(No Model.)

G. R. RANK.

LEATHER CUTTING TOOL.

No. 588,928. Patented Aug. 24, 1897.

Fig. 1.

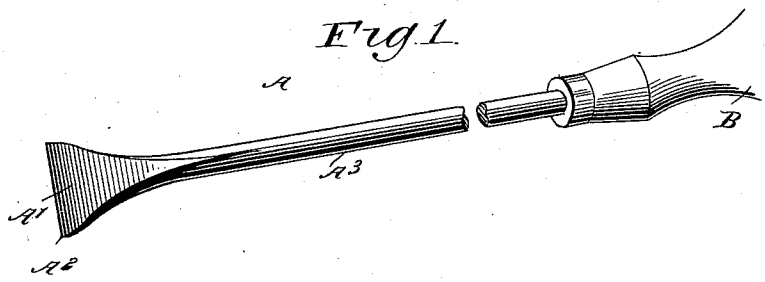


Fig. 2.

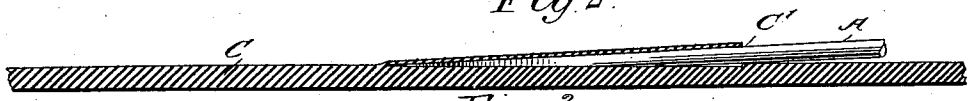


Fig. 3.

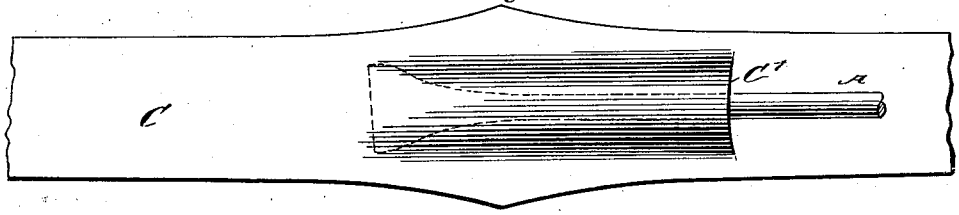


Fig. 4.

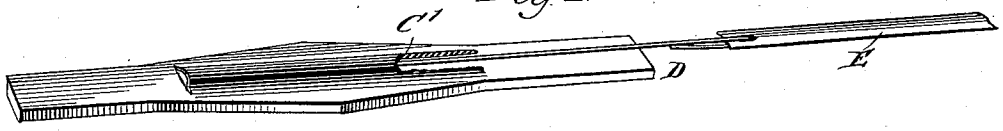


Fig. 5.

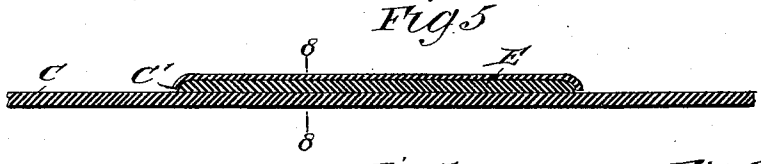


Fig. 6.



Fig. 7.



Fig. 8.



WITNESSES:

Paul Jahal

Rud. Hoffmann

Fig. 9.

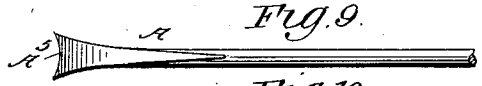


Fig. 10.

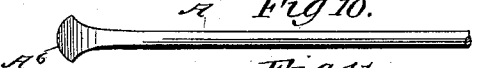
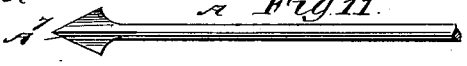


Fig. 11.



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GEORGE R. RANK, OF ALLEGANY, NEW YORK, ASSIGNOR TO IRVING S. BERNHEIMER, EDWIN D. KOHN, AND HARRY D. KOHN, OF CHICAGO, ILLINOIS.

LEATHER-CUTTING TOOL.

SPECIFICATION forming part of Letters Patent No. 588,928, dated August 24, 1897.

Application filed March 23, 1895. Serial No. 542,930. (No model.)

To all whom it may concern:

Be it known that I, GEORGE R. RANK, of Allegany, in the county of Cattaraugus and State of New York, have invented certain new and useful Improvements in the Manufacture of Leather Articles, of which the following is a full, clear, and exact description.

The invention relates to harnesses, and more particularly to the manufacture of nose-bands, bridle-fronts, &c., as shown and described, for instance, in the application for Letters Patent of the United States, Serial No. 529,810, filed by me November 24, 1894.

The object of the present invention is to provide certain new and useful improvements in the manufacture of leather articles, whereby a chisel is employed to conveniently, rapidly, and accurately cut a passage between the grain and fiber of the leather to permit of drawing a piece of leather, wick, or other material into the said passage.

