

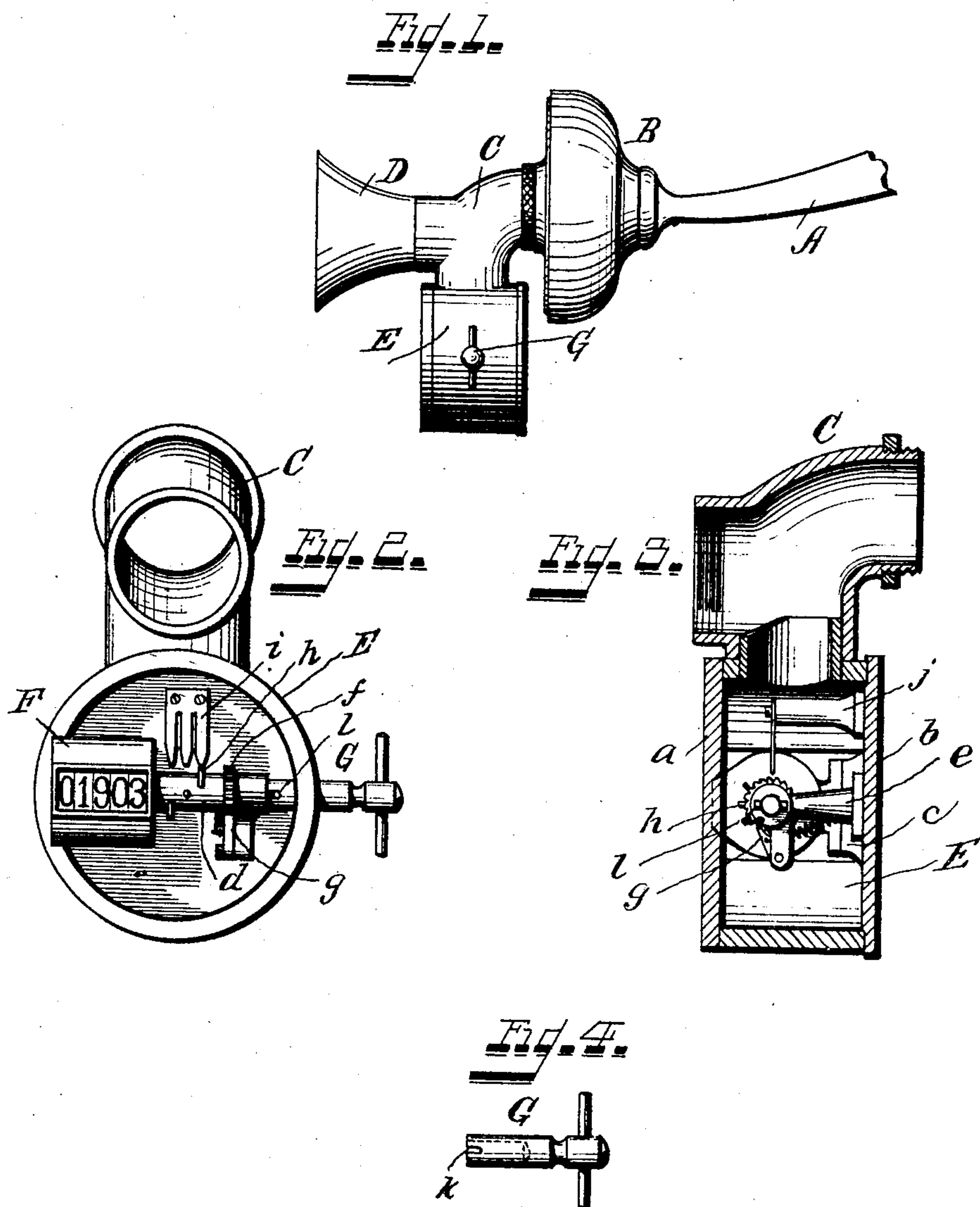
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G. S. NICKUM.
REGISTER FOR TELEPHONES.

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NO MODEL.



Witnesses.
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REGISTER FOR TELEPHONES.

SPECIFICATION forming part of Letters Patent No. 774,991, dated November 15, 1904.

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To all whom it may concern:

Be it known that I, GEORGE S. NICKUM, a citizen of the United States, residing at Salt Lake City, in the county of Salt Lake and State of Utah, have invented certain new and useful Improvements in Registers for Telephones, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to a very simple and efficient registering mechanism to be applied to telephones, especially those having a limited service, and whether they are what are known as "wall-telephones" or "desk-telephones," and is particularly adapted to limited party-line service; and it has for its object the provision of a sound-case containing the registering mechanism, with an exterior removable key for operating the same and at the same time operating a sounding reed or reeds, and which is simply and readily attachable to the transmitter of such telephones as are now in use, the sounding-case being connected by an open tube to the transmitter directly in front of the diaphragm and carrying the speaking-tube on a branch of said open tube.

The novelty of my invention will be hereinafter more fully set forth, and specifically pointed out in the claims.

In the accompanying drawings, Figure 1 represents my register attached to the transmitter of a telephone in position for use. Fig. 2 is a front elevation of my register detached from the telephone and with the front thereof removed. Fig. 3 is a vertical central sectional elevation of Fig. 2 looking to the left. Fig. 4 is a detail view of the operating-key.

The same letters of reference are used to indicate identical parts in all the figures.

