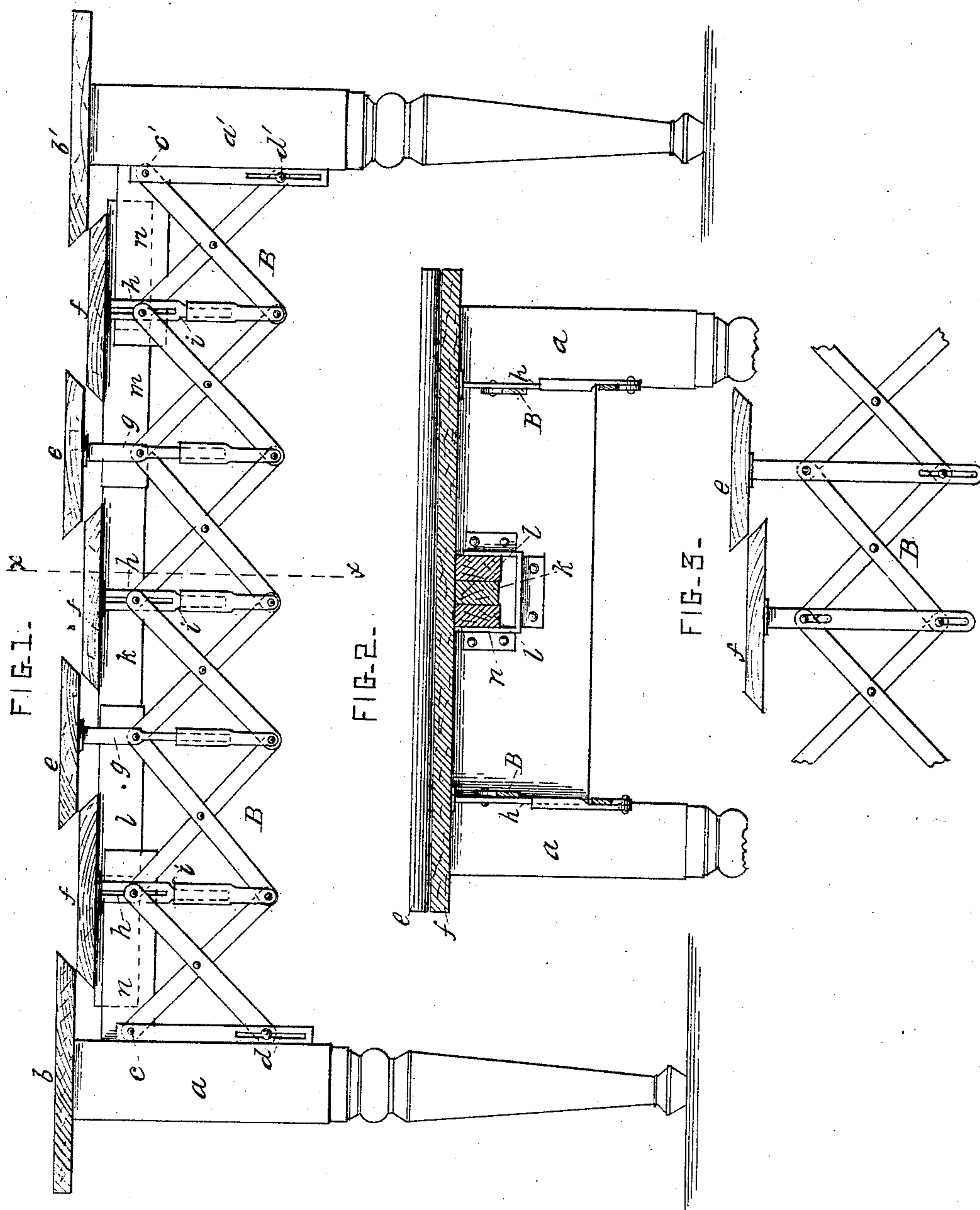


J. D. BRASSINGTON.
Extension-Table.

No. 223,273.

