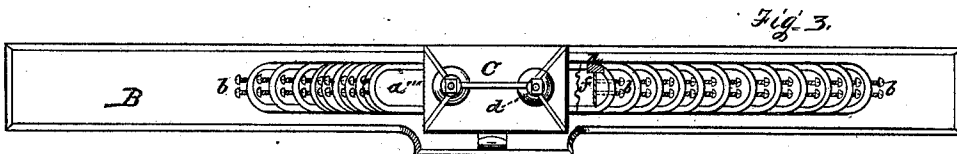
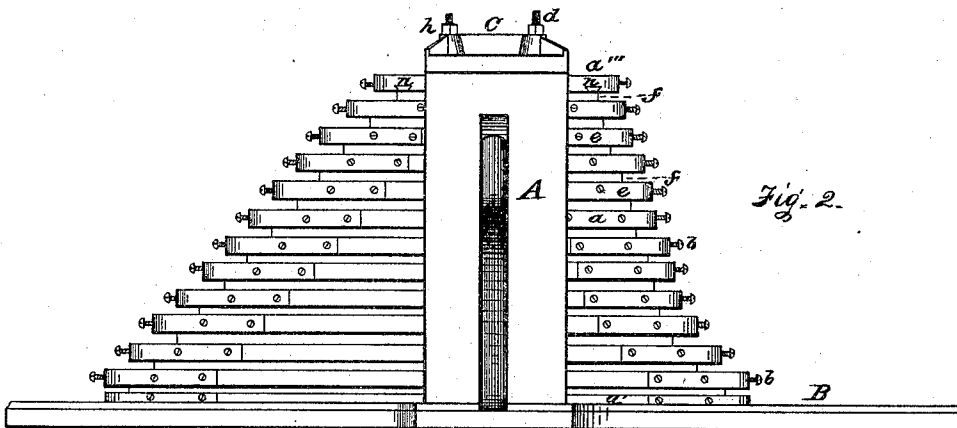
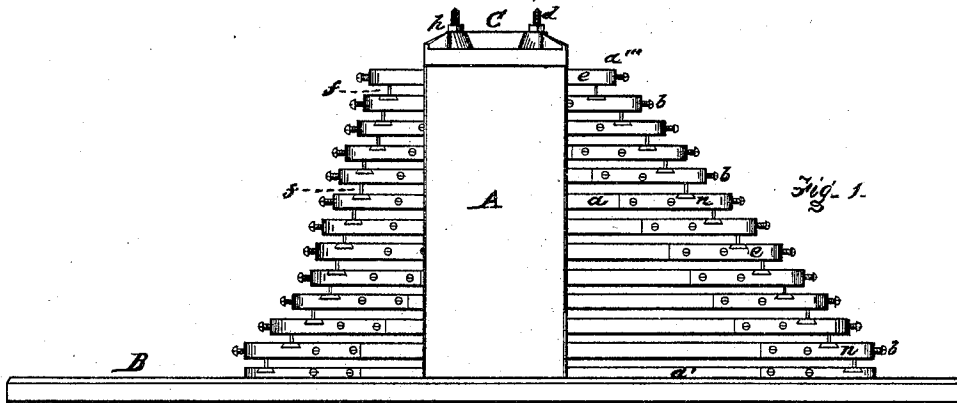


H. HARTLEY.

LEATHER-CUTTING MACHINE.

No. 172,732.

Patented Jan. 25, 1876.



WITNESSES.
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UNITED STATES PATENT OFFICE.

HOWARD HARTLEY, OF PITTSBURG, PENNSYLVANIA.

IMPROVEMENT IN LEATHER-CUTTING MACHINES.

Specification forming part of Letters Patent No. **172,732**, dated January 25, 1876; application filed August 9, 1875.

To all whom it may concern:

Be it known that I, HOWARD HARTLEY, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and Improved Mechanical Contrivance, to be used for the purposes of cutting leather into the form of belts, bands, or straps.

