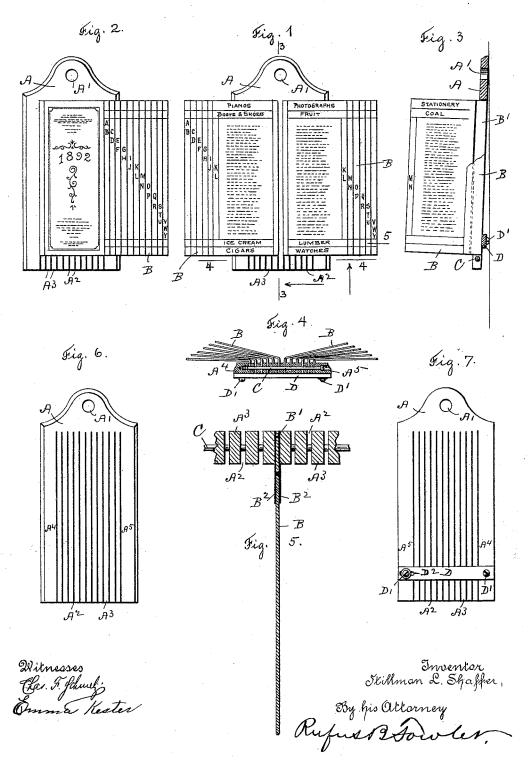
## S. L. SHAFFER. TELEPHONE INDEX.

No. 493,304.

Patented Mar. 14, 1893.



## United States Patent Office.

STILLMAN L. SHAFFER, OF WORCESTER, MASSACHUSETTS.

## TELEPHONE-INDEX.

SPECIFICATION forming part of Letters Patent No. 493,304, dated March 14, 1893.

Application filed October 25, 1892. Serial No. 449,961. (No model.)

To all whom it may concern:

Be it known that I, STILLMAN L. SHAFFER, a citizen of the United States, and a resident of Worcester, in the county of Worcester and 5 State of Massachusetts, have invented a new and useful Improvement in a Telephone-Index, of which the following is a specification, reference being had to the accompanying drawings, in which-

Figure 1 is a front view of the same, with the leaves opened. Fig. 2 represents a front view of a telephone index embodying my invention. Fig. 3 is a vertical sectional view on line 3, 3, Fig. 1. Fig. 4 is a transverse sectional view on line 4, 4, Fig. 1. Fig. 5 is a transverse sectional view of a portion of the

back of the index shown on line 5, Fig. 1, with a single leaf inserted, the several parts being represented full size. Fig. 6 is a front view 20 of the back of the index with the leaves removed and Fig. 7 is a rear view of the back, shown in front view in Fig. 6.

Similar letters refer to similar parts in the different figures.

My invention relates to certain improvements in that class of telephone indexes, in which a series of indexed leaves, are supported upon a rigid back, adapted to be suspended, and hold the leaves in position for conven-30 ient manipulation and my invention has for its object to provide a cheap and efficient means for supporting the indexed leaves, which I attain by means of the device, represented in the accompanying drawings and

35 hereinafter described and claimed. Referring to the accompanying drawings, A denotes the back of the index, preferably formed of wood and consisting of a board from one-quarter to one-half inch in thick-40 ness, and provided with a hole A', or other convenient means, by which it can be suspended, or hung against the wall. The board is provided with a series of slits A2, forming a series of prongs A3, which is readily accom-

45 plished by sawing the board, in parallel slits, each the width of the saw-kerf, and the thickness of the cardboard forming the leaves of the index.

The leaves B are preferably made of card-50 board, of uniform width and have at one edge

a stub B' formed of a narrow strip of cardboard united by strips B2 of canvas, leather, or other flexible material, so as to make a joint between the leaf and stub. The stubs B' are inserted in the slits A<sup>3</sup> and the side 55 prongs A4, A5, which are preferably left wider than the prongs A3, by which the leaves are separated, are then drawn together clamping the stude B' securely between the prongs A3. The leaves can be clamped by any known de- 60 vice, but I prefer to unite the outer prongs A4, A5, by a screw C, inserted in the board with the tip screwed into the prong A<sup>5</sup>, with its head bearing against the prong A<sup>5</sup>. Upon the rear side of the back A, I place a cleat D, 65 by which the lower end of the board is thrown out from the wall as represented in Fig. 3.

The cleat D is attached to the prongs A<sup>4</sup> and A5, by screws D', D', one of which passes through a slot D2, thereby allowing the prongs 70 A<sup>4</sup> and A<sup>5</sup> to be pressed together and retained in place by the screws D' and cleat D, and in some cases the screw C will not be needed, for example, where a small number of leaves is required.

The width of the board A will depend upon the number of leaves required and the width of the prongs A3, by which the leaves are separated is sufficient to allow the edges of the leaves when closed together, to project far 80 enough to disclose the index letters.

The leaves are readily removed by loosening the clamping device, and allowing the prongs A<sup>4</sup>, A<sup>5</sup> to separate.

What I claim as my invention, and desire to 85

secure by Letters Patent, is-

1. In a telephone index, the combination of the back, cut to form therein a series of parallel slits and a series of parallel prongs, with a series of indexed leaves inserted and go detachably held within the slits, substantially as described.

2. In a telephone index, the combination of a rigid back A, provided with a series of parallel slits, a series of indexed leaves pro- 95 vided with stubs united to said leaves by a flexible joint, said stubs being inserted in said slits and means for clamping the same in position, substantially as described.

3. In a telephone index, the combination 190

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of a back provided with a series of parallel slits, forming elastic prongs, leaves inserted in said slits, and a clamping screw by which said prongs are drawn together, substantially as described.

5 as described.

5 TILLMAN L. SHAFFER.

4. In a telephone index, the combination of a back provided with a series of parallel slits, forming elastic prongs, leaves inserted

said prongs are drawn together, substantially 10

Witnesses:

RUFUS B. FOWLER, EMMA KESTER.