

No. 808,777.

PATENTED JAN. 2, 1906.

A. E. PETERMAN.
TELEGRAPH KEY.

APPLICATION FILED OCT. 13, 1905.

2 SHEETS—SHEET 1.

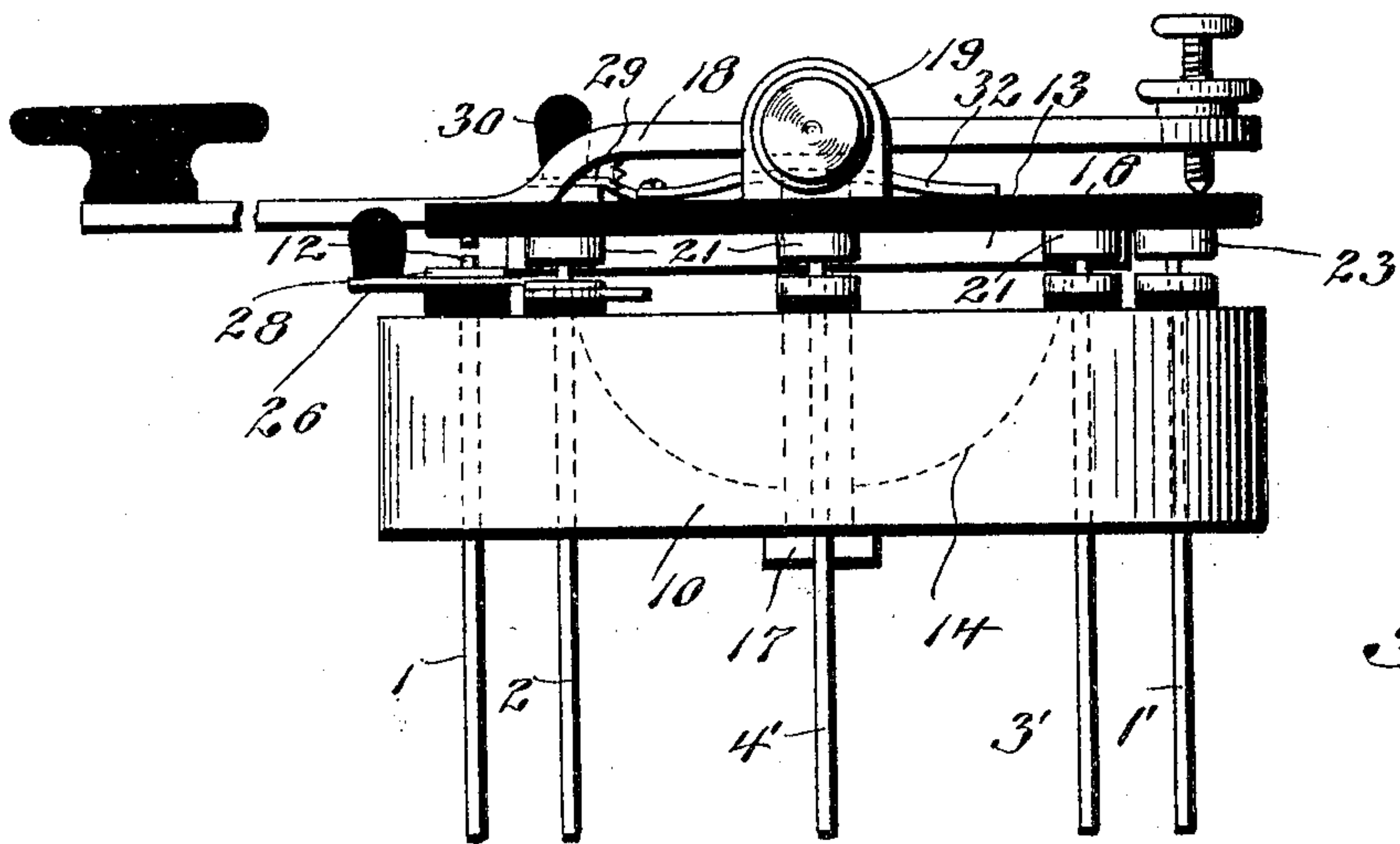


Fig. 1.