A represents any suitable supporting-bracket journaled either to the wall or a movable base, as in a desk-telephone, and carrying the transmitter B of the usual or any suitable type. The face of the transmitter B is provided with a threaded orifice, into which is screwed the connecting-tube C. This connecting-tube C has three branches, one of which is screwed into the transmitter-case,

and almost directly opposite which the second branch has the mouth-piece D screwed into it, and the lower branch of which carries, attached to it in any suitable manner, the register and sound case E. In this instance the sounding-case is a section of a tube with a front wall *a* and a rear wall *b*, Fig. 3, either or both of which may be removable.

Within the box B is a well-known form of disk register F, the case of which is rigidly and suitably secured to a pillow-block *c* upon the back wall *b* and contains a series of numbered disks in multiples of one from "0" to "9," arranged side by side on a shaft or spindle *d*, suitably journaled in the register-casing and projecting horizontally therefrom, as seen in Fig. 2, where its outer end is journaled in the end of a post or support *e*, projecting from the back piece *b*. The disks of the register are of that well-known type that each one, beginning from the right-hand side, when it has made a complete revolution gives one tenth of a revolution to the next disk on the left, and so on through the series.

Upon the spindle *d* is a ratchet *f*, with which a spring-pawl *g* engages to prevent the spindle from being turned or rotated in but one direction, and projecting from said spindle between the ratchet and register-case are one or more pins *h*. Where there are more than one of these pins, they are set staggered upon the spindle, as seen in Fig. 2, so that as the spindle is rotated they come into action successively upon a corresponding number of pendant metal reeds *i*, suitably secured to a post or other support *j*, projecting from the back plate *b*.

There is a removable key G to be inserted through an opening in the side of the box or case E in line with the spindle *d*, which key fits over a diminished portion of the spindle *d* and has slots *k*, Fig. 4, to engage pins *l* upon the end of the spindle to lock the key to the spindle. When it is desired by the owner of the telephone to prevent any one else from using the register, he can simply withdraw the key and put it in his pocket, and the register then cannot be operated by any one.

The purpose and manner of using a register of this character when connected to a trans-

mitter are as follows: In limited telephone service the subscriber is limited to a certain number of calls in a given time, and an extra charge is made for all calls over said number, and for this reason it becomes necessary to keep a record of the number of calls used. Heretofore the exchange has generally kept the record of calls over a limited-service line; but this system is sometimes unsatisfactory, and particularly so where there is a party-line limited service, for the reason that there is nothing to indicate to the exchange which subscriber on the party-line has made the call. My invention removes these objections, and in use when the exchange is called and the number to which the subscriber wants to talk given the exchange will instruct the subscriber to register, and by means of the sounding-reeds within the register the exchange will be notified that the registering has been done and will then connect the subscriber with the party to whom he wishes to talk, and by means of a reading opening provided in the front of the register-case the subscriber can always keep tab on the number of calls used and not run over his allotted number.

In party-line limited service each of the registers may have a different number of sounding-reeds or the reeds may be differently intoned. This difference either in number of sounds or in tone will immediately inform the operator at the exchange which subscriber on the party-line is calling and she can make her charge accordingly. For example, A, B, and C are all on a party-line limited service, and A's register has two reeds, B's register three, and C's register four, and if B should call up the exchange and register at the proper time his register would sound three strokes, which would immediately inform the exchange that it was subscriber B who was using the line.

Having thus fully described my invention, I claim—

1. In telephone registering mechanism, the combination of a transmitter, a register-case connected therewith and having an opening against the diaphragm thereof, sounding mechanism within said register-case, registering mechanism within said register-case, and means for operating said register and sounding mechanism.

2. In telephone registering mechanism, the combination of a transmitter, a register-case connected therewith and having an opening against the diaphragm thereof, sounding mechanism within said register-case, registering mechanism within said register-case, and means for simultaneously operating said register and sounding mechanism.

3. In telephone registering mechanism, the combination of a transmitter, a case secured thereto by an open tube carrying the mouth-piece, a register within said case having an operating-spindle, a reading-opening in said case for the register, sounding mechanism

within the case operated by the operation of the register, and a key for putting into action said register and sounding mechanism.

4. In telephone registering mechanism, the combination of a transmitter, a case secured thereto by an open tube carrying the mouth-piece, a register within said case having an operating-spindle, a reading-opening in said case for the register, sounding mechanism within the case operated by the operation of the register, and a removable key for putting into action said register and sounding mechanism.

5. In telephone registering mechanism, the combination of a transmitter, a case secured thereto by an open tube carrying the mouth-piece, a register within said case having an operating-spindle, a reading-opening in said case for the register, a sounding-reed within the case operated by the spindle of the register and a removable key for turning said register and spindle, substantially as described.

6. In telephone registering mechanism, the combination of a transmitter, a case secured thereto by an open tube carrying the mouth-piece, a register within said case having an operating-spindle, a reading-opening in said case for the register, a sounding-reed within the case operated by the spindle of the register, and a key for turning said register and spindle, substantially as described.

7. In telephone registering mechanism, the combination of a transmitter, a case secured thereto by an open tube carrying the mouth-piece, a register within said case having an operating-spindle, a reading-opening in said case for the register, a plurality of sounding-reeds within the case operated by the spindle of the register, and a key for turning said register and spindle, substantially as described.

8. In telephone registering mechanism, the combination, of a transmitter, a case secured thereto by an open tube carrying the mouth-piece, a register within said case having an operating-spindle, a reading-opening in said case for the register, a plurality of sounding-reeds within the case operated by the spindle of the register, and a removable key for turning said register and spindle, substantially as described.

9. In telephone registering mechanism, the combination of a transmitter, a case secured thereto by an open tube carrying the mouth-piece, a register within said case having an operating-spindle, a reading-opening in said case for the register, a plurality of sounding-reeds within the case operated successively by the spindle of the register, and a key for turning said register and spindle, substantially as described.

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