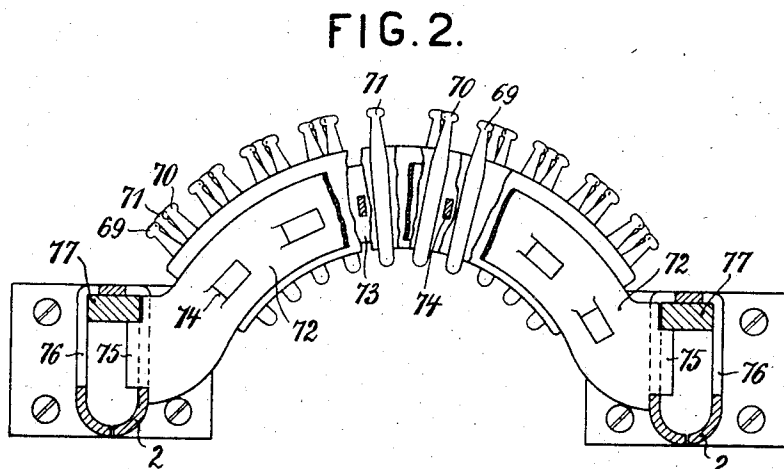
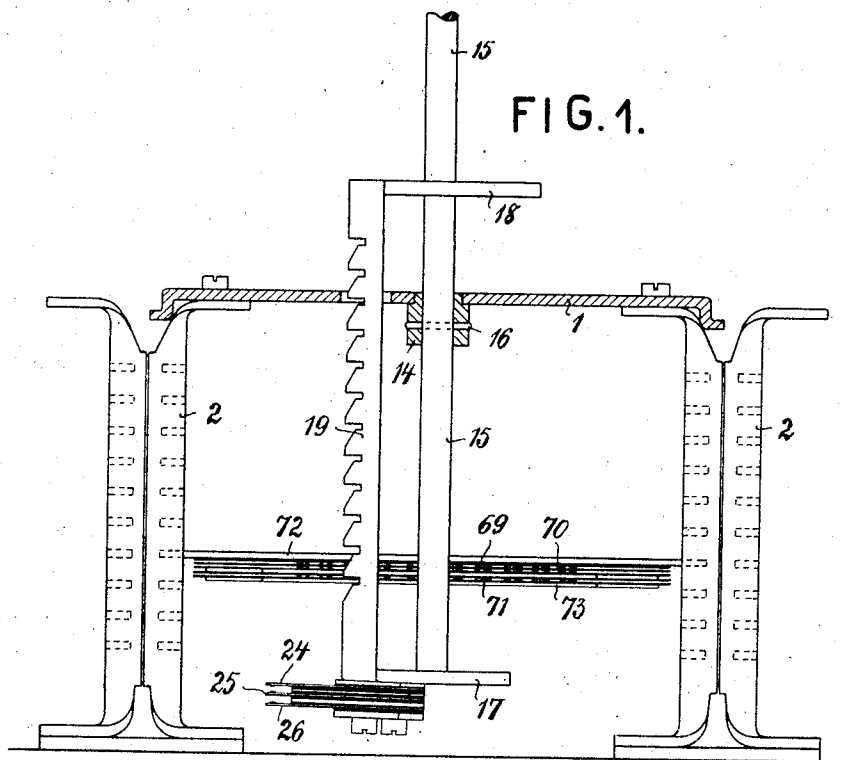


B. SETTEGAST.
 SELECTOR FOR AUTOMATIC TELEPHONE EXCHANGES.
 APPLICATION FILED DEC. 4, 1911.

1,038,213.

Patented Sept. 10, 1912



Witnesses

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UNITED STATES PATENT OFFICE.

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SELECTOR FOR AUTOMATIC TELEPHONE-EXCHANGES.

1,038,213.

Specification of Letters Patent.

Patented Sept. 10, 1912.

Original application filed May 23, 1910, Serial No. 562,924. Divided, and this application filed December 4, 1911. Serial No. 663,844.

To all whom it may concern:

Be it known that I, BERNHARD SETTEGAST, engineer, citizen of Germany, and resident of Karlsruhst, near Berlin, Germany, have invented certain new and useful Improvements in Selectors for Automatic Telephone-Exchanges, of which the following is a specification.

My present invention relates to selectors for automatic telephone exchanges, this application being a division from my earlier patent application Ser. No. 562,924 filed May 23, 1910, Pat. No. 1,015,644, granted January 23, 1912, and has for its object a new and improved arrangement of the fixed contact sets with which the well known movable contact arms cooperate.

In the Strowger system there is a special set of fixed contacts provided for each contact arm of the switch cylinder over which the contact arms pass, that is to say, the A-conductor, the B-conductor which both lead to the subscriber, and the testing conductor which only leads to the office, are connected to separate contact sets. If a fault occurs in any one line or if a line is to be cut off the necessary operations have to be carried out in all three contact sets of the selector. In place of this the contacts of the A-, B- and corresponding testing-conductors are arranged together in the new selector. For example a set of contacts is formed by ten such groups of three contacts each. The sets of contacts are so arranged in multiple sets of ten for example in the standards of the selector that they are easily accessible from the rear and can also be removed and exchanged in a very simple manner.

