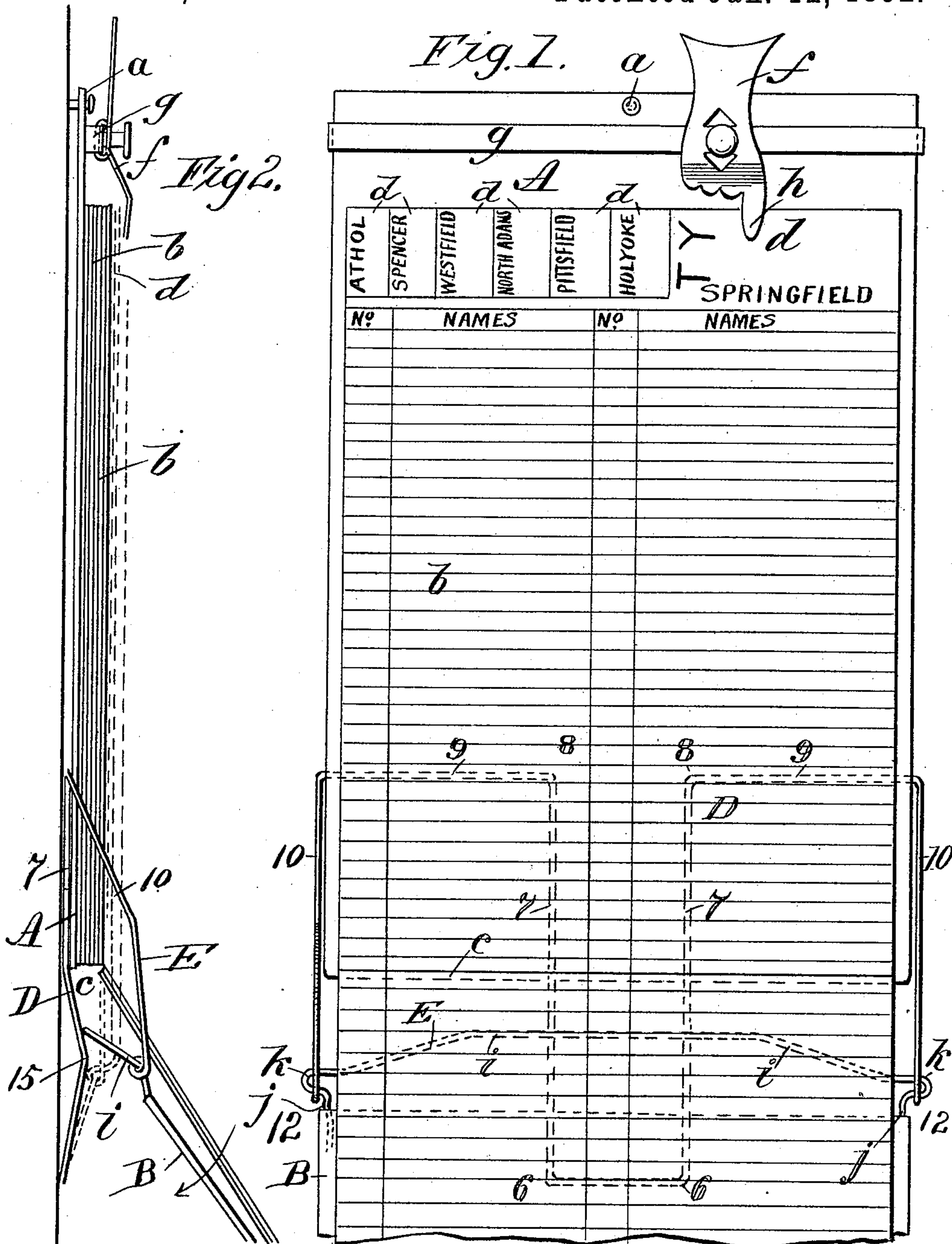


2 Sheets—Sheet 1.

Patented Jan. 12, 1892.

No. 467,131.



Witnesses

J. B. Garrison
G. W. Chamberlain.

Inventor,

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Attorneys.