The invention consists principally of a fiber-and-grain-separating chisel having a wedge-shaped blade, widest at its cutting edge and terminating gradually at its back in a shank.

The invention also consists of certain parts and details and combinations of the same, as will be fully described hereinafter and then pointed out in the claim.

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 all the figures.

Figure 1 is a perspective view of the separating-chisel. Fig. 2 is a sectional side elevation of the leather with the chisel inserted between the grain and the fiber. Fig. 3 is a plan view of the same. Fig. 4 is a perspective view with part in section and showing the means for drawing a piece of leather into the passage formed between the grain and fiber. Fig. 5 is an enlarged sectional side elevation of the article with a filling inserted in the passage. Fig. 6 is a cross-section of a piece of leather before forming the passage. Fig. 7 is a similar view of the same after the passage is formed and with the shank still in position. Fig. 8 is a cross-section of the finished article on the line 8 8 of Fig. 5; and Figs. 9, 10, and 11 are plan views of different forms of separating-chisels.

The tool A, employed for forming a passage between the grain and fiber of a piece of leather, is preferably made in the form shown in Fig. 1, the said tool being provided with a wedge-shaped cutting-blade A′, made widest at its cutting edge A^2, which is two or three times wider than the diameter of the shank A^3, in which gradually terminates the back of the cutting-blade A′.

The shank A^3 may be round or polygonal in form and provided at its rear end with a handle B, adapted to be taken hold of by the operator for pushing the cutting edge in contact with the leather, so as to pass the said cutting edge between the grain and fiber of the leather C. The operator then by placing the shank A^3 in an approximately horizontal position pushes forward, so as to cause the cutting edge A^2 to separate the grain and fiber and thereby form a passage C′ in the strip of leather without danger of the side corners of the cutting edge A^2 cutting a slot in the leather and without danger of the tool binding in the leather. When this passage is formed between the grain and fiber for whatever length desired, it is preferably filled with a piece of leather, wick, or other material, and for this purpose I employ a long wire D, doubled in an awl-hole in the end of a leather string E and adapted to be pushed through the passage C′ to draw the leather string E or other filling in place in the passage C′.

By reference to Figs. 9, 10, and 11 it will be seen that the form of the cutting-blade of the chisel A may be varied without deviating from my invention, it being understood, however, that the cutting edge must be wider to a considerable extent than the diameter of the following shank, so as to prevent binding of the tool while pushing it through the leather between the grain and fiber. In Fig. 9 the cutting-blade A^5 is concave at its cutting edge, in Fig. 10 it is round, while in Fig. 11 it is made spear-shaped.

It is understood that in all cases the cutting edge must be considerably wider than the shank in order to cut the passage wide enough, so that the walls of the passage do not bind around the chisel or shank portion of the same. With the tool described a clean passage can be cut with perfect ease, and, if

desired, the operator can cut in circles or adjust the chisel from one side, cutting up the line.

The improvement can be used and applied on all harness parts or other leather-work where laps are usually stitched or layers used or other straps or parts are inserted for the purpose of attaching the same by means of blocking up the passage, forming loops, &c. The device can further be used for ornamenting leather-work, forming raises, or other fancy raised designs. The invention relates, however, more particularly to harness and saddlery goods and can be used to great advantage and immense saving of labor and expense in manufacturing leather-work of all kinds, and applies particularly to the following parts of harnesses: Forming crown layers; inserting gag-runners, chapes, or winker-braces; making nose-bands, fronts, and face-drops; raising throat-straps, face-pieces, overcheeks, or side cheeks; fancy standing martingales; fancy straps; raised ornaments on blinds, &c.; splitting overcheek-jiggers at back of overcheeks or splitting loops on the ends of fronts or center holes for winker-brace to pass through; on breast-collars, neck-straps, or inserting trace-points and center straps on breast-collars, martingales, or choke-straps on hame-tugs; cutting passages for the hame-clips and hiding the same, where otherwise they would be exposed to the weather and soon become rusty; for inserting springs in the ends of lines; making shaft-tugs, belly-bands, or forming loops for one belly-band to slide through or be attached to the other by means of the above; turn-backs; breechings for inserting layers or imitating the same; fancy light open bridles or riding-bridles; bearing-straps on double harness and inserting the filling in the same, or inserting the ends, as desired; on gig-saddle loops, housings, horse-boots, riding-saddles, &c.; rosettes and saddle-nail covers, and other fancy work, as before described.

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

A chisel adapted to separate the grain of the leather from the fiber having a straight and broad cutting edge with receding and blunt side edges terminating in a small shank, the shoulders between the side edges and shank being rounded, whereby the said shank will not rupture the grain and sufficient grain will be separated on each side of the shank to prevent binding thereof and the rounded shoulders will permit the removal of the knife without rupturing the leather, substantially as described.

GEORGE R. RANK.

Witnesses:
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M. M. DYE.