

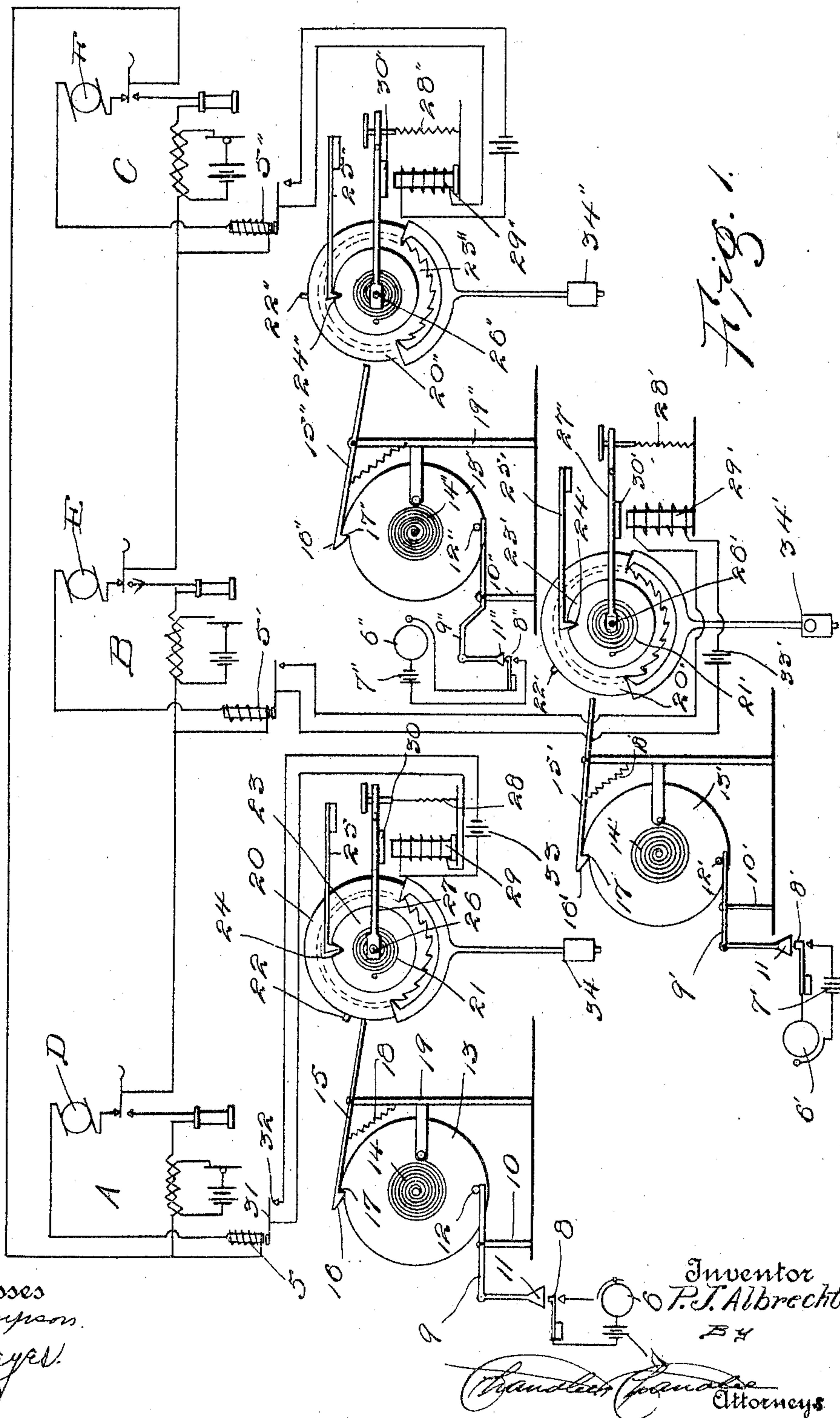
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PATENTED JAN. 10, 1905.