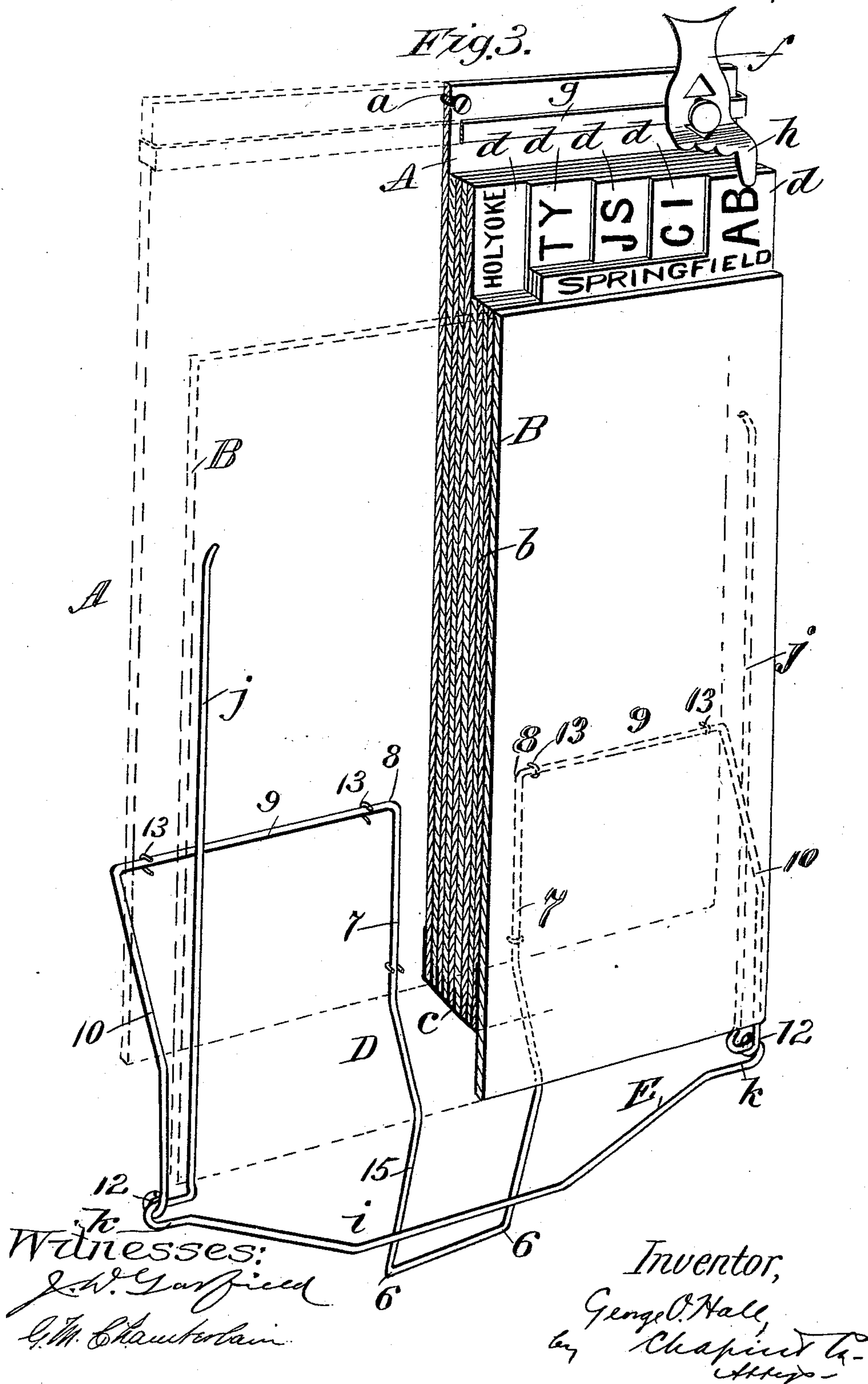
(No Model.)

2 Sheets—Sheet 2.

G. O. HALL.
INDEXED DIRECTORY.

No. 467,131.

Patented Jan. 12, 1892.



UNITED STATES PATENT OFFICE.

GEORGE O. HALL, OF SPRINGFIELD, MASSACHUSETTS, ASSIGNOR TO DAMON
N. COATES, OF SAME PLACE.

INDEXED DIRECTORY.

SPECIFICATION forming part of Letters Patent No. 467,131, dated January 12, 1892.

Application filed April 30, 1891. Serial No. 391,091. (No model.)

To all whom it may concern:

Be it known that I, GEORGE O. HALL, a citizen of the United States, residing at Springfield, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Indexed Directories, of which the following is a specification.