Patented Jan. 6, 1880.



ATTEST=

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UNITED STATES PATENT OFFICE.

JOHN D. BRASSINGTON, OF NEW YORK, N. Y.

EXTENSION-TABLE.

SPECIFICATION forming part of Letters Patent No. 223,273, dated January 6, 1880.

Application filed September 8, 1879.

To all whom it may concern:

Be it known that I, JOHN D. BRASSINGTON, of New York city, State of New York, have invented certain new and useful Improvements in Extension Tables and Platforms, of which the following is a specification.

My invention aims to provide an extension-table in which the extending sections of the top shall be contained within the table and automatically presented in proper place when the table is pulled out or extended, thus obviating the objection of keeping the sections separate from the table and inserting them by hand, and thereby forming an extension-table which is complete in itself. To this end my invention may be briefly stated to consist in a table constructed with a lazy-tongs connecting its leg ends, and arranged with its width vertical, with its upper terminals pivoted and its lower terminals capable of sliding, and having its alternate links or sections connected, respectively, to the permanent sections of the top and to the extending sections, the permanent sections being mounted on uprights projecting from the top angles of the tongs, while the extending sections are mounted on uprights projecting or impelled from the bottom angles, so that when the tongs is extended the permanent sections of the table-top separate without rising or falling, while the extending sections rise up between them, forming a level extended top, and when the tongs is contracted the permanent sections come together, while the extending sections fall beneath them.

In the annexed drawings, Figure 1 presents a side elevation of my improved table, shown on the point of full extension, and Fig. 2 a cross-section on *x x*. Fig. 3 illustrates a modification.

In practice the table will be double the length shown in the drawings, which shows but half a table of the usual size, one of the end legs forming the middle legs in a table of full size, as will be readily understood.

a a' indicate the leg ends of the table, to which the fixed end sections, *b b'*, of the table-top are directly secured. The leg ends are connected by the lazy-tongs *B B*, arranged, as shown, on each side of the table, with its width vertical, and having its upper terminals piv-

oted to the leg ends, as shown, at *c c'*, and its lower terminals capable of sliding in slots at *d d'*. *ee* indicate the permanent sections of the table-top, and *ff* the extending sections, which alternate with each other, and are attached to the alternate sections or links of the tongs, as illustrated.

The permanent sections *e*, as shown, are mounted on uprights *g g*, extending from and pivoted to the upper angles of the tongs, and hence it will be observed that when the tongs is expanded or contracted the permanent sections will move apart or together in the same horizontal plane, level with the end sections, *b b'*, without rising or falling. The extending sections *f*, however, are mounted on uprights *h h*, extending from and pivoted to the lower angles of the tongs, and capable of a limited play thereon, as illustrated, so that when the tongs is extended the sections *f f* tend to raise by the upward thrust from the lower angles of the tongs.

The uprights *g* and *h* are preferably formed in two parts, an upper and a lower part, jointed midway by a sliding joint, which allows a necessary amount of idle motion, and admits of the contracting and expanding movement of the tongs-sections. The sliding movement of the lower half of the uprights *g* is entirely idle, as the lower part imparts no motion to the upper part, but simply serves to steady and brace the same in a vertical position. The sliding movement of the lower part of the uprights *h* is, however, idle for only a part of the stroke, and when the tongs is nearly fully extended, with the extending sections *f f* in position between the permanent separated sections, as illustrated in Fig. 1, the top of the lower halves of the uprights strikes shoulders *i i* on the upper halves, and the upward thrust from the lower angles of the expanding tongs then raises the sections *f f* up between the sections *e* flush with the surface thereof, thus forming a level extended table-top. The upper halves of the uprights *h* are slotted, as shown, to admit their independent vertical motion, and the amount of loose play between the shoulders *i* and the top of the lower half of the uprights is equal to the full stroke of the lower half less the vertical movement of the extending sections *f f*, as will be readily understood. It

will also be observed that the edges of the permanent and extending sections of the top are beveled at opposite angles, so as to obtain a wedging action when the two series of sections engage, thus obtaining a tighter fit and a more certain and easy action of the parts.

