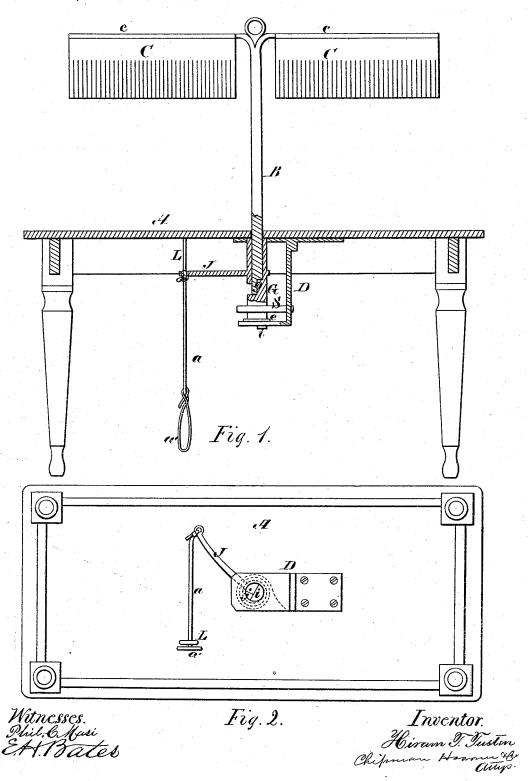
## H. T. TUSTEN. Table Fan Attachments.

No.152,884.

Patented July 7, 1874.



## UNITED STATES PATENT OFFICE.

HIRAM T. TUSTEN, OF ABBEVILLE, SOUTH CAROLINA.

## IMPROVEMENT IN TABLE-FAN ATTACHMENTS.

Specification forming part of Letters Patent No. 152,884, dated July 7, 1874; application filed May 16, 1874.

To all whom it may concern:

Be it known that I, HIRAM T. TUSTEN, of Abbeville, in the county of Abbeville and State of South Carolina, have invented a new and valuable Improvement in Fly-Brushes; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a section of my fly-brush. Fig. 2 is a bot-

tom view of same.

The object of my invention is to combine an oscillating fly-brush with a dining-table in such manner that a person sitting at the table can conveniently work the brush by a slight motion of his foot, and, when the brush is not required, it can be readily removed from the table.

In the annexed drawings, A represents an ordinary dining-table, through the center of the cover of which a hole is made for receiving a vertical rod, B, to which brushes C C are applied by means of horizontal arms c c. (Shown in Fig. 1.) The lower end of the rod B is half-round, and fitted into a corresponding socket formed in the lower solid end of a tube, G, as shown at g, Fig. 1. The brush-rod B will thus oscillate with tube G, and, when desired, this rod can be lifted out of its tube and removed from the table. The tube G has its end bearings in a bracket, D, which is secured rigidly to the lower side of the tablecover, and this tube is supported in its bearings by means of an annular flange, e, which rests upon the foot of the bracket. (Shown in Fig. 1.) S represents a convolute spring, one end of which is made fast to the bracket

D, and the other end is secured to the tube G after being coiled around the same. J represents an arm, which is secured to the tube G, and to which a cord, a, is attached. This cord is passed through the eye of a fixed pendant, L, and has a foot-loop, a', formed on its lower end. The lower end of the tube G has a half-round extension, i, formed on it, which is held against V-shaped stop, j, on the bracket D, by means of the spring S, which is partly wound up for this purpose.

To operate the fly-brush, a person crosses one leg over the other, and, with the raised foot in the loop of the treadle-cord a, he depresses his foot and turns the brush-shaft B, which coils up the spring S; then, by raising the foot, the reaction of the spring gives another turn to the brush-shaft. By these upand-down motions of the foot the brush-shaft

receives an oscillating motion.

What I claim as new, and desire to secure

by Letters Patent, is-

1. The brush-carrying rod B, passed through the table-top A, and coupled, at g, to an oscillating tube, G, having its bearings in a bracket, D, beneath the table-top, as shown and described, for the purpose set forth.

2. The tube G, constructed to receive and couple with the removable brush-shaft B, in combination with the spring S, arm J, pendant L, and looped treadle-cord a, substantially as and for the purposes described.

In testimony that I claim the above I have hereunto subscribed my name in the presence

of two witnesses.

HIRAM T. TUSTEN.

Witnesses:

L. M. PERRIN, T. P. QUARLES.