(Model.)

J. W. CHILDS.

TABLE HINGE.

No. 262,641. Patented Aug. 15, 1882.

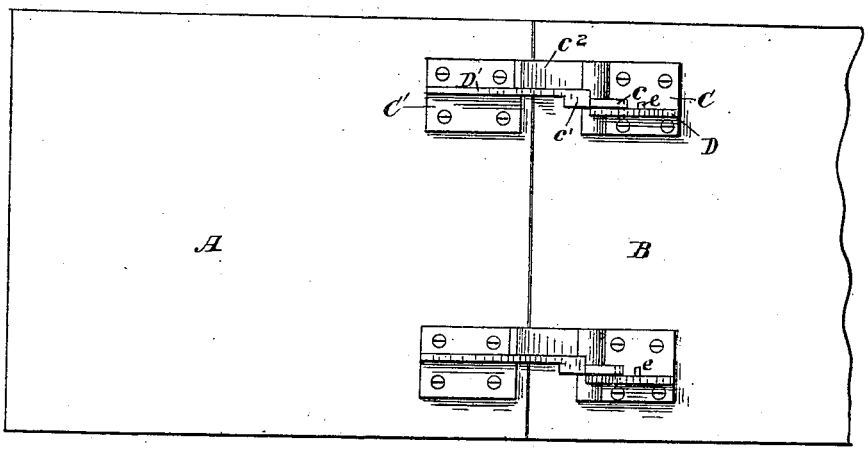


Fig 1

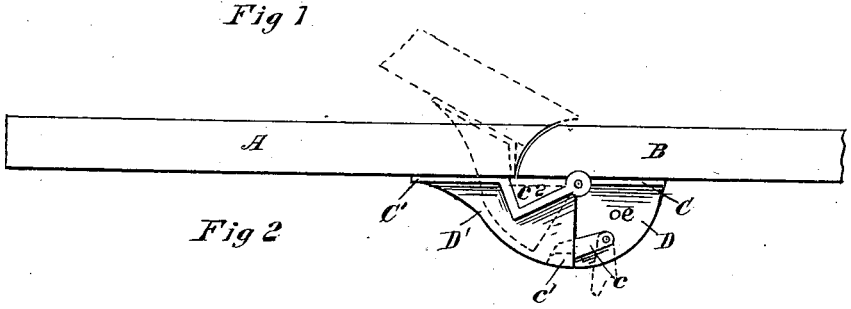


Fig 2

Fig 4

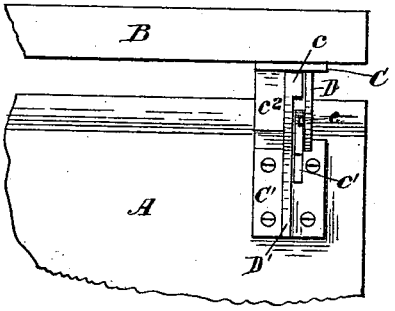
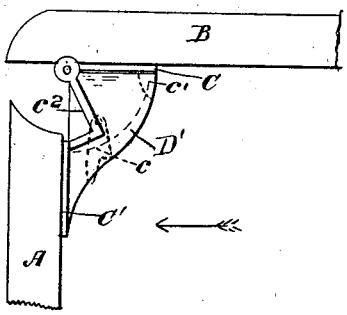


Fig 5



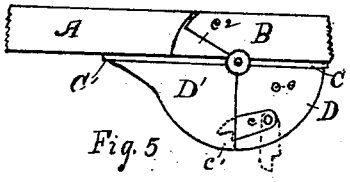


Fig. 5

Witnesses
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UNITED STATES PATENT OFFICE.

J. WALLACE CHILDS, OF KANSAS CITY, MISSOURI.

TABLE-HINGE.

SPECIFICATION forming part of Letters Patent No. 262,641, dated August 15, 1882.

Application filed July 6, 1882. (Model.)

To all whom it may concern:

Be it known that I, J. WALLACE CHILDS, of Kansas City, in the county of Jackson and State of Missouri, have invented a certain new and useful combined hinge and automatic support for falling leaves of sewing-machines and tables, of which the following is a specification.