The nature of my invention will be readily understood from the following description, taken in connection with the accompanying drawing, wherein—

Figure 1 represents a front elevation of my improved device or apparatus for cutting leather; Fig. 2, a rear view, and Fig. 3 a top view, of the same, and having one small portion broken away to better exhibit the manner of fastening the knives.

To construct my leather-cutting apparatus I first make a strong frame, A, and attach it in an upright position to a suitable tablet or support, B. Horizontally within this frame are placed a series of narrow bars, *a a a*, of uniform width, but of unequal lengths, and arranged, when in place, a short distance apart, the one above the other, as that the longest bar *a'* will be at the bottom of the series, or nearest the tablet B, and so on in regular progressive order until the uppermost or shortest bar *a'''* is in position at the top of the frame. The several ends of these horizontal bars are each bound with a metallic clasp, *e*, which are furnished with pinch-screws *b b*, for holding a short knife, *f f*, placed vertically therein, and with their sides parallel to the sides of the frame A, and so that the edges of the knives will point all in the same direction.

In addition to the pinch-screws *b b*, the different knives are further secured by means of a hard wooden block, *n*, driven into a dove-tail-shaped recess formed transversely in the ends of the opposite bars, which blocks press against that portion of the blades most remote from the pinch-screws, and give the requisite bearing that enables them to withstand, without vibration, the work they are designed to accomplish.

These bars, so constructed, and furnished with knives, are arranged the one above the other in the frame, as hereinbefore stated, but not with their centers on the same vertical line, being so adjusted as that the distance

between the uppermost knife on one side of the series will be exactly one inch from the frame A, and descending by varying steps of one inch until the space of one foot is attained.

The knives on the opposite ends of the bars are arranged with respect to the upright frame in the same relative order, but differing in distance by fractional parts of an inch, so that if the upper knife in the series on this side of the frame A is situated one and one-quarter inch therefrom the lowermost knife shall be separated six and one-quarter inches; or the arrangement of the knives with relation to the upright frame may be made to suit the width of the required belting.

By means of a metallic clamp, C, fitted with suitable screws *d* and nuts *h* at the top of the frame A, the several bars *a a a*, when properly adjusted, are held immovable, or so that no variation can take place between them while in use.

The tablet B, supporting the frame A and horizontal bars, is to be firmly affixed to a bench at a convenient height, when the operation of cutting belts, bands, or straps from large pieces of leather is made extremely simple, and which is as follows: That edge of the piece of leather which it is designed to commence operations on is to be made or trimmed perfectly straight, when, by placing such piece of leather between the bars *a a*, with the straightened part against the frame A, and drawing it through that space abreast the edge of one of the knives, a strip will be severed therefrom of uniform width, and of a breadth corresponding to the distance between the knife and the side of the frame nearest thereto.

I claim—

1. The series of horizontal bars *a a a*, of different lengths, arranged the one above the other in progressive order, as shown, in combination with their supporting-frame A and tablet B, in the manner and for the purposes set forth.

2. The series of stationary horizontal bars *a a*, arranged the one above the other in regular progressive order within a frame, A, in combination with the knives *f* at the ends of the bars, as and for the purposes set forth.

3. The horizontal bars *a a*, arranged, as shown, within the frame *A*, in combination with the knives *f* and clasps *e* around the ends of the bars, for the purposes set forth.

4. The horizontal bars *a a*, of different lengths, arranged the one above the other in progressive order within their supporting-frame *A*, in combination with the pinch-screws *b* in the ends of the binding-clasps *e*, as and for the purposes set forth.

5. The horizontal bars *a a*, in combination

with knives *f* and the wooden blocks *n*, placed transversely in the ends of said bars.

6. The horizontal bars *a a* and frame *A*, in combination with the clamp *c* and screw-bolts *d* at the top of the frame, as and for the purposes set forth.

HOWARD HARTLEY.

Witnesses:

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