

C. T. GRILLEY.  
Loom-Picker.

No. 204,213.

Patented May 28, 1878.

Fig. 1.

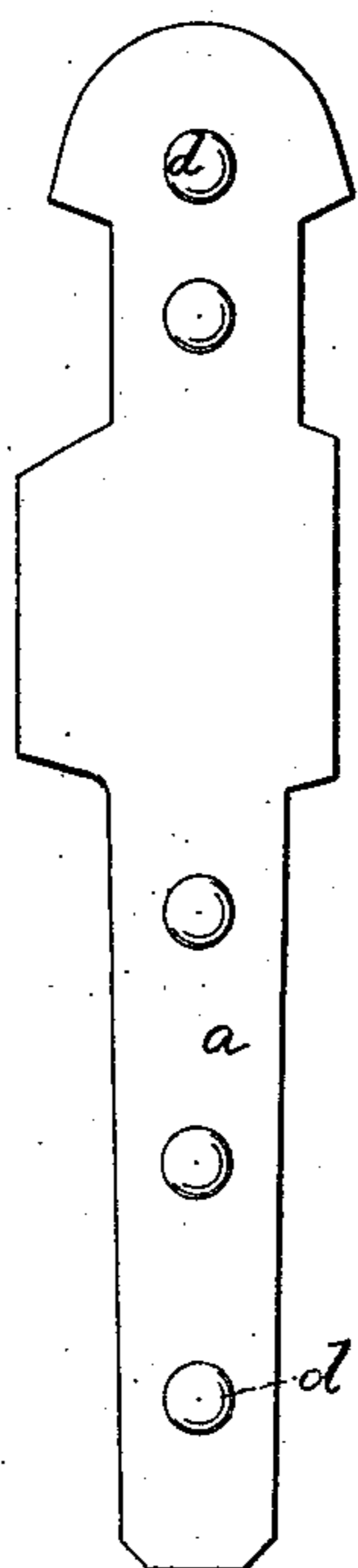
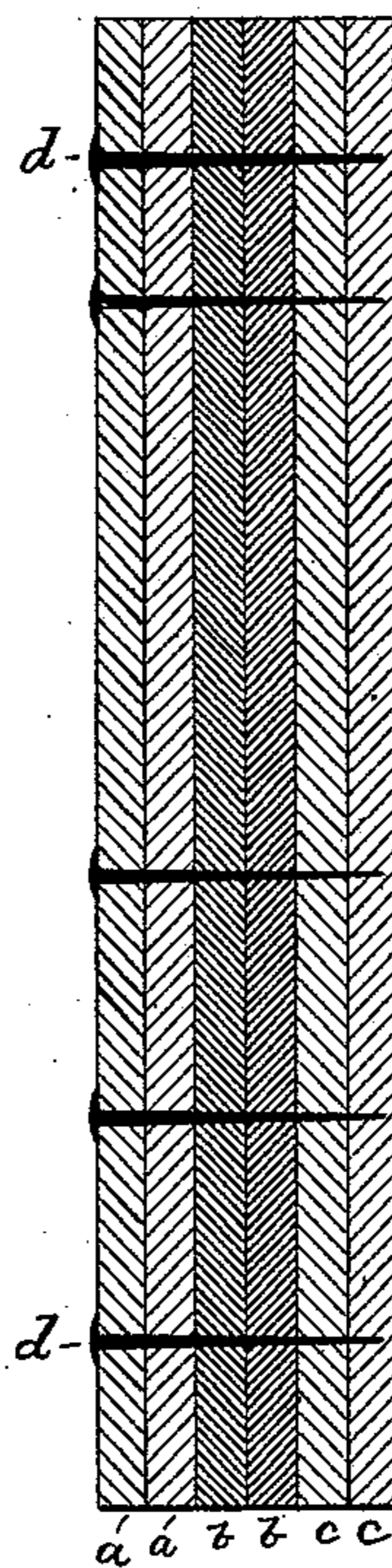


Fig. 2.



Witnesses.

W. J. Pratt.  
E. C. Perkins.

Inventor.

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by Crosby & Gregory attys

# UNITED STATES PATENT OFFICE.

CHARLES T. GRILLEY, OF BOSTON, MASSACHUSETTS.

## IMPROVEMENT IN LOOM-PICKERS.

Specification forming part of Letters Patent No. 204,213, dated May 28, 1878; application filed October 26, 1877.

*To all whom it may concern:*

Be it known that I, CHARLES T. GRILLEY, of Boston, in the county of Suffolk and State of Massachusetts, have invented an Improved Loom-Picker, of which the following is a specification:

This invention relates to loom-pickers; and consists in a loom-picker composed of a number of layers or pieces of leather cut from the flesh side of a tanned skin, such portion of the leather being more fibrous and tough than the grain-face of the leather, whereby the picker is made more lasting and capable of enduring much greater wear than a picker composed of ordinary leather having the grain-face yet forming part of it; also, in the combination, with such layers of leather cut from the flesh side of a tanned skin, of a tip-checking layer of harder and more dense material, preferably rawhide, to resist the point of the shuttle as the latter becomes sunk into the layers of this tough fibrous portion of the leather.