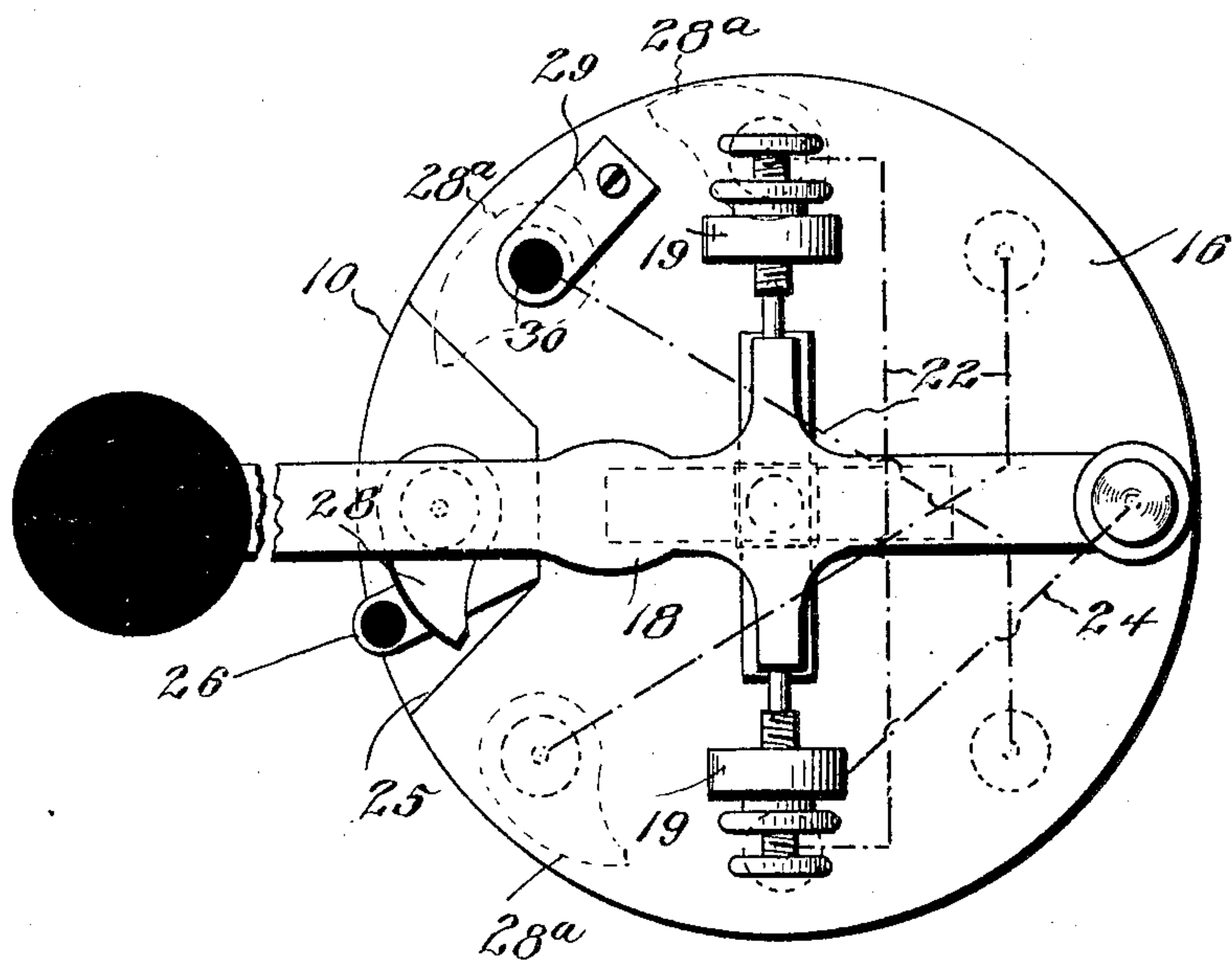


Fig. 2.

Addison E. Peterman,
Inventor

by
Milo B. Stevens and Co.
Attorneys.