The object is to furnish a hinge combined with an automatic leaf-support adapted to be applied to the falling leaves of sewing-machines and tables; and the invention consists in a hinge having its straps or leaves provided with flanges and a gravitating pawl constructed and arranged as hereinafter described and claimed.

The accompanying drawings illustrate the invention.

Figure 1 shows a bottom view of the combined hinge and support secured to the bottom side of a sewing-machine and its falling leaf. Fig. 2 is a side or edge view of the same in horizontal position. Fig. 3 is a side view with the leaf down. Fig. 4 is a rear view, looking at Fig. 3 in the direction of the arrow. Fig. 5 is an edge view, showing the usual form of strap or leaf of hinge, and is a modification of my device, the table being cut away.

In the drawings, A designates the falling leaf, and B the stationary part of the machine or table, to which the falling leaf is attached.

The hinge consists of the hinge leaves or straps C C′, hinged together in the usual manner; and the support consists of the flanges D D′, made respectively of one piece with the hinge-leaves and placed thereon sufficiently out of line with each other to pass each other in folding the hinge and allow space for the pawl *c* between. The pawl is secured to flange D by a pin or rivet made of one piece with the pawl or flange, so as to pass through a hole in the flange or pawl, or by a pin or bolt passing through both the pawl and flange, so as to secure the pawl firmly to the flange, and at the same time allow the pawl to turn freely on the pin, so as to hang down from the pin when left free. When the hinge is secured to the under side of the table and its falling leaf in a horizontal position the flanges extend downward, and the pawl, when free, hangs between the said flanges and in the path of a lug or projection, c', secured to the outer edge of flange D′ and projecting toward the other flange into the space between the flanges, as shown in dotted lines in Fig. 2. When the leaf A is elevated from the position shown in Fig. 3 to that shown in Fig. 2 the lug c' moves through the arc of a circle from the position it occupies in Fig. 3 to that seen in Fig. 2, and in doing so engages the pawl hanging down and elevates it to the position shown in Fig. 2, at which point the notch of the pawl falls below the lug, so as to prevent its moving backward from this point, and the leaf, being now left free, is thus supported in a horizontal position.

The hinge-leaf C is provided with a recess, c^2, in its upper side to allow the leaf A to be elevated above the horizontal, as shown in dotted lines, Fig. 2, far enough to carry the lug beyond the extreme end of the pawl, which is thereby released and falls back to a vertical position. The lug when lowering the leaf strikes the opposite side of the pawl and swings it out of the way and passing beyond, so that the pawl falls back to its vertical position. The pawl should be so arranged that the movement of the lug in lowering the leaf will not leave the pawl in a vertical position above its pivot and out of contact with the lug when raising the leaf. In order to prevent any quick or accidental movement from resting the pawl in such elevated position, a boss, *e*, may be formed on the flange to prevent the pawl from swinging upward further than is sufficient to allow the lip to pass beyond it in lowering the leaf.

In applying the hinge to the table the joint of the hinge is placed to one side of the joint between the table and its falling leaf in order to allow the recess c^2 to pass over the stationary part of the table in unlocking the pawl for lowering the leaf.

The flanges D D′ may be disconnected from the hinge-leaves and secured to the table and table-leaf instead, to produce the same result when employed with a hinge having the recess c^2; or the table is provided with said recess c^2, as shown in Fig. 5, or means for allowing the

leaf to be elevated sufficiently above a horizontal to unlock the pawl; but the hinge and support are preferably made together, as shown.

What I claim is—

1. A hinge having leaf-supporting flanges D D′, provided with a gravitating pawl, *c*, and an engaging-lug, *c′*, substantially as and for the purpose specified.

2. Flanges D D′, having pawl *c* and engaging-lug *c′*, in combination with a hinge having a recess, c^2, or means for allowing sufficient movement of the table-leaf above a horizontal plane to unlock the pawl, substantially as shown.

J. WALLACE CHILDS.

Witnesses:
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