

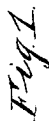
(No Model.)

2 Sheets—Sheet 1.

A. F. GEORGE.
DIRECTORY HOLDER AND OPERATOR.

No. 500,099.

Patented June 20, 1893.



Witnesses:

G. S. Hooper.

Jno. L. Condon

Inventor
A. F. George.

By Higdon & Higdon
attys.

UNITED STATES PATENT OFFICE.

ALBERT F. GEORGE, OF KANSAS CITY, MISSOURI, ASSIGNOR OF ONE-HALF
TO JOSEPH H. FINK AND WILLIAM F. PEASE, OF SAME PLACE.

DIRECTORY HOLDER AND OPERATOR.

SPECIFICATION forming part of Letters Patent No. 500,099, dated June 20, 1893.

Application filed June 7, 1892. Serial No. 435,795. (No model.)

To all whom it may concern:

Be it known that I, ALBERT F. GEORGE, of Kansas City, Jackson county, Missouri, have invented certain new and useful Improvements in Directory Holders and Operators, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to appliances for holding and operating the directory-lists which give the call-numbers of telephone-subscribers, and also for holding various other forms of lists or indexes which are used for quick reference, such as library-catalogue lists, directory-lists of large numerously tenanted buildings, fire-alarm lists, and in fact for all other similar purposes.

The objects of my invention are to produce a holder and operator which shall be simple, strong, durable, compact and inexpensive in construction, and by means of which the holder may be opened instantly at precisely the place required to display the number or address, the name or title, or other entry which is sought for. Furthermore to produce a directory holder and operator which shall avoid all necessity for directly manipulating the lists themselves, and which shall automatically close itself after having been opened and used.

To the above purposes my invention consists in certain peculiar and novel features of construction and arrangement, as hereinafter described and claimed.

In order that my invention may be fully understood, I will proceed to describe it with reference to the accompanying drawings, in which—

Figure 1 is a perspective view of a directory-holder and operator embodying my invention. Fig. 2 is a transverse vertical section of the same, on the line 2—2 of Fig. 1. Fig. 3 is a horizontal section of the same, on the line 3—3 of Fig. 1. Fig. 4 is a detached perspective view of one of the opening or operating-arms, and also a similar view of the lifting-spring for said arm. Fig. 5 is a detached perspective view of the lower part of one of the movable holders for the lists. Fig. 6 is a perspective view of one corner of the

lower part of the bottom-casing of the holder, showing two of the guide-standards.

In the said drawings, 1 designates the back of the casing, which supports the operative parts of the device. This casing is preferably of metal, and also of elongated rectangular form, and is designed to be secured in vertical position against a wall or any other suitable structure. From the outer side of the lower end of the back 1 projects horizontally outward a casing 2 which is preferably also in the form of a single metal casting, and of rectangular form; the said casing being provided at its rear portion with any suitable or preferred number of ears 3. Suitable screws 4, or equivalent devices, are passed through the ears 3 and into the back 1, and serve to secure the casing 2 firmly to the back 1. The top of this casing is closed by a removable cover 5 which is formed at its sides with downwardly extending flanges 6, which flanges embrace outwardly extending ribs 7 at the sides of the casing 1; the arrangement being such that the cover 5 can be slid forward and thus expose the interior of the casing 2. When this cover 5 is in closed position, its rear margin comes into contact with the front margin of a stationary top-piece 8 which is preferably formed integrally with the sides and back 9 of the casing, and which closes the rear upper part of said casing. A notch 10, or any other suitable attachment, may be formed in the front part of the top 5 so as to facilitate the opening and closing of the same. The front 11 of the casing is preferably formed integrally with the sides and bottom thereof, and is formed also with a number of vertically elongated openings or slots 12, through which extend and work the operating-arms of the device, as will be hereinafter more fully described.

Within the rear portion of the casing 2 are located a number of vertical supporting and guiding standards 13 which are arranged parallel with each other side by side, and each separated from the other by a vertical space, as shown. The front upper margins of these standards 13 are preferably of segmental form, while at their front lower portions, said standards are formed each with a forward

extension; the purpose of said extensions being hereinafter explained.

