

J. ZICKEL.
ANNUNCIATOR BOARD.
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931,548.

Patented Aug. 17, 1909.

Fig. 1.

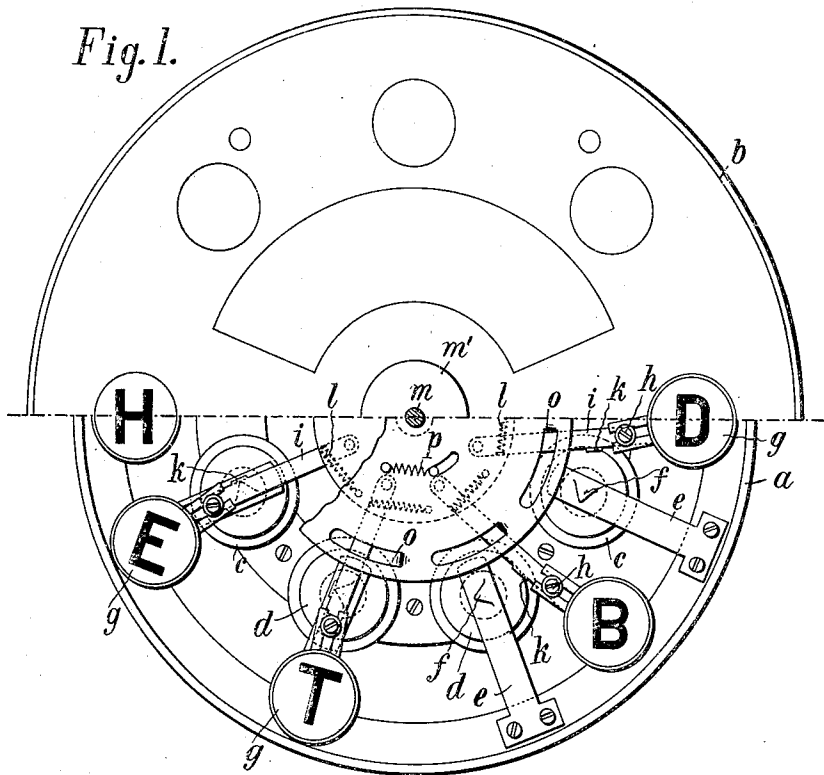
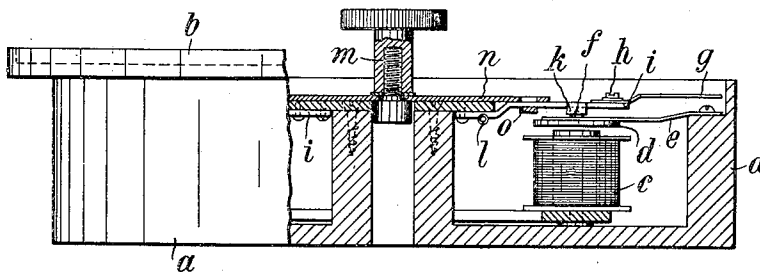


Fig. 2.



WITNESSES:

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JULIUS ZICKEL, OF BERLIN, GERMANY.

ANNUNCIATOR-BOARD.

No. 931,548.

Specification of Letters Patent.

Patented Aug. 17, 1909.

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To all whom it may concern:

Be it known that I, JULIUS-ZICKEL, a subject of the King of Prussia, residing at 72 Yorkstrasse, Berlin, Germany, have invented new and useful Improvements in Annunciator-Boards; and I do hereby declare the following to be a full, clear, and exact description of the invention.