This invention relates to improvements in indexes or directories, the same being particularly designed for use for a telephone indexed directory, although, as will be manifest, the same is applicable for other uses, being readily adapted to serve as an index for book-keepers, &c.

The main object of the invention is to provide an index of substantially the character mentioned which is capable of being readily operated by one hand only, whereby the same becomes unusually convenient.

The invention essentially embodies a series of leaves or tablets which are substantially hinge-supported at their lower edges or portions and which are adapted to stand upright, confining appliances being provided for maintaining them in their upright positions, which confining appliances, however, may be manipulated to permit the downswinging of the leaves or tablets to display the index or directory imprinted thereupon, and all substantially as will hereinafter more fully appear, and be set forth in the claims.

Reference is to be had to the accompanying drawings, in which this invention is illustrated, similar letters and numerals of reference indicating corresponding parts in all the views.

Figure 1 is a face view of the indexed directory with the front or cover thereof shown as downwardly swung and the lower portion thereof as broken away. Fig. 2 is an edge view of the same. Fig. 3 is a view in perspective and central vertical section of the device, the front or cover being shown as swung closed and the relations of the parts front of the plane of section being indicated by dotted lines.

In the drawings, A represents the back board or primary support for the parts constituting the improved index, the same being formed of card-board or analogous stiff material in a manner similar to the production

of book-covers, and is provided near its upper edge, as indicated at *a*, with a perforation or other means whereby to suspend the back vertically.

bb represent a series of leaves or tablets laid the one in front of the other and all at their lower edges hinge-connected together and to a lower portion of the said back A, as indicated at *c*, all so that each of said tablets may swing downwardly on and from the hinge *c* or so that several or all of them may swing in a bunch if properly released so to do. The hinge connection at *c* is to be constituted in any simple manner—as, for instance, by strips of cloth or suitable flexible material suitably secured to the lower edge portions of the tablets and ultimately to said back in any well-known or approved manner. The said tablets terminate by their upper edges at a suitable distance below the upper edge of the back A, and each tablet is provided with an upwardly-extended tab or thumb-piece *d*. The said tabs *d*, as indicated in the drawings and as common in indexes, are of varying widths for the different tablets, the uppermost ones being narrower than those next thereunder, successively, and there is provided movably across the upper part of the back A a clip or confining device, which may be caused to assume a position to engage the tabs of any of the tablets desired. The clip is indicated at *f*, and, as shown, consists of a struck-out-sheet metallic plate movable across the top of the back A on the runner-bar *g*, which is properly secured on the back, substantially as shown. The clip embodies the finger *h*, which is suitably offset or extended to lie beyond the upper edge of whichever of the tabs the clip may be oppositely disposed. It will of course be plain that as the parts being described are arranged in the drawings all the tablets having the tabs *d* at the left of the position of the finger *h* will be held from swinging downwardly, while of course, if the finger is with the clip moved to the left, all the tablets which have tabs to the right of the finger are free to swing downwardly.

B represents the front or cover of the directory, the same at its bottom being supported on or from and movable with relation

to the back by means of a peculiarly-constructed spring-hinge, which will be now described.

D represents a spring-frame, the same 5 formed of a single piece of wire intermediately bent twice at right angles, as at 6 6, and thence upwardly extended in the parallel members 7 7 for a suitable distance, each of which, as indicated at 8 8, is outwardly bent 10 and continued in the member 9 9, and each of said latter members is provided with a return bent member 10, which ranges substantially parallel with the members 7 7, and at its extremity is formed into a ring-eye 12. 15 The sections or members 9 9, and also portions of those 7 7, are disposed in a common plane and lie against the rear face of the back A near its lower edge, being secured thereon by suitable confining devices—such, for instance, as the staples or clips 13 13. The 20 lower portions of the said spring-frame D—that is to say, those portions which comprise the lower halves of the parallel members 7 7 particularly—are bent into an offset or forwardly-extended plane, which lies in 25 advance of the front face of the said back A, and, as indicated at 15 in Figs. 1 and 3, constitutes a double inclined spring-bearing for a portion of the frame E, which is secured to the said cover B, and which forms 30 the other member of the said spring-hinge therefor. The said frame E, as clearly indicated in the drawings, consists of the single piece of spring-wire, which constitutes by its intermediate portion the bow member *i* and by its terminals the legs *j*, by means of which the said frame is confined upon the said cover B, the engagement being effected by any suitable securing means. The said frame E at 40 the junction of the members *i* with those *j* is formed looped, as shown at *k*, thereby rendering more efficient the connection between the said frames. The active tendency of the engagement between the bowed part *i* of the cover-frame E and the inclined spring-bearing 15 of the back frame D is to maintain with an effective amount of stress the cover in either of the positions that the same may be made to assume, the necessity for such spring maintenance being, however, only for the upper 50 disposition, for of course when the cover is downwardly swung it will there remain from gravity.

