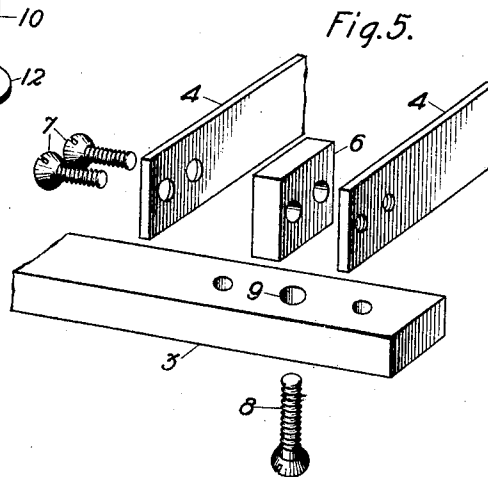
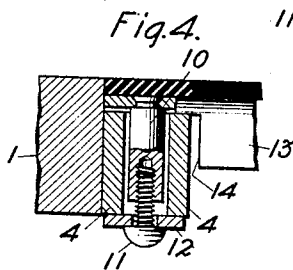
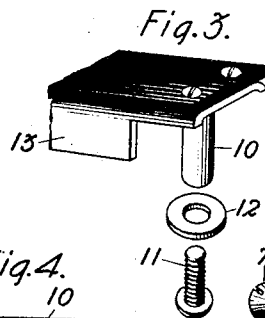
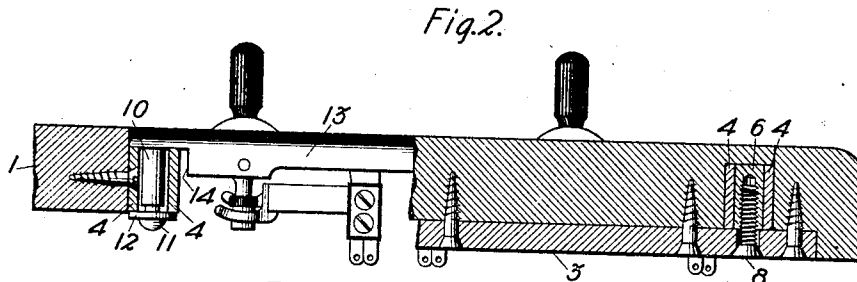
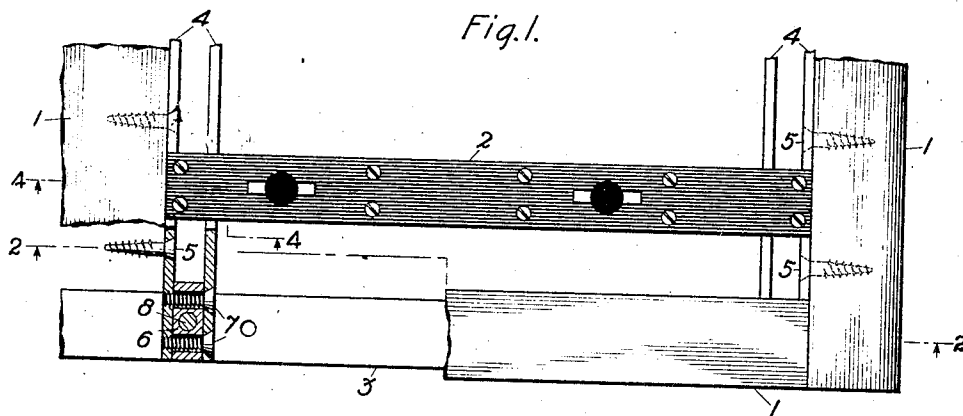


E. B. CRAFT.
KEY SHELF AND BASE.
APPLICATION FILED MAY 9, 1910.

1,050,520.

Patented Jan. 14, 1913.



Witnesses:
M. Washburn Jr.
J. M. Intosh.

Inventor:
Edward B. Craft.
by *J. C. Munroe* Atty.

UNITED STATES PATENT OFFICE.

EDWARD B. CRAFT, OF HACKENSACK, NEW JERSEY, ASSIGNOR TO WESTERN ELECTRIC COMPANY, OF NEW YORK, N. Y., A CORPORATION OF ILLINOIS.

KEY SHELF AND BASE.

1,050,520.

Specification of Letters Patent.

Patented Jan. 14, 1913.

Application filed May 9, 1910. Serial No. 560,19C.

To all whom it may concern:

Be it known that I, EDWARD B. CRAFT, a citizen of the United States, residing at Hackensack, in the county of Bergen and State of New Jersey, have invented a certain new and useful Improvement in Key Shelves and Bases, of which the following is a full, clear, concise, and exact description.

This invention relates to telephone switchboards and more especially to improvements in the construction of the key shelf and key base so as to permit the longitudinal adjustment of the key base at any desired position with reference to the key shelf, and to provide improved means of attachment.

The invention will be described by reference to the accompanying drawings, and the parts, improvements or combinations which I regard as novel will be pointed out in the appended claims.

Like numerals of reference refer to corresponding parts in the accompanying drawings, in which—

Figure 1 is a plan view partly broken away and partly in section of one end of my key shelf carrying a key base; Fig. 2 is a transverse view, partly in section, taken on line 2—2, Fig. 1, of my key shelf and key base; Fig. 3 is a view of an end portion of my key base with cooperating parts of the locking means disassociated; Fig. 4 is an enlarged view in cross section of one side of the key shelf frame and an end portion of my key base mounted thereon showing locking means on the key base and key shelf; and Fig. 5 is a view of an end portion of the locking bars, and spacing block and their support, showing the parts disconnected and the manner and means by which these parts are coupled.