P. J. ALBRECHT.  
SELECTIVE TELEPHONE SYSTEM.

APPLICATION FILED JULY 25, 1904.

2 SHEETS--SHEET 1.



Witnesses  
Cand. Simpson.  
W. C. Keyes.

Inventor  
P. J. Albrecht

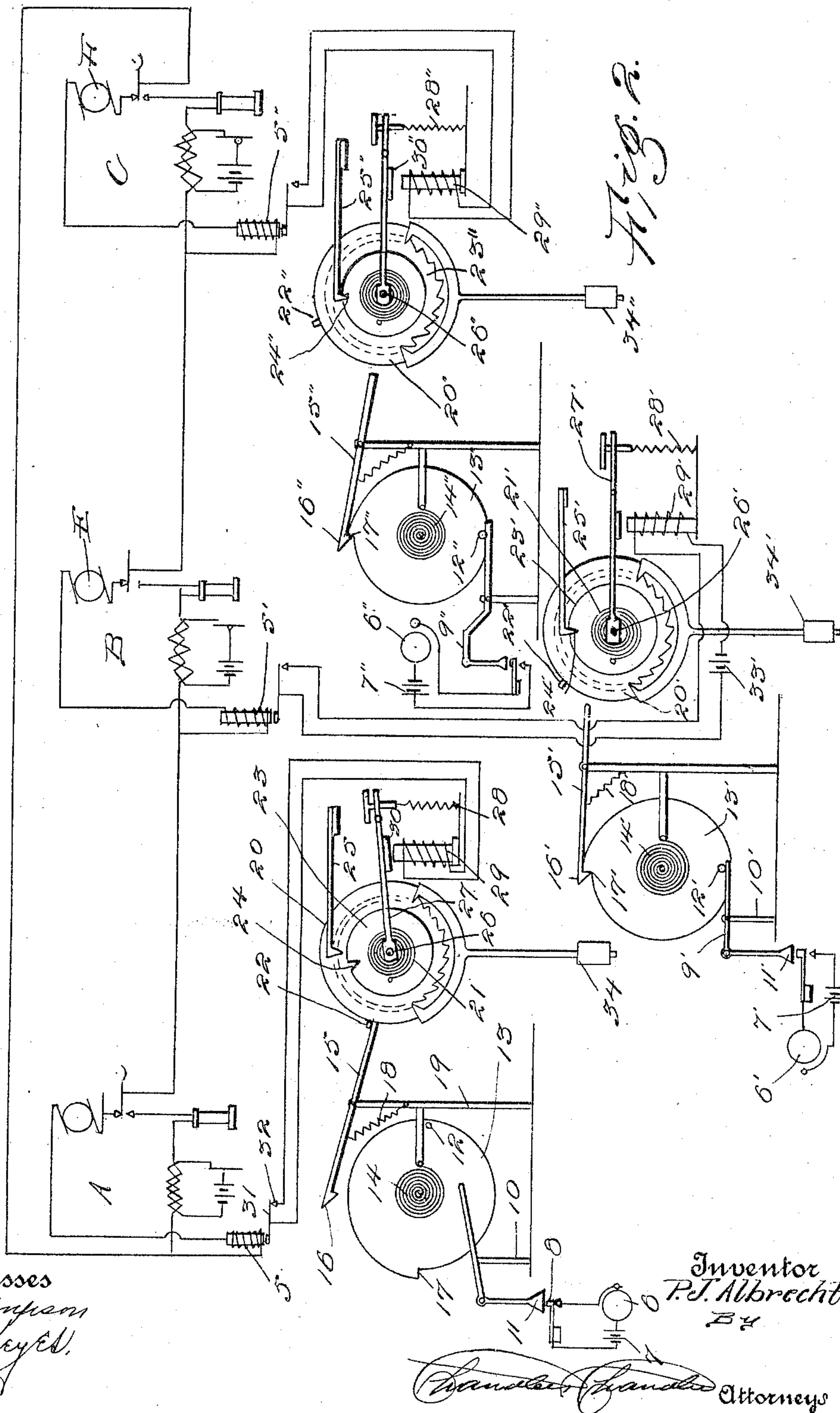
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Attorneys

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Witnesses  
Amos J. Simpson  
W. C. Keyes.