In the operation or use of the present indexed directory obviously the mode of procedure is substantially as follows: All the 55 parts being restored to their normal positions and the cover being held upwardly swung, on desiring to expose any of the indexed tablets corresponding to the indexed tab thereof, which is always exposed, the clip is slid so 60 that the finger *h* occupies a position over the tab which is an extension of the tablet desired to be seen, and then by the same hand as was employed to slide the clip the cover is 65 downwardly swung, when the released tablets, overlying the one desired to be seen, will of

themselves downwardly swing, for the same will be insured either by the suction of the air exerted between the cover and the tablets 70 as the cover swings or by the slightest joggling movement that may be imparted to the back by the movement of the cover, for the said tablets are usually formed of comparatively stiff or semi-rigid material and are so 75 poised that they will of themselves, when unrestrained, usually swing upon their hinged support.

As either side of any of the tablets is readily rendered visible, both sides therefore 80 usually have indexes imprinted thereon, and therefore a comprehensive directory may be furnished on a minimum number of tablets.

What I claim as my invention is—

1. In an index or directory, a back adapted 85 to constitute a vertical support, a series of leaves or tablets of comparatively rigid material, which at their lower edge portions are hinge-supported on said back and are adapted to be self-supporting and to stand 90 upright from said hinge-support, and a confining device supported on said back above said hinge-support and movable to engage the upper edge portions of the tablets for 95 maintaining them in upright or closed positions or disengaging the tablets for permitting their downswinging to disclose the index-matter thereon, substantially as set forth.

2. In an index or directory, a series of superposed leaves or tablets which are substantially 100 hinge-supported at their lower portions and which are adapted to stand upright, and which tablets have the index overlapping tabs of varying widths, substantially as described, of a back or rear support for said 105 tablets, provided with a clip movable for an engagement with either of said tabs, substantially as and for the purpose described.

3. In an index or directory, the combination, with the back A, provided with the runner-bar *g*, of the series of superposed leaves 110 or tablets, which are hinge-supported and connected at their lower edges and supported on said back and provided with the overlapping tabs at their upper edges of varying 115 widths, substantially as described, and the clip *f*, engaged with and adapted to slide on the said runner-bar *g* and provided with the finger *h* and adapted to overlie and engage either of said tabs, substantially as described 120 and shown.

4. In an index or directory, the combination, with a back A and a series of leaves or tablets which at their lower edges are supported and hinge-connected the one on the 125 other and all upon said back, of a front or cover adapted to be supported on and swing from the lower portion of the said back, there being spring appliances provided for maintaining the said cover in its upwardly-swung 130 position, for the purpose set forth.

5. In an index or directory, the combination, with the back and the series of hinged leaves or tablets supported thereon and said

back being provided with the frame D, formed of a single piece of wire and comprising the members 7 7, having the spring-bearing 15, and the members 10 10, provided with the ring-eyes 12 12, of the cover B, having secured thereto the wire frame E, hinge-connected to the frame D and provided with a bow member *i*, all substantially as described, for the purposes set forth.

10 6. In an index or directory, the combination, with the back A, provided near its upper edge with the runner-bar *g* and having the wire frame D, comprising the members 7 7, having the spring-bearing portion 15, and
15 the members 10 10, provided with the ring-

eyes 12 12, formed and applied as shown, and the series of hinged leaves or tablets supported on said back and provided with the overlapping tabs of varying widths at their upper edges, of the clip *f*, supported and movable on said runner-bar and having the finger *h*, and the front or cover B, having secured thereto the wire frame E, hinge-connected to the frame D and provided with the bow member *i*, all substantially as described and shown, for the purposes set forth. 25

GEO. O. HALL.

Witnesses:

WM. S. BELLOWS,

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