Referring to the drawings, 1 is a body portion or framework, preferably of wood, of a key shelf having a longitudinally extended opening. This key shelf and the opening therein may be of any desirable size suitable to contain key bases 2 to be mounted therein, and it may be constructed in one piece or by joining several pieces mounted on or bound together by suitable braces or reinforcing pieces 3 or in any other desirable manner which will afford a sufficiently rigid mounting for said key bases. The key shelf 1 is provided on the opposite inner faces of the key shelf frame surround-

ing the longitudinal opening with locking bars 4. These bars 4 are arranged in pairs extending the length of the key shelf within the opening and substantially parallel to and adjacent the opposite sides of the opening and each other. One of each pair of these locking bars 4 is mounted longitudinally on the opposite inner lateral faces of the key shelf framework surrounding this opening and firmly attached to said key shelf framework by screws 5 or other suitable fastening means. The other bars of each pair are mounted within the opening and in the key shelf adjacent and substantially parallel to the bars mounted on the opposite inner lateral faces of the key shelf framework, but spaced therefrom by blocks 6 disposed between the ends of the adjacent bars forming each pair. The locking bars are attached to opposite sides of these spacing blocks 6 by screws 7, rivets or other suitable fastening means, and the blocks 6 carrying the locking bars are rigidly mounted on the transverse brace or supporting bar 3 at each end of the key shelf, by means of a bolt or screw 8, or other suitable means, which passes through the hole 9 in the supporting bar 3 and engages the spacing block 6 to hold the same and the locking bars in position. The locking bars are thus held in fixed relation to the opposite sides of the opening in the key shelf, and in fixed relation to each other, an unobstructed channel space being thus formed between the bars of each pair.

2 is a key base mounted in the key shelf and across said opening therein. The key base 2 is adapted to carry the buttons, plungers, key levers and the other associated apparatus usual to a key base. Said key base 2 is mounted on said key shelf in longitudinally slidable adjustment or relation thereto by means of impending studs 10 or other suitable means mounted on said key base near each extremity thereof. These studs 10 may be screwed, riveted or otherwise suitably fastened to said key base. The studs extend into the channel between the locking bars 4, and each is provided with a threaded socket in its lower extremity adapted to receive a screw 11, on which is loosely carried a collar or washer 12, adapted to engage the lower faces of the locking bars 4. The key base, which is made preferably of metal and topped with a hard rub-

ber strip to afford a suitable finish and protection for its upper surface, is provided with downwardly depending longitudinal sides 13. Near each extremity of the key base these sides 13 are upwardly recessed to form a shoulder 14 which is adapted to restrain the key base 2 from transverse movement between the opposite pairs of locking bars 4 in the key shelf. The studs 10 carrying the washer and screw, which cooperate or grip with the locking bars to fasten and adjustably lock the key base in the desired position within the opening of the key shelf are preferably disposed between the extremities of the key base and the said recessed portion 14 near the ends of said base, so that the studs will impend from the key base at a point coincident with the channel between the adjacent locking bars.

From this description it can be readily seen that when it is desired to mount the key base within the longitudinal opening in the key shelf if the screws 11 and washers 12 upon the studs 10 near each end of said base are removed from the studs and the studs are downwardly inserted into the channels formed by the adjacent locking bars, the key base will be in its proper position in the key shelf, and while permitted movement longitudinally of the key shelf will be restrained from transverse movement therein. If the screws 11 carrying the collars or washers 12 are then inserted in the threaded portion of the studs and tightened the washers will be forced into contact with the lower faces of the locking bars and lock the key base in position. If it is desired to remove the key base from the key shelf the screws carrying the collars are withdrawn and the key base may be readily removed. But if it is desired merely to adjust the key base upon the key shelf by sliding it longitudinally thereof, such adjustment is permitted by loosening the screws 11 and disengaging the wash-

ers from the locking bars; when the key base may be moved longitudinally of the shelf in any desired position.

Although I have described my invention in great detail, nevertheless, I do not desire to be limited to such details except as hereinafter specified in the claims; but having fully and clearly described my invention—

What I claim as new and desire to secure by Letters Patent is:

1. The combination with a telephone switchboard, of a keyshelf having an opening therein, a key base, supporting means therefor mounted in said keyshelf opening to form an unobstructed channel extending longitudinally thereof, and locking means on said key base cooperating with said supporting means.

2. The combination with a telephone switchboard, of a keyshelf having a longitudinal opening therein, key supporting bars mounted in said opening to provide an unobstructed channel longitudinally of said keyshelf opening, a key base adjustably supported in said keyshelf by said supporting bars, and means for locking said key base to said bars.

3. In a telephone switchboard, a key shelf having a longitudinal opening therein, locking bars mounted on said shelf within said opening, a key base mounted on said locking bars, a stud mounted on said key base, a screw carried by each said stud, a collar loosely mounted upon each said screws, said collars being adapted to engage said locking bars and hold the key base in longitudinal adjustment with the key shelf.

In witness whereof, I, hereunto subscribe my name this 7th day of May A. D., 1910.

EDWARD B. CRAFT.

Witnesses:

IRVING MACDONALD,
MORGAN WASHINGTON, JR.