Witnesses
O. E. Murray.
M. A. Schmidt.

No. 808,777.

PATENTED JAN. 2, 1906.

A. E. PETERMAN.
TELEGRAPH KEY.

APPLICATION FILED OCT. 13, 1905.

2 SHEETS—SHEET 2.

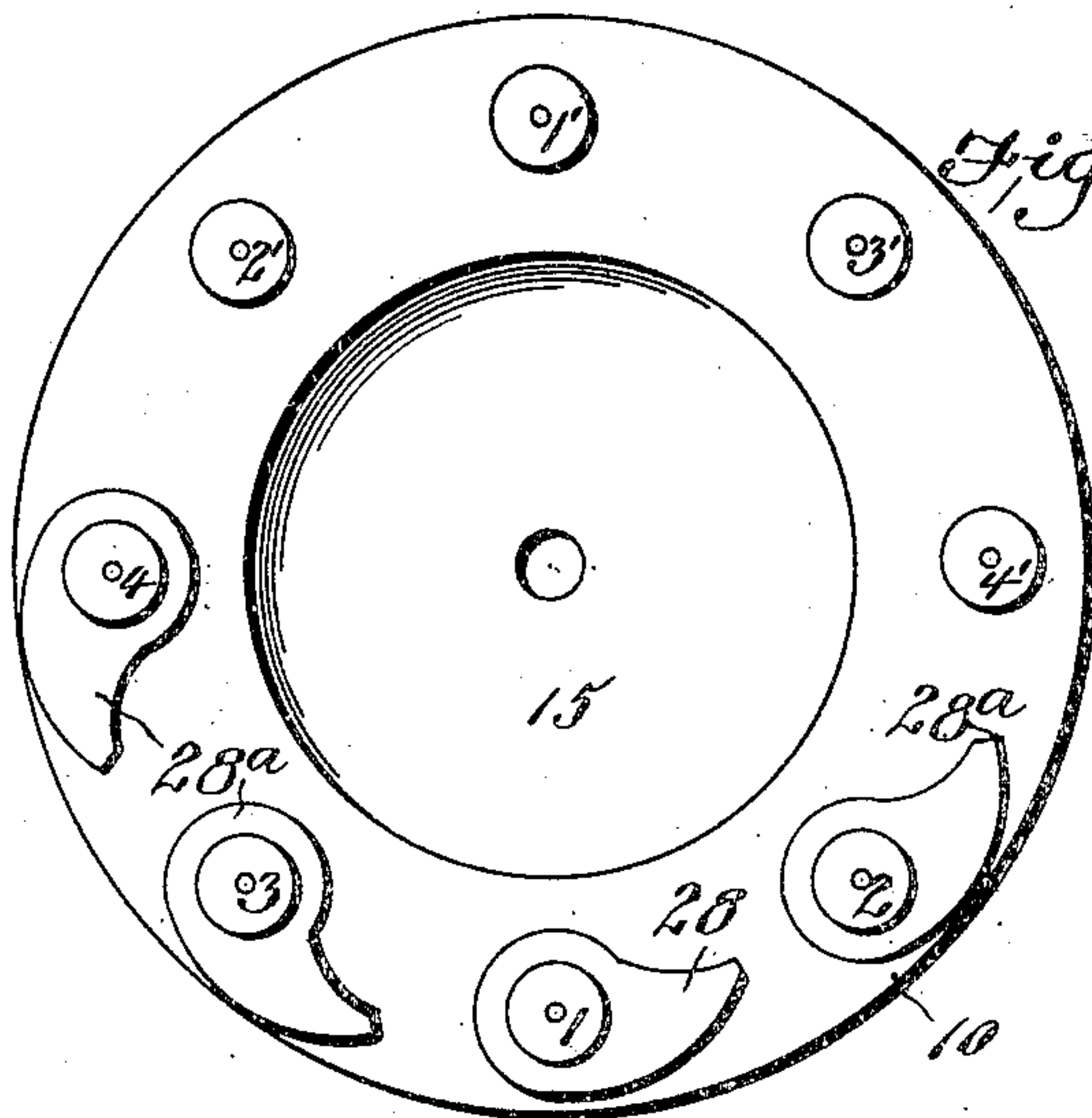


Fig. 4.

