N. A. HULL.
Table.

No. 208,318. Patented Sept. 24, 1878.

Fig. 1.

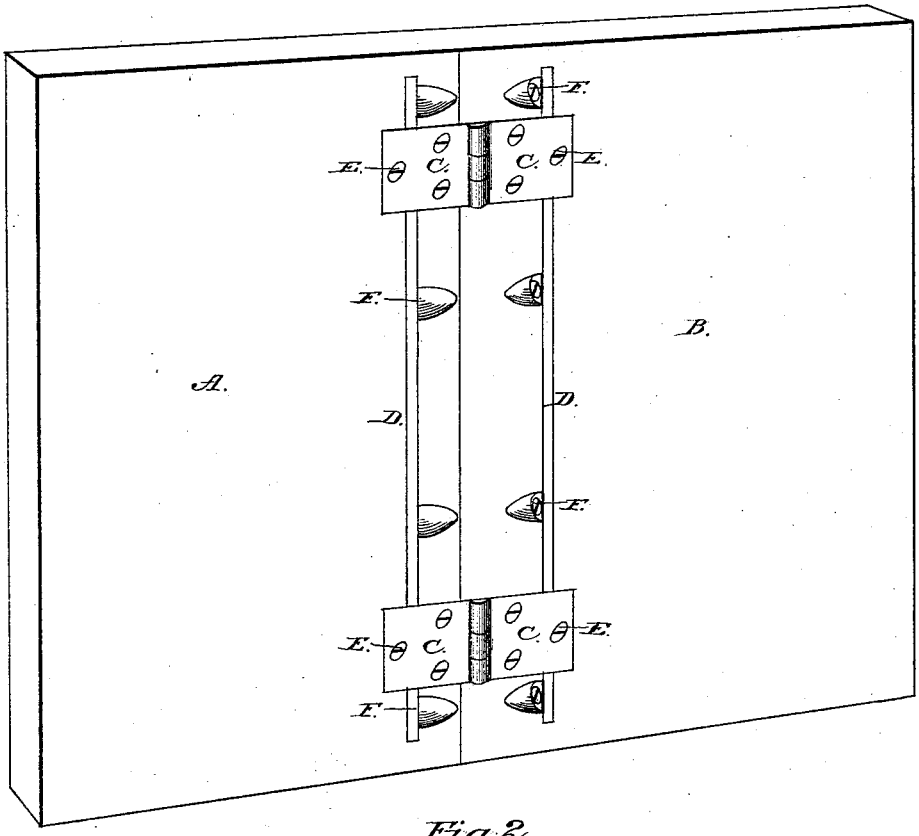
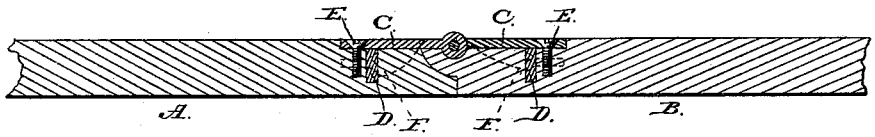


Fig. 2.



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UNITED STATES PATENT OFFICE.

NICHOLAS A. HULL, OF PERU, INDIANA, ASSIGNOR OF ONE-HALF HIS RIGHT TO CHARLES B. RATHBUN, OF SAME PLACE.

IMPROVEMENT IN TABLES.

Specification forming part of Letters Patent No. **208,318**, dated September 24, 1878; application filed March 22, 1878.

To all whom it may concern:

Be it known that I, NICHOLAS A. HULL, of the city of Peru, county of Miami, State of Indiana, have made a new and useful Improvement in the Method of Fastening Table-Hinges and Preventing Table-Leaves from Warping; and I do hereby declare the following to be a full and exact description of the construction and operation of the same.

The nature of this invention relates to a device for preventing hinges from becoming loose from the table or leaf to which they are attached, and to preventing the warping or springing of the leaf or top of a table.