One form of construction is shown in the accompanying drawing, in which—

Figure 1 is a front view and Fig. 2 a sectional view on line 2—2 with certain parts broken away.

24, 25, 26 are contact arms which for instance are supposed as fixed to a toothed bar 19 adapted to be lifted and turned by electromagnets (not shown). The bar 19 has two end disks 17, 18 sliding loosely on a fixed upright bar 15. The latter passes through the base plate 1, on which the moving mechanisms for the toothed bar 19 are mounted.

The sets of contacts, only one of which is indicated in the figures, consist for example of

ten groups each of three contacts 69, 70, 71. Each contact (Fig. 2) consists of a strip with the usual soldering eyelet at its outer end, while the inner end of each strip projects inward a little beyond the plates 72, 73, about to be described, and is adapted to be engaged by the end of one of the contact springs 24, 25, 26. The contact pieces 69, 70, 71, are separated from one another and from the supporting plates 72, 73, by means of intermediate layers of insulating material. The supporting plates 72, 73, are held together either by rivets, or better by means of lugs 74 stamped out of one plate and passed through corresponding slots in the other plate and then bent over at their ends. The lower plate 73 is only made so long as is necessary for holding the contacts 69, 70, 71, but the ends of the upper plate 72 are formed as lugs 75 which are thrust from the rear into slots 76 in the standards 2 (Fig. 2). These standards consist of stamped sheet metal shaped as tubes with extended foot-pieces at each end. When the required number—say ten—of the plates 72 carrying the sets of contacts have been inserted in the standards, bars 77 are thrust into the hollow standards from above, thus locking the plates 72 in position, as seen in Fig. 2. The standards 2 are so arranged that they will each take the lugs 75 of the contact sets of two adjacent selectors.

As is evident from the preceding description and the drawings, all the parts of the new contact sets are so formed that they can be made entirely by machinery, that is to say, they need no subsequent finishing by hand. They all consist of stamped and, in some cases, bent sheet material which can be made at the same time with the necessary holes for receiving the various screws, pins and the like. In consequence of this, the new selector is not only very easily made, but costs very little.

I claim:—

1. In a selector for automatic telephone exchanges a plurality of contact sets, each set comprising a row of groups, and each group consisting of a plurality of coördinate contacts, standards holding said contact sets in such a manner, that each set can be changed independently from the others, substantially as described.

2. In a selector for automatic telephone

exchanges a plurality of contact sets, each set comprising a row of groups, and each group consisting of two speaking and a testing contact, standards holding said contact sets in such a manner, that each set can be exchanged independently from the others, substantially as described.

3. In a selector for automatic telephone exchanges a plurality of contact sets, each set comprising a row of groups, and each group consisting of a plurality of coördinate contacts, each set of contacts being held together by means of two plates with the insertion of intermediate insulating layers, standards holding said contact sets in such a manner, that each set can be exchanged independently from the others, substantially as described.

4. In a selector for automatic telephone exchanges a plurality of separately interchangeable contact sets, each set comprising a row of groups, and each group consisting of a plurality of coördinate contacts, each set of contacts being held together by means of two plates with the insertion of intermediate insulating layers, lugs stamped out from one of said plates, slots stamped out in the other of said plates, said lugs passing through, and being bent over said slots, substantially as described.

5. In a selector for automatic telephone exchanges a plurality of separately interchangeable contact sets, each set comprising a row of groups, and each group consisting of a plurality of coördinate contacts, each set of contacts being held together by means of two plates with the insertion of inter-

mediate insulating layers, standards with transverse slots adapted to receive the ends of one of said plates, substantially as described.

6. In a selector for automatic telephone exchanges a plurality of separately interchangeable contact sets, each set comprising a row of groups, and each group consisting of a plurality of coördinate contacts, each set of contacts being held together by means of two plates with the insertion of intermediate insulating layers, standards of stamped and rolled sheet having transverse slots to receive the ends of one of said plates, substantially as described.

7. In a selector for automatic telephone exchanges a plurality of separately interchangeable contact sets, each set comprising a row of groups, and each group consisting of a plurality of coördinate contacts, each set of contacts being held together by means of two plates with the insertion of intermediate insulating layers, standards of stamped and rolled sheet having slots to receive the ends of one of said plates, and bars to be inserted from above in each standard and adapted to hold the ends of the contact sets in position, substantially as described.

In witness whereof, I have hereunto signed my name this 16th day of November, 1911, in the presence of two subscribing witnesses.

BERNHARD SETTEGAST.

Witnesses:

HENRI HASPER,
WOLFGANG HAUPT.