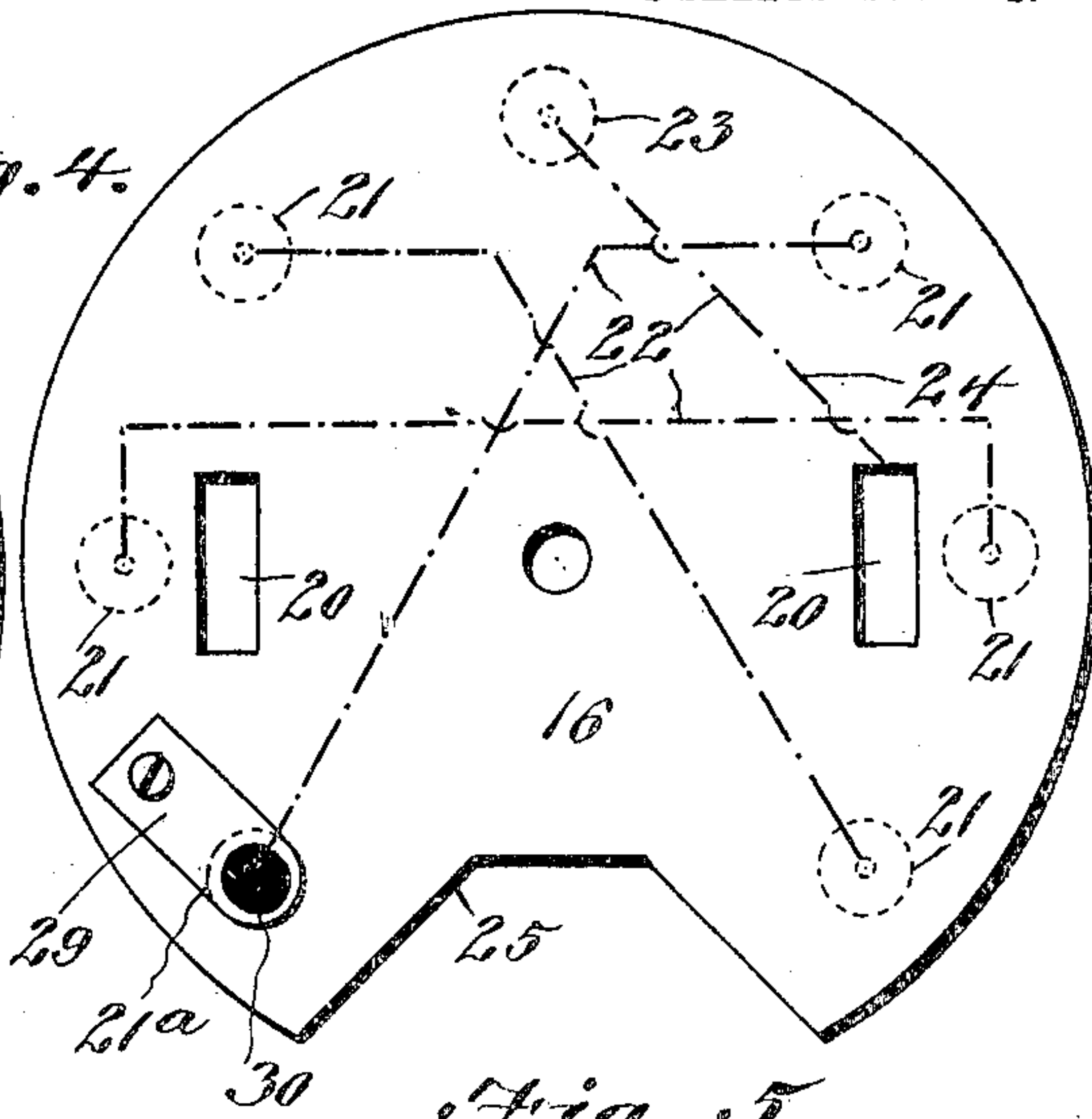


Fig. 5.

