

(No Model.)

J. A. FRENCH.

LOOM PICKER.

No. 374,893.

Patented Dec. 13, 1887.

Fig. 1.

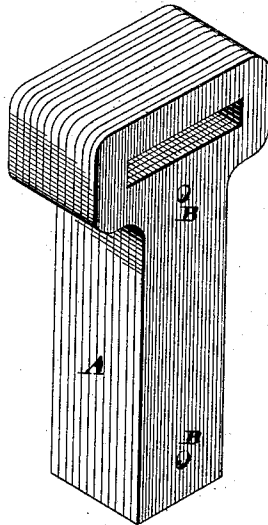
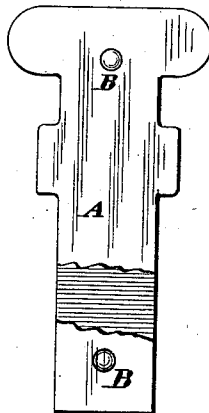


Fig. 2.



Attest;
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UNITED STATES PATENT OFFICE.

JOHN A. FRENCH, OF CHICAGO, ILLINOIS, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THOMAS KANE, OF SAME PLACE.

LOOM-PICKER.

SPECIFICATION forming part of Letters Patent No. 374,893, dated December 13, 1887.

Application filed October 15, 1883. Serial No. 109,032. (No model.)

To all whom it may concern:

Be it known that I, JOHN A. FRENCH, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Loom-Pickers, of which I do declare the following to be a specification.

In the manufacture of loom-pickers it has been heretofore proposed to employ leather or rawhide arranged in superposed layers or pieces so disposed that when one layer became worn away the next succeeding one would be exposed to the action of the shuttle. Pickers of leather, as has been found in practice, speedily crack under the repeated blows of the shuttle and are soon rendered unfit for use, while those made of rawhide become so unyielding and smooth after short usage that the point of the shuttle is very apt to glance. Other substances have also been employed in lieu of those above mentioned; but, so far as I am aware, one or the other of the objections noted has been met with in their use.

My invention has for its object to provide a loom-picker that shall be so tough as to much more effectively resist wear than those commonly employed, and which shall at the same time be sufficiently hard and yet slightly elastic, so that the point of the shuttle will not be in danger of glancing. This object I accomplish by forming the picker of thin layers of wood, preferably with their grain crossed, united by ordinary glue or some kindred gelatinous substance, which, as I have discovered, while firmly holding the layers together, gives increased toughness and wear-resisting quality to the woody fiber and serves at the same time to render it slightly elastic, so that as it compacts beneath the action of the shuttle the surface does not become so hard and smooth as to cause the shuttle-tip to glance.

In the accompanying drawings, Figure 1 is a perspective view, and Fig. 2 is a side view, partly broken away, of a picker for looms, the shape in the two figures being slightly different, but both shapes being well known.

The picker is composed of the layers A, of very thin veneer, (cut preferably from fifty to one hundred to the inch,) so disposed that the grains of the adjoining layers are crossed. The several layers are joined together under great pressure by ordinary glue or other suitable gelatinous material, which not only serves to securely unite the layers, but it also so enters

the pores of the wood as to become in effect an integral part of the mass. By crossing the grains of the wood security against splitting is effected, and by means of the glue and woody fiber combined a surface is obtained of such character that it will not crack under the action of the shuttle, nor will it allow the shuttle-tip to glance. As the picker becomes worn by long usage the glue in the pores of the wood, as well as the thin films between the layers, affords, as it becomes compacted, a striking-surface possessing all the desired qualities of toughness and slight elasticity. The glue used in joining the layers should be applied in such quantity as not only to hold them together, (for which purpose rivets B may also be used in addition,) but as well to be forced into and fill the pores thereof when pressure is applied in uniting them; and the drying of the layers should be completed under pressure in order to secure a more effective union of the parts.

It is preferred that the structure of the picker should be uniform throughout; but in any event the face always should be of thin veneers, so that the glue may permeate the pores and form a part of the striking-surface.

I am of course aware that thin layers of wood have heretofore been united by glue for various uses in the arts; but I am not aware that it has ever been discovered, prior to my invention, that thin layers of wood joined together by glue possess the desired qualities for a loom-picker, or could be advantageously employed for such purpose; nor, so far as I am aware, have veneers joined by glue ever before been employed for any analogous uses wherein the peculiar qualities required in a loom-picker could be developed.

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

1. A picker for looms, made of a plurality of veneers of wood, the grains of the different layers being crossed, substantially as described.
2. As a new article of manufacture, a loom-picker composed of thin layers of wood having their grains crossed and connected together by glue, substantially as and for the purpose set forth.

JOHN A. FRENCH.

In presence of—

GEO. W. SICKELS,
A. R. SHERRILL.