When the table is extended it may be thus held by any suitable form of catch-bolt or locking device, arranged to lock the lazy-tongs and prevent it from moving, which is not shown, but may be formed in a number of ways, as will be readily understood. It will also be understood that when the table is to be contracted, by unlocking the lazy-tongs and forcing the ends of the table together the contraction of the tongs will at once cause the extending sections *f* to fall below the permanent sections *e*, which then close together over them level with the fixed ends *b b'*, while the extending sections *f* close together beneath the sections *e*, as will be observed from Fig. 1.

It will now be seen that by this construction I form a very novel and improved form of extension-table, which in itself contains all its parts, and is always complete in itself, and in which the simple act of pulling apart or extending the ends of the table automatically presents the extending sections in their true position, and the simple act of contracting the table ends automatically removes the extending sections within the body of the table, while, owing to the balanced arrangement of parts, this extending or contracting movement is made with great ease, thus presenting many striking advantages over other tables of this class.

In order to prevent any lateral movement of the sections *e f* they are braced and guided against lateral play by a series of longitudinal guide-bars intersliding with each other, as shown in Figs. 1 and 2. Thus a central bar, *k*, is fixed to the central extending section, *f*, and this is guided between two pairs of bars, *l l m m*, fixed on each side and at each end thereof, respectively, to the outer sections, *f f*, as seen best in Fig. 1; and these outer bars, *l* and *m*, slide in troughs or casements *n n*, fixed to the leg ends of the table, as shown.

In the modification shown in Fig. 3 the uprights of the tongs, instead of having a sliding joint midway, as in Fig. 1, are formed in one piece. The upright of the permanent sections *e* are pivoted to the top angles of the tongs, as in Fig. 1, but their lower ends are

slotted to slide upon the pivot of the lower angles, as illustrated. The uprights of the extending sections *f* are slotted at each end, the length of the slots being equal to the vertical stroke of the tongs less the vertical movement necessary to raise the sections into place.

The construction shown in Fig. 1 is preferable for its compactness in not extending down beyond the ordinary side boarding or casing of the table; but the construction shown in Fig. 3 is preferable for simplicity and greater rigidity, and either construction may be used when desired.

It will be seen that the main mechanism of the table forms a new mechanical movement, which is, of course, also applicable to other articles than tables—for instance, to extensible screens or blinds, or extensible platforms, and may even be adapted to draw-bridges, if desired.

What I claim as my invention is—

1. An extension table or platform constructed with a lazy-tongs, arranged with its width vertical, and connecting the leg-ends of the table with the permanent and extending sections *e f* of the table-top, supported alternately from the top and bottom angles of the tongs-sections, whereby the action of extending the tongs and separating the leg-ends of the table causes the permanent sections to separate on a level line, while the extending sections rise up between them flush with their surface, substantially as herein set forth.

2. The combination of the leg ends *a a'*, the lazy-tongs *B B*, connecting the same, the uprights *g h*, crossing the sections and angles of the tongs and secured thereto, and the permanent top sections, *e*, and extending top sections, *f f*, alternating with each other, and mounted on the said uprights, substantially as herein shown and described.

3. The combination, with the permanent sections *e* and extending sections *f*, of the lazy-tongs *B*, arranged in parallel line with said sections, together with the uprights *g h*, crossing and connecting with the sections of said tongs, and supporting the sections *e f* of the top, and formed in two parts, jointed midway by a sliding joint, substantially as herein shown and described.

JOHN D. BRASSINGTON.

Witnesses:

CHAS. M. HIGGINS,
JOHN E. GAVIN.