole to be made. Then it is turned around or rotated, so that the edges *c* shall cut out the leather and form the hole. Then, as the front side of the hole thus made is wider than the back side, the bit is inserted into the hole at the rear side, and the whole made regular and even. Back of the bit *a* is a knife, *e*, having a sharp cutting-edge, *e'*, the other edge being blunt, as in ordinary knives. This tool is furnished with a handle, *f*, at the rear end of which, there is an awl *g*, either sharp or blunt, as may be desired. This tool entirely takes the place of the tools recited as necessary in mending belts, as herein described. The holes may be cut by the bit *a*, and thus dispense with the block, punch, and mallet, and there is no need of a separate knife or awl, so that the operator is not hampered with many tools, and therefore free to work more effectively and quickly.

In other operations this tool is equally useful, while the cheapness with which it can be made puts it within the reach of all.

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

A combined tool, consisting of a bit, *a*, and knife *e*, fitted with a handle, *f*, having an awl, *g*, the whole combined and arranged substantially as described and shown.

In testimony whereof I, the said JAMES S. ALEXANDER, have hereunto set my hand.

JAMES S. ALEXANDER.

Witnesses:

W. N. PAXTON,
THOS. B. KERR.