My invention relates to annunciator-boards having a series of electromagnets releasing the annunciator-disks, disposed in a circle and arms carrying said annunciator-disks arranged radially or approximately radially, the arms being adapted to be returned into the locking position by a centrally arranged disk. Constructions of this kind have the special advantage over those having become known up to the present, that the parts of the same may be concentrated into a narrow space, admitting of the provision of a large number of annunciator-disks in a single small box or casing. A further decrease in the size of the apparatus is obtained by returning the released annunciator-disks into their original position in the present case by means of a button or the like, provided on the apparatus, instead of returning the annunciator-disks into their locking position by means of lateral levers according to known devices, enabling the apparatus at the same time to be sunk into walls and dispensing with polishing the casing of the latter. The returning of the annunciator-disks may be accomplished by pressing or turning the button in the center of the annunciator-plate. Supposing the button is disposed capable of being turned, the annunciator-disks are arranged laterally movably in such a way that they may be engaged by special abutments provided on a disk connected with said button.

In the drawings in which like parts are similarly designated, representing several modes of construction of the object of the invention, Figure 1 is a front view of the annunciator-board partly with the casing removed; Fig. 2 is a cross section through the center.

According to Figs. 1 and 2 the casing *a* is of cylindrical shape and closed in front by a cover *b*. The series of electromagnets releasing the annunciator-disks are arranged in a circle and electrically connected in known manner, and when excited take effect upon the armatures *d* disposed above. These latter are connected to the casing *b* by radi-

ally bearing arms *e* and generally keep the annunciator-disks *g* in their respective locking position. The annunciator-disks are attached by means of screws *h* to the arms *i*, which in their respective locking position have a radial bearing and which are provided with noses *k*. The latter slide over noses *f* of arms *e* when returning the annunciator-disks into their locking position, and are thus ready to be released again. The arms *i* are acted upon by springs *l* which are stretched when returning the annunciator-disks into the locking position. The fixing of the annunciator-disks *g* to the arms *i* is effected in such a manner, that on account of an improper execution of the apparatus said annunciator-disks may be readjusted and brought into their proper position in an easy manner. To this end the annunciator-disks are provided with slitted pieces in the slits of which the set-screws *h* may conveniently be shifted. The returning of the annunciator-disks *g* is effected by turning the shaft *m* connected with a disk *n*, carrying embossed projections *o* within reach of the arms *i*, and which may be suitably made of such shape as to serve as a guide for the arms *i* when swinging. The disk *n* is acted upon by the spring *p* and after having returned the annunciator-disks *g* into their locking position the disk *n* returns to its original position.

The action of this form of construction is the following: One of the armatures *d* is attracted by its corresponding electromagnet as soon as the latter is excited. The nose *f* attached to this armature releases the respective annunciator-disk under the action of the spring *l* into its visible position. In order to effect the returning of the annunciator-disk it is necessary to turn the shaft *m* by the button *m'*. The disk *n* rigidly connected with the shaft *m* engages the respective arm by means of projections *o* and leads the same back into its original position, where it will be retained, since the electromagnet which has received but one rush of current, is now without current. Subsequently the disk *n* automatically returns induced by the spring *p* into its original position.

I claim:

1. In an annunciator-board in combination a series of electromagnets arranged in a circle, a series of armatures each of them coacting with one of the magnets, a series of annunciator-disks each of them coacting with one of the armatures and journaled in circu-

larly arranged bearings, a series of springs each of them applied to one of the annunciator-disks with a tendency to pull the annunciator-disk into the visible position, and
5 a centrally arranged disk to return every released annunciator-disk into the locking position.

2. In an annunciator-board, in combination a series of electromagnets arranged in a
10 circle, a series of armatures each of them co-acting with one of the magnets, a series of annunciator-disks each of them coacting with one of the armatures and journaled in circularly arranged bearings, a series of springs,

each of them applied to one of the annunciator-disks with a tendency to pull the annunciator-disk into visible position and centrally arranged means for returning every released annunciator-disk into the locking
position. 15 20

In testimony that I claim the foregoing as my invention, I have signed my name in presence of two subscribing witnesses.

JULIUS ZICKEL.

Witnesses:

CARL SCHUTZ,
JOSEF CECIL.