Inventor  
P. J. Albrecht  
BY

Handley Handley Attorneys



# UNITED STATES PATENT OFFICE.

PETER J. ALBRECHT, OF MARION, SOUTH DAKOTA.

## SELECTIVE TELEPHONE SYSTEM.

SPECIFICATION forming part of Letters Patent No. 779,982, dated January 10, 1905.

Application filed July 25, 1904. Serial No. 218,086.

*To all whom it may concern:*

Be it known that I, PETER J. ALBRECHT, a citizen of the United States, residing at Marion, in the county of Turner, State of South Dakota, have invented certain new and useful Improvements in Selective Telephone Systems; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to telephone systems, and more particularly to the means for calling up the different subscribers on the line, the object of the invention being to provide what is known as a "selective" system, wherein any subscriber on a line may be rung up without ringing up the other subscribers.

A further object of the invention provides a system of this nature which will be cheap and simple and at the same time efficient.

In the drawings forming a portion of this specification, and in which like characters of reference indicate similar parts in the several views, Figure 1 is a diagrammatic view showing a system embodying the present invention, the parts being in their inactive positions. Fig. 2 is a view similar to Fig. 1, showing the parts in their active positions.

Referring now to the drawings, there is shown a system including three sets of telephone instruments A, B, and C, each set of instruments having a magneto, (indicated at D, E, and F, respectively.) In place of the usual magneto-bell in the ringing-circuit there is at each of the stations an electromagnet 5, 5', and 5'', respectively, these magnets and the magnetos being switched into and out of the talking-line in the usual manner, the specific switching mechanism for this purpose being unnecessary to illustrate.

The equipment of each subscriber's station is the same as that of every other subscriber's station, so that a description of one will suffice for them all, there being one detail modified in each structure, which is the location of the releasing-pin.

For purposes of convenience in description the parts at the station A will be given basic numerals, while the parts at the station B cor-

responding will be given the same numerals with primes, while the same numerals referring to like parts at station C will be given seconds.

Referring then more particularly to station A, it will be noted that there is employed a common type of electric bell 6, which is in a local circuit including a battery 7 and a push-button 8. A lever 9 is pivoted upon an upright 10, and at one end thereof is hung a weight 11, which is sufficiently heavy to actuate the push-button 8 and close the circuit of the battery 7 when permitted to rest upon the push-button. The lever is held normally with the weight 11 in raised or inactive position by means of the retaining-pin 12 upon the face of the disk 13, which latter is provided with a spring 14, which tends to rotate the disk and carry the retaining-pin from engagement with the lever. The disk 13 is held normally against rotation under the influence of the spring 14 by means of the latch-lever 15, having a terminal hook 16, which engages the lug 17 on the periphery of the disk. A helical spring 18, connected to the latch-lever 15 and to the post 19, on which it is pivoted, holds the latch-lever normally and yieldably in engaging position.

To actuate the lever 15 and release the disk 13, an actuating-disk 20 is provided, having a helical spring 21, which tends to rotate the disk. A pin 22 is engaged in the periphery of the disk 20, and when the disk is rotated under the influence of its spring the pin 22 is carried against the adjacent end of the latch-lever 15 and moves it, with its hook, from engagement with the lug 17. In the periphery of the hub 23 of the disk 20 is a notch 24, with which normally engages an arm 25 to hold the disk against rotation.