The first part of my invention consists in inserting a metal plate edgewise into the wood, under the leaves of the hinges, after preparing a suitable groove to receive it parallel to and at such a distance from the joint of the hinge that one or more of the screws with which the hinges are usually fastened shall impinge against the outer face of the plate, and thus receive and sustain the whole force and concussion to which table-hinges are subjected when thrown up with a quick motion of a heavy leaf.

Another part of my invention consists in such a modification of the plate as to make the plate extend from one hinge to the other, so as to make one plate form a stay for one end of two hinges for small tables, where the grain of the wood runs at right angles to the hinged joint. In such cases the ends of the plates are secured in the grooves by the leaves of the hinges overlapping them, and the table or leaf is prevented from warping between the hinges by means of a screw or screws driven obliquely through the plate and sides of the groove. This application of the plate also serves as an anchor for the screws of the hinges, and also prevents the wood from warping, and obviates the necessity of a third hinge, sometimes required to support the middle of the joint of the table-leaf.

A still greater advantage is secured by this arrangement, as it enables the table-builder to dispense with the wooden cleats usually employed in constructing tables whose leaves or tops are constructed with the grain of the wood running at right angles to the joint of the leaf. This cleat is attached by means of a tongue-and-groove joint, and fastened with glue, involving a great amount of labor and expense; and, besides, it is not found practicable at all times to use a wooden cleat sufficiently large and strong to hold the work from warping.

The metal plate described above may be comparatively small, and is inserted into the wood so as to present an even surface with the wood, and permits the grain of the wood in the leaf and top of the table to meet end to end.

To enable others to make and use my invention, I will proceed to give a more exact description, having reference to the accompanying drawing, making a part hereof, and to the letters of reference marked thereon.

The same letters indicate the same parts wherever they occur.

Figure 1 of the drawing shows a surface view of the hinged side of a device embodying my invention. Fig. 2 shows a vertical transverse section of the same drawn at right angles to the joint of the table-leaf.

A represents the top of the table. B represents the table-leaf. C represents the hinge. This hinge is constructed in the usual manner and fastened with screws in the usual way. D represents the protecting-plate. This plate, when used only as a stay for the screws of the hinges, should be made short, and each leaf of the hinges C should be provided with the plate D. This plate should be made of metal and inserted edgewise into the wood in a groove cut parallel to the joint of the table-leaf and at such distance from said joint as will bring one or more of the screws E (with which the outer ends of the hinge C are fastened) in close contact with the outer face of the plate D. This forms a permanent anchor for the screws E, and relieves the unprotected screws from that severe tensional strain that soon works them loose in the wood when the protection-plate D is not used; and the plate D will require no fastening other than the ordinary fastening for the hinge C, as it is held in the groove by the wings of the hinge; but in cases where hinges are required for tables, where the grain of the wood forming

the leaf and top of the table meet end to end at the joint, such table must be protected against warping between the hinges, which are usually attached near the outer edges of the table. In such cases I extend the plate D in length so as to embrace both hinges C C. The ends of this long plate will serve for an anchor for the hinges, the same as the short plate first described, and the overlapping hinges will make a sufficient fastening for the plate; but the central and intermediate parts of the plate D should be fastened by inserting screws obliquely through it and into the wood, as seen at F.

The plate D may also be used to prevent parts from warping that are not connected by hinges. In such cases the plate should be inserted into the wood, as described above, and fastened at the ends, as well as at the middle and intermediate parts, by screws, as shown at F.

Having thus fully described my invention, what I claim is—

1. The combination of the table A, leaf B, hinge C, plate D, and screws E, substantially as and for the purposes set forth.

2. The table A, having hinged leaf B, each part being provided with a plate, D, inserted in grooves in the wood at right angles to the plane of the table and leaf, and attached thereto by screws F, substantially as shown and described.

NICHOLAS A. HULL.

Witnesses:

SHEPHERD H. WHEELER,

LAWRENCE E. WHEELER.