The picker improved by me is of that kind which in operation is secured to the picker-stick by means of straps, bands, or otherwise. Pickers made of ordinary leather, the grain side being retained, last from two to four weeks, when they become so worn as to be worthless. Pickers to run on guide-rods have been commonly made of rawhide. A picker entirely of rawhide, mounted upon a picker-stick, would present a surface so hard that the point of the shuttle would be apt to glance, and it would be so heavy as to increase the danger of breaking the picker-staff.

In the manufacture of leather pickers as now commonly practiced the flesh side of the hide is skived off and wasted, leaving the grain side of the leather as the principal portion of each layer, and in use such layers having the grain-face, which, when dry, is hard and brittle, easily crack and break, and soon wear out.

In this my invention, and for this my improved picker, the layers composing it are cut from the flesh side of the skin or hide suitably tanned. I find that this most tough and fibrous part of the hide cut from the flesh side yields gradually, compacts evenly under the action of the shuttle against it, and the tip of the shuttle makes for itself a seat of uniform elasticity. When the tip strikes the grain-

face of a layer of leather, as heretofore common, the seat made by it is hard, and by repeated blows cracks out, permitting the tip to then pass to the next layer and crack or break it in time, which, it is obvious, will not be the result if the layers of leather are tough and fibrous rather than hard and brittle, for in the former case the layers will stretch or compact evenly without cracking.

In my improved picker I find it desirable and advantageous, at or near the middle of the mass of layers, to interpose a tip-checking layer of a harder and more dense material than leather, such as rawhide. Back of this tip-checking layer, when used, I find it advantageous to employ a cushioning-layer, preferably made of leather or other elastic material less dense than rawhide, to receive the main force of the blow of the tip on the tip-checking layer.

Figure 1 represents, in front elevation, and Fig. 2, in vertical section, one form of a picker embodying my invention.

In this my improved picker for the outer face I employ layers *a a* of leather cut from the flesh side of the tanned skin or hide, they being tough, very strong, and capable of being gradually stretched or indented by the shuttle-tips without breaking, tearing, or cracking, as is commonly the case with pieces of leather struck on the grain-face by a shuttle-tip. My picker, of any desired thickness, may be made entirely of this tough, fibrous, flesh-side portion of the leather; or, as I have found very desirable, tip-checking layers *b*, one or more, of a more dense and harder material than leather, may be placed back of the face-layers *a*, such layers *b* being preferably of rawhide.

To further increase the efficiency of the picker composed of layers *a* and *b*, as hereinbefore described, so as to relieve the force of the blow of the shuttle-tip on the tip-checking layer, I have shown in the drawing cushioning-layers *c c* behind the layer *b*, such layers *c* resting, when the picker is in use, against the usual picker-stick. The layers *c* are, and will be, composed preferably of material like that constituting the face-layers *a*, but other elastic or softer material than rawhide may be employed. The layers *a* may be made of any desired thickness by cementing or gluing to-

gether the pieces cut from the flesh side of the tanned skin, such layers being of different thickness; and when placed together the layers are subjected to very considerable pressure in a mold or die to condense them. The opening or seat made by and for the tip in the layers *a* is formed so gradually and evenly that the tip touches the seat uniformly and keeps the shuttle-point straight to the checking-layer.

A picker made as above described has been found to last many months, thereby saving very much in cost of pickers, in time of attaching new pickers, and loss of use of the loom while attaching the same.

The layers *a b c* are held together by means of suitable rivets or nails *d*.

The shape of the picker may be varied without departing from my invention.

I am aware that pickers shaped as shown in the drawings have been made of ordinary leather, the different layers containing both the grain and flesh sides of the skin or hide; but such pickers are, for reasons herein given, considered objectionable.

In my improved picker I employ only the flesh side of the skin or hide, which is very

tough and fibrous and will not break nor crack under blows of the shuttle. I therefore make no claim to a picker made up of leather in which the grain side of the leather predominates.

I claim—

1. As an improved article of manufacture, a loom-picker composed at its face of tough fibrous layers of leather cut from the flesh side of a hide, substantially as described.

2. A loom-picker composed of face-layers *a* of leather cut from the flesh side of a hide and of a tip-checking layer, *b*, of a more dense and hard material, substantially as described.

3. In a loom-picker, face-layers *a* of leather cut from the flesh side of a hide, tip-checking layer *b*, of a more dense and hard material, and cushioning-layers *c*, all substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHARLES T. GRILLEY.

Witnesses:

G. W. GREGORY,

W. J. PRATT.