The disk 20 has trunnions 26, which are mounted in journal-boxes at the ends of a pivoted yoke 27, the disk being movable with the yoke to carry it away from the arm 25, so as to disengage the arm from the notch 24, the disk being held normally and yieldably in the position shown in Fig. 1 by means of a helical spring 28, connected with the yoke, as illustrated. An electromagnet 29 is disposed to attract the armature 30, carried by the yoke



27, to draw the yoke, with the disk, into disengaged position when the magnet is energized. The electromagnet 5 is one member of a relay comprising an armature-lever 31, which when the magnet 5 is energized is moved into contact with the point 32, so as to close the local circuit of a battery 33, which circuit includes the magnet 29.

With the construction described it will be seen that as soon as the magnet 5 is energized the disk 20 is drawn downwardly to disengage the arm 25, which latter is of spring material. As soon as the disk 20 is drawn down it begins to rotate, and when it is released and rises it continues to rotate until the notched portion of the hub reaches the arm 25 again, when the disk stops. The pin 22 is of such length that when the disk is drawn downwardly it will not strike the latch-lever 15, and consequently said lever is only actuated when the disk is in raised position. It will be noted that the pins 22, 22', and 22'' of the several stations are different angular distances from the notches 24, 24', and 24'', respectively. When, therefore, it is desired to sound the bell 6 at the station A, the calling-magneto is operated to quickly release the disk 20 and then return it to permit its pin 22 to strike the latch-lever 15 and then to operate the magneto again until the pins 22' and 22'' have passed their respective latch-levers 15' and 15''. Each of the disks 20, 20', and 20'' is provided with a governor, which may be in the form of a pendulum 34, these pendulums being set to operate substantially in unison, so that the disks move substantially in unison, and each operator by watching his own disk is enabled to tell the positions of the other disks and when to operate his magneto to obtain the desired results. It will be understood that in practice modifications of the specific construction shown may be made and any suitable materials and proportions may be used for the various parts without departing from the spirit of the invention.

What is claimed is—

1. In a selective telephone system, the combination with a plurality of stations each having a relay in its ringing-circuit, of a local signal-circuit at each station controlled by the relay, a local signal-circuit at each station, means for closing the signal-circuit, means for releasing the closing means, means for actuating the releasing means, means for holding the releasing means normally inactive and with respect to which said releasing means is movable into and out of engagement with the holding means, and an electromagnet in the

secondary circuit of the relay and under the influence of which the actuating means is movable out of engagement with the holding means, the actuating means being adapted for successive operation.

2. In a selective telephone system, the combination with a plurality of stations each having a relay in its ringing-circuit, of a local signal-circuit at each station including a push-button, means for actuating the push-button, a lever connected with the push-button-actuating means, a rotatable disk, a pin carried by the disk and disposed to engage and hold the lever with the push-button-actuating means inactive, means for rotating the disk with its pin out of engagement with the lever, a latch-lever disposed to hold the disk normally against rotation, a second rotatable disk at each station, means for rotating the second disk, means for holding the second disk normally against rotation, a radial pin upon the periphery of each of the second disks, said pins having different positions upon the different disks and adapted to engage their respective latch-levers and move them to inactive positions when their respective second disks are rotated, and electromechanical means in the secondary circuit of each relay for shifting the corresponding second disk out of engagement with its holding means, at which times said pins are movable free from the latch-levers.

3. In a selective telephone system, the combination with a plurality of stations each having a relay in its ringing-circuit, of a local circuit at each station controlled by the relay, a local signal-circuit at each station, means for closing the signal-circuit, means for releasing the closing means, means for actuating the releasing means, means for holding the releasing means normally inactive and with respect to which said releasing means is movable into and out of engagement with the holding means, an electromagnet in the secondary circuit of the relay and under the influence of which the actuating means is movable out of engagement with the holding means and out of active relation to the releasing means, and means for returning the actuating means to its normal position when the influence of the electromagnet is removed.

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

PETER J. ALBRECHT.

Witnesses:

H. VAN RUSCHEN,  
JAKOB ALBRECHT.