15 designates the operating-arms of the device, each of which is of such length as to extend from within the space between two of the standards 13, forwardly through and beyond one of the openings 12 in the front of the casing 2. At its outer extremity, each of these arms is formed or otherwise provided with a flat longitudinal enlargement 16 upon which are formed or otherwise placed one or more letters of the alphabet, or any other character or inscription, according to the particular purpose for which the device is to be used. The rear end of each arm 15 is formed with an upward extension 17 which is preferably of approximately C-shape, as shown, and the upper extremity of this extension 17 is formed with a triangular or wedge shaped head 18, the two sides of which are preferably of concave form. These arms are also each formed, at its under side and at a point adjacent to the point of union of the bend 17 with the body-portion of the arm, with a pair of downwardly extending parallel lugs or ears 19 between which works the upper end of the corresponding lifting-spring for the lever. Each of these lifting-springs 33 is preferably of segmental form, as shown, the rear end of the spring pressing upward against the under side of the corresponding arm 15 at a point between its lugs or ears 19, and the front end of each spring being inserted beneath an overhanging rib 34 which is formed upon the bottom of the casing 2, and which extends from side to side of the casing. The entire series of arms 15 are pivoted at their inner or rear portions upon a horizontal pivot-rod 20 which extends transversely within the casing 2, and which rests upon the upper ends of the standard-extensions 14; this rod being of such length as to extend through the corresponding parts of the sides of the casing, and said rod also extending transversely and loosely through the arms 15 at the points of union of the bends 17 with said arms.

21 designates two short horizontal brackets which are formed upon the inner surfaces of the sides of the casing 2, and each of which is preferably of U-form in cross-section, as shown. These two horizontal brackets 21 are thus located opposite each other, and said brackets support a horizontal retaining-piece 22 which is preferably of U-form in cross-section, and which is of such length as to extend from one side of the casing 2 to the opposite side thereof; the ends of the retaining-piece being inserted into the supporting-brackets 21, as shown. Within the retaining-piece 22 is inserted an elongated strip 23 of glass or other similar hard polished material; this strip thus extending horizontally within the casing 2 and being of such length as to reach from one side of the same to the other. Upon this strip 23 rest the lower conical extremities 25 of a number of vertical rods 24, which extend upward through the top-piece 8

of the casing 2, and which carry the movable frames into which the directory-lists are inserted, as will be hereinafter fully described. It will thus be seen that the bearings of the rods 24 upon the bearing-strip 23 are of such a nature as to reduce the friction and wear of the parts to the minimum, and thus also permit of the free movement axially of the rods. These rods extend loosely through the top-piece 8 of the casing, and are of such length as to extend upward nearly to the upper end of the back 1, and the upper ends of these rods extend loosely through the outer horizontal portion of a bracket 26. This bracket 26 is preferably of inverted L-shape and extends horizontally across the upper end of the back 1 of the device, and said bracket is secured to said back by a number of screws 27 or equivalent devices; the said screws passing through a suitable number of ears 28 which project upwardly from the upper part of the bracket. It is to be observed that the rods 24 are preferably arranged in a slightly segmental row across the device, so that the middle rod is the farthest from the back 1 and the other rods at each side of the middle rod gradually approach nearer to the back.

29 designates the holders or carriers for the lists, these holders being preferably of vertically elongated rectangular form, as shown. Each of these holders or carriers is secured, as at 30, and preferably near the upper and lower parts of its inner side, to one of the rods 24 in such manner that the holder or carrier shall move with the rod; the ears 30 being soldered, riveted, or otherwise rigidly secured to the rods. At its lower end each rod 24 is formed or otherwise provided with a short horizontal transverse rod or arm 31 which normally extends parallel with the back 1, and the ends of which normally lie closely adjacent to the ends of the two arms 31 of the rods 24 at opposite sides of the intermediate rod 24; the purpose of these cross-arms 31 being hereinafter fully explained. It is to be further observed that the rods 24 are inclined forwardly and upwardly, so that their upper ends are farther from the back 1 than are their lower ends; the purpose of such arrangement being to cause the holders or carriers 29 to normally extend outward against each other, and to return automatically by gravity to such position after having been separated, as hereinafter also fully explained. Each holder or carrier 29 is preferably formed with grooved side-pieces, as shown, and the cards, boards, plates, or similar devices 32, upon which the names, index-lists, numbers or similar inscriptions are made, are slipped downwardly between the grooved side-portions of the holders or carriers. As shown, each side of each card is provided with a central dividing-line which leaves two spaces for the inscriptions, but it is to be observed that but a single space may be formed at each side of each card 32, or that more than two spaces may be formed, according to the require-

ments of special circumstances. As shown, also, the cards 32 are divided alphabetically as is usual in telephone and other directories, but the cards may be divided numerically, or otherwise, according to the requirements of the particular use to which the cards may be devoted.

Now, in operating the device above described, let it be assumed that the telephone-call number of Albert F. George be desired. The arm 15 carrying the letter "G" is depressed, causing the triangular head 18 of the arm to move forward and enter between one end of the cross-arm 31 of the rod 24 which carries the corresponding card 32, and the end of the next cross-arm 31. This movement separates these two leaves or holders oppositely from each other, and displays the name "Albert F. George" and the call number of his telephone; the holders 29 at each side of the separating or opening point being likewise opened, as shown in Fig. 1. As soon as the arm 15 is released, the holders will fall together again, owing to the upwardly and forwardly inclined positions of the rods 24, and the device will be in readiness for further use; the springs 33 automatically raising the arms and permitting this closing movement.

From the above description it will be seen that I have produced a directory holder and operator which is simple, strong, durable and compact in construction, which is also inexpensive to manufacture, and which is capable of use in a great variety of situations where indexes, directories, and the like are required for ready reference. It will also be seen that the device avoids the necessity for all direct handling of the holders or carriers themselves, and that the latter automatically close together after each use of the device.

Having thus described my invention, what I claim as new therein, and desire to secure by Letters Patent, is—

1. In a directory holder and operator, the combination of pivotally movable carrying rods, having each at its lower end a cross arm, with a number of depressible operating arms or levers, having each at its inner end a wedge-shaped head or enlargement for entering between the cross-arms, when the operating arms or levers are depressed, and thus moving the supporting rods oppositely pivotally, substantially as set forth.

2. In a directory holder and operator, the combination of a number of pivotally mov-

able carrying-rods, having each at its lower end a cross-arm, with a number of depressible arms or levers, having each at its inner end a wedge-shaped head or enlargement for entering between the cross-arms, when the operating arms or levers are depressed, and a spring located between each arm or lever and the base of the casing, to return said arm or lever to its normal position, substantially as described.

3. In a directory holder and operator, the combination of a suitable supporting frame or casing, having a number of supporting rods extending obliquely upward and in a segmental row, and holders carried thereby, with a supporting horizontal retaining piece, extending transversely of the casing, and actuating arms or levers, carrying letters on their outer ends, and having each a wedge shaped head at their inner ends, substantially as described.

4. In a directory holder and operator, the combination of a suitable frame, a number of vertical rods for carrying the card holders and having conical lower ends, a pair of oppositely disposed supporting brackets located in the lower part of the supporting frame, a horizontal retaining piece resting at its ends within said brackets, and a bearing strip for receiving the lower ends of the rods, mounted in the retaining piece, substantially as described.

5. In a directory holder and operator, a casing or frame consisting of a vertical back board or piece, a top plate or piece horizontally secured to the back board or piece, and having segmentally arranged vertical openings or holes therethrough, and a rectangular box or casing horizontally secured to the back board or piece, a suitable distance below the top plate or piece, and having vertical slots in its front wall, and having a horizontal top piece, provided with a series of segmentally arranged openings, and a number of rods engaging the openings in the top plate and the top piece of the box or casing, an opening in the top or upper wall of the box or casing, and a sliding door or cover to close the opening in the upper wall or top of the box or casing, substantially as described.

In testimony whereof I affix my signature in the presence of two witnesses.

ALBERT F. GEORGE.

Witnesses:

HARRIET E. PRICE,
JNO. L. CONDRON.