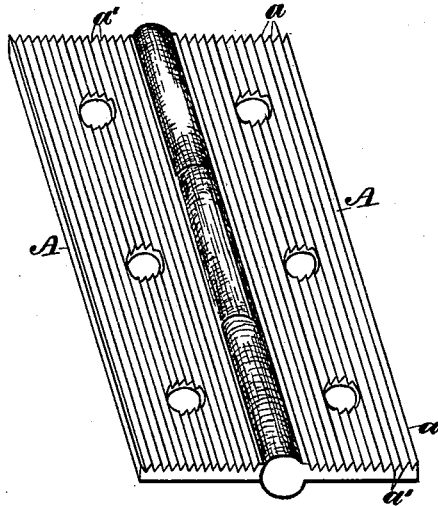


J. S. LASH.
HINGES.

No. 190,343.

Patented May 1, 1877.



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN S. LASH, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN HINGES.

Specification forming part of Letters Patent No. **190,343**, dated May 1, 1877; application filed December 22, 1876.

To all whom it may concern:

Be it known that I, JOHN S. LASH, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Hinges; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification, in which the figure is a perspective of my invention.

My invention has for its object to provide means for relieving the strain usually imposed on the screws by which the hinge is fastened to the door and frame. A further object of my invention is to provide means for facilitating the facing of the recesses on the door and frame in which the leaves of the hinge rest.

My invention consists in grooving, corrugating, or otherwise roughening the back of the hinge-leaves, so that the same will be partly held in their recesses by adhesion or traction, the ribs or corrugations indenting the wood, and thereby holding to the same in such manner as to relieve the strain imposed upon the retaining-screws, as will be hereinafter more fully described and definitely claimed.

Referring to the accompanying drawing, A A show the leaves of a butt-hinge having my improvements applied, said improvements being equally applicable to all hinges made by casting metal, not being particularly intended for strap or other hinges made of wrought metal.

The back of the leaves are grooved, corrugated, or ribbed, as shown at *a a'*, the former showing the elevations or ridges, and the latter the depressions.

I prefer to produce the roughened back of said leaves by forming vertical ribs and grooves, as shown in the drawing; but my invention is not limited to such formation, as the ribs may be made horizontally or obliquely; or other forms of elevation—such, for illustration, as the faces or rubbing-surfaces of various kinds of files present—may be substituted for said ribs.

The utility of such roughened backs may be briefly set forth as follows: In fastening

hinges to doors and frames it is usual to cut in the wood, by the aid of a chisel, a recess for each leaf, so that the front of the leaves will, when inserted, be flush with the edge of the door and with the face of the frame. The chisel-cut is usually rather roughly made in the first instance, and has to be carefully "faced" or smoothed, in order to cause the hinge-leaves to fit snugly and truly. To facilitate this facing I insert the hinge-leaf in its recess as soon as the latter is first roughly cut, as already set forth. I then strike the outside of said leaf a smart blow with a hammer, causing the back of the same to be impressed into the roughly-cut wood adjacent to it. On removing the hinge-leaf the projecting parts of the wood in the recess will be found to bear the impression of the ridges on the back of the leaf. By cutting away such projecting and impressed parts of the wood, I accomplish the facing of the recess, in which the hinge-leaf will then fit snugly and truly.

After the facing of the recess has been accomplished, I restore the leaf to its place in such recess, and, by means either of blows or by the pressure of the fastening-screws, cause said leaf to press so against the wood back of it that the ribs or elevations will indent and enter the fiber of the wood, the latter passing into the grooves of the metal.

By this means the fastening-screws are relieved, in great measure, of the usual lateral and downward strain which the weight of the door imposes, such strain being partly distributed over the whole back of the hinge, and being partially borne in its proportionate part by each of the ribs or elevations.

What I claim as my invention is—

As a new article of manufacture, a hinge having a ribbed or roughened back, substantially as set forth, to facilitate the facing of the wood to which such hinge is secured, and to partially relieve the fastening-screws of lateral and downward strain, as specified.

In testimony that I claim the foregoing I have hereunto set my hand this 20th day of December, 1876.

JOHN S. LASH.

Witnesses:

GEO. C. SHELMERDINE,
M. DANL. CONNOLLY.