

(No Model.)

C. E. ROBERTS.

KNIFE FOR LEATHER SPLITTING MACHINES.

No. 344,404.

Patented June 29, 1886.

Fig 1.

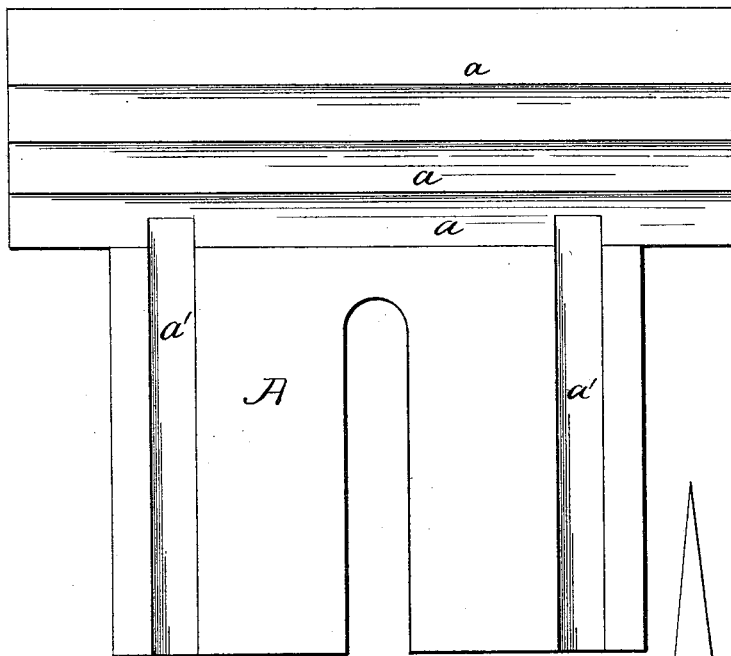


Fig 2.

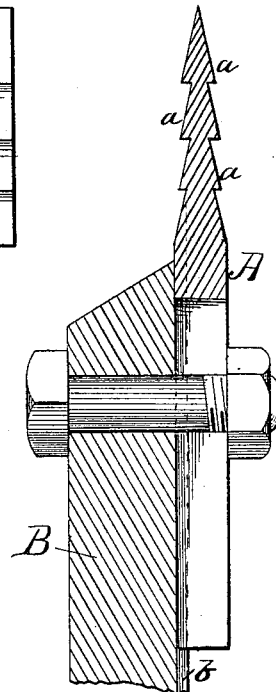


Fig 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

CHARLES E. ROBERTS, OF CHICAGO, ILLINOIS.

KNIFE FOR LEATHER-SPLITTING MACHINES.

SPECIFICATION forming part of Letters Patent No. 344,404, dated June 29, 1886.

Application filed October 12, 1885. Serial No. 179,642. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. ROBERTS, a citizen of the United States, residing in Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Knives for Leather-Splitting Machines, of which the following is a specification.

Knives for splitting and cutting leather require to be frequently ground to keep them in good condition, and as the body of such knives require to be of considerable thickness and strength to adapt them to be properly mounted and secured in machines the faces of the knives which have to be ground down every time the knife is sharpened, are often two inches or more in breadth, and consequently a great deal of time and labor has heretofore been consumed in grinding the knives.

It is the object of the present invention to obviate this difficulty and to provide a knife which, while it may have any required thickness and pitch of face, may still always present comparatively narrow grinding-faces, so that it may be easily and quickly sharpened; and to this end my invention consists in a knife having a series of parallel and comparatively narrow faces arranged in steps, one back of another, from the edge toward the base or body of the knife, so that only one of these narrow faces, or one pair of them, will be presented to be ground at a time, and so that each face or pair of faces will come into play in turn as the knife is used up.

In the accompanying drawings, which form a part of this specification, Figure 1 is a side elevation of a knife embodying my invention. Fig. 2 is a cross-section; and Fig. 3 is a view similar to Fig. 2, showing the old way of making such knives.

In said drawings, A represents the body of the knife, and *a a* the narrow faces arranged in steps, one back of another.

The knife shown in the drawings is specially designed for use in a leather-splitting ma-

chine; but my invention is adapted for use upon other knives or other edge tools, which otherwise would present broad faces to be ground.

The number of faces *a* on each side of the knife may be varied, as desired, and they should preferably be parallel to each other, so that as the knife is ground away the meeting faces which form its edge will always present the same angle to each other. As the knife or blade is used up, each succeeding pair of faces meet to form the edge of the knife. In knives which are intended to be ground only upon one side of course the narrow parallel step-faces *a* will be provided only upon one side of the knife. The series of step-faces *a* may be formed in the knife blank or stock by rolling, or in any other suitable manner, before tempering. The zigzag step-faces also facilitate the tempering of the blade and insure a better temper in that part of the blade which forms the edge, as it is ground back, because the zigzag steps take away part of the metal. The body of the blade is provided with guide-grooves *a'*, preferably one near each end, in which fit suitable tongues or guides, *b*, on the frame or knife-seat B. By this means the blade is not only securely held in place, but when taken out and replaced no special adjustment is required to get the knife back to its proper position.

I claim--

1. An edge tool having a series of narrow grinding-faces arranged in steps, one back of another, to facilitate the grinding or sharpening of the same, substantially as specified.

2. A knife or other edge tool having a series of narrow parallel grinding-faces arranged in steps, one back of another, substantially as specified.

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Witnesses:

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