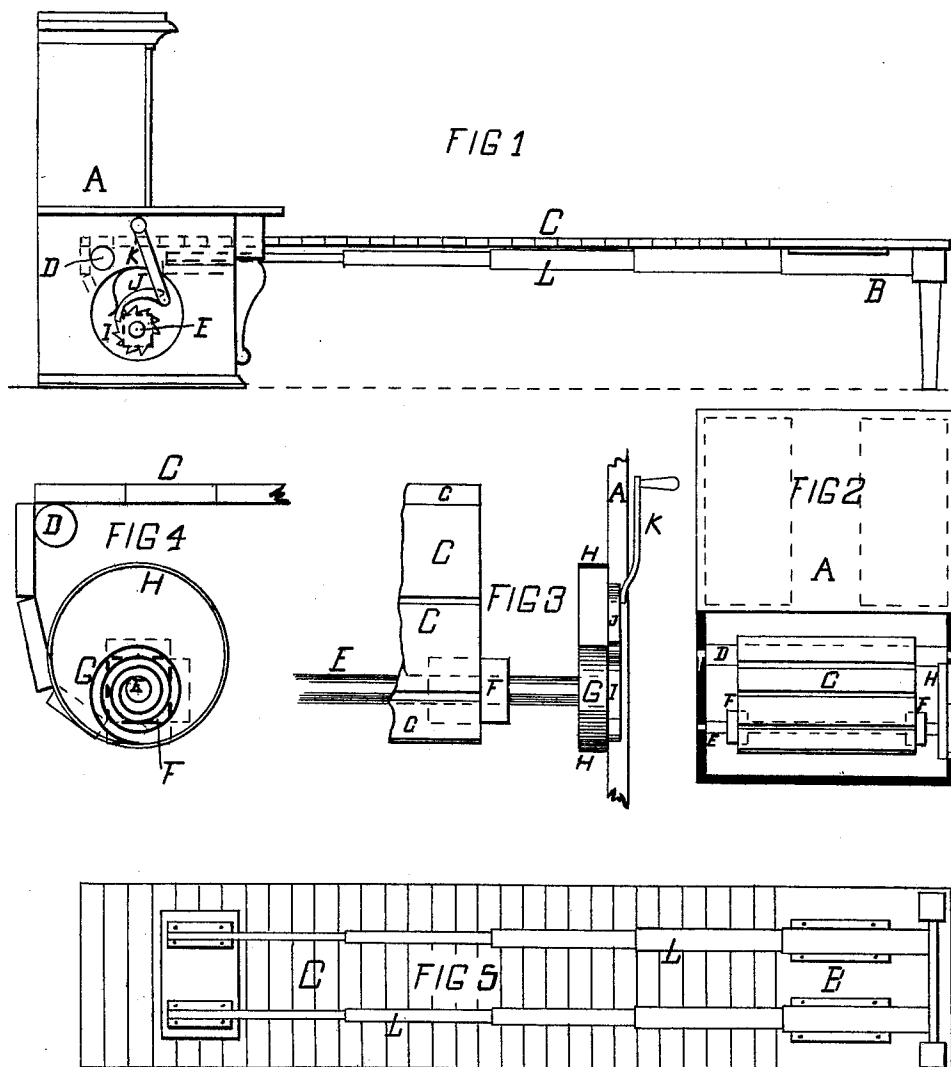


J. R. SHIRLEY.  
EXTENSION-TABLE.

No. 185,649.

Patented Dec. 26, 1876.



Witnesses  
*Alex. L. Diamond*  
*Geo. J. Williamson*

Inventor  
*John R. Shirley*  
 by *Francis D. Pastorius*  
 Attorney

# UNITED STATES PATENT OFFICE.

JOHN R. SHIRLEY, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF OF HIS RIGHT TO GEORGE T. LINN, OF SAME PLACE.

## IMPROVEMENT IN EXTENSION-TABLES.

Specification forming part of Letters Patent No. **185,649**, dated December 26, 1876; application filed November 7, 1876.

*To all whom it may concern:*

Be it known that I, JOHN R. SHIRLEY, of the city and county of Philadelphia, and State of Pennsylvania, have invented a new and useful Extension-Table, which is fully set forth in the following specification, reference being had to the accompanying drawings.

A number of leaves are fastened to a web, one end of which is attached to a table, while the other end enters a side board and passing over a guide-roller is made fast to a winding-drum, which in this instance is composed of square wrapping-pieces on a transverse-shaft. A steel spring is coiled up in an immovable case around the drum-shaft, to which one end is fixed. The other end is fixed to the case. On an extension of the shaft is fastened a ratchet-wheel, which is operated upon by a pawl-lever, for the purpose of holding the spring when wound up. The leaves, when extended, are guided and supported in place by telescopic tubes, which are placed at their under sides.

Figure 1 is a side view, showing the side-board, and the leaves extended. Fig. 2 is a rear view of the side-board, the lower part of the back being removed. Fig. 3 is an enlarged detached back view of the leaves, drum-shaft, wrapping-pieces, spring and case, and the ratchet and its attachments. Fig. 4 is an enlarged side view of the leaves, guide-rollers, drum-shaft, wrapping-pieces, and the spring and case. Fig. 5 is a bottom view of the leaves and the telescopic tubes.

A is a side-board, B a support table, and C a number of leaves on a web of cloth or other suitable material, one end of which is secured to the table B. The other end enters the side-board, and, passing over a guide-roller, D, is fixed to a drum composed of the transverse shaft E, and the wrapping-pieces F. G is a spiral spring coiled in the case H, to which one end is fixed. The other end is fixed to the case. I is a ratchet-wheel on an

extension of the shaft E. It is operated upon by the pawl J of the lever K, for the purpose of holding the spring when wound up. L are telescopic tubes, placed beneath the leaves C, for guiding and supporting them when extended. The larger one is fixed to the table-end B. The smaller one is fixed within the side-board.

As before observed, one end of the leaf-extension is attached to the transverse shaft E. The act of drawing or extending the leaves turns the shaft, and winds up the spring G, the force of which will be augmented in proportion to the amount of extension of the table, which is held by the ratchet and pawl I J. When the table is to be closed, the end B is raised and moved to the side-board. Simultaneously the pawl J is released from its connection with the ratchet I by operating the lever K, which permits the spring G to react and turn the shaft E in the proper direction for taking up and winding the leaves on the shaft as they are pushed in. The telescopic tubes are accurately fitted, but not so tightly as to prevent their being slid one over the other during the operations of extending and closing the leaves.

I claim as my invention—

1. The combination of the end B, table C, roller D, and the transverse shaft E, as shown and described.
2. The combination of the end B, table C, roller D, shaft E, spring G, ratchet I, and the pawl J, as shown and described.
3. The combination, with the case A, of the flexible table top C and the tubes L, as shown and described.

In testimony whereof I hereunto sign my name in presence of two subscribing witnesses.

JOHN R. SHIRLEY.

Witnesses:

GEO. C. SHELMEKDINE,  
FRANCIS D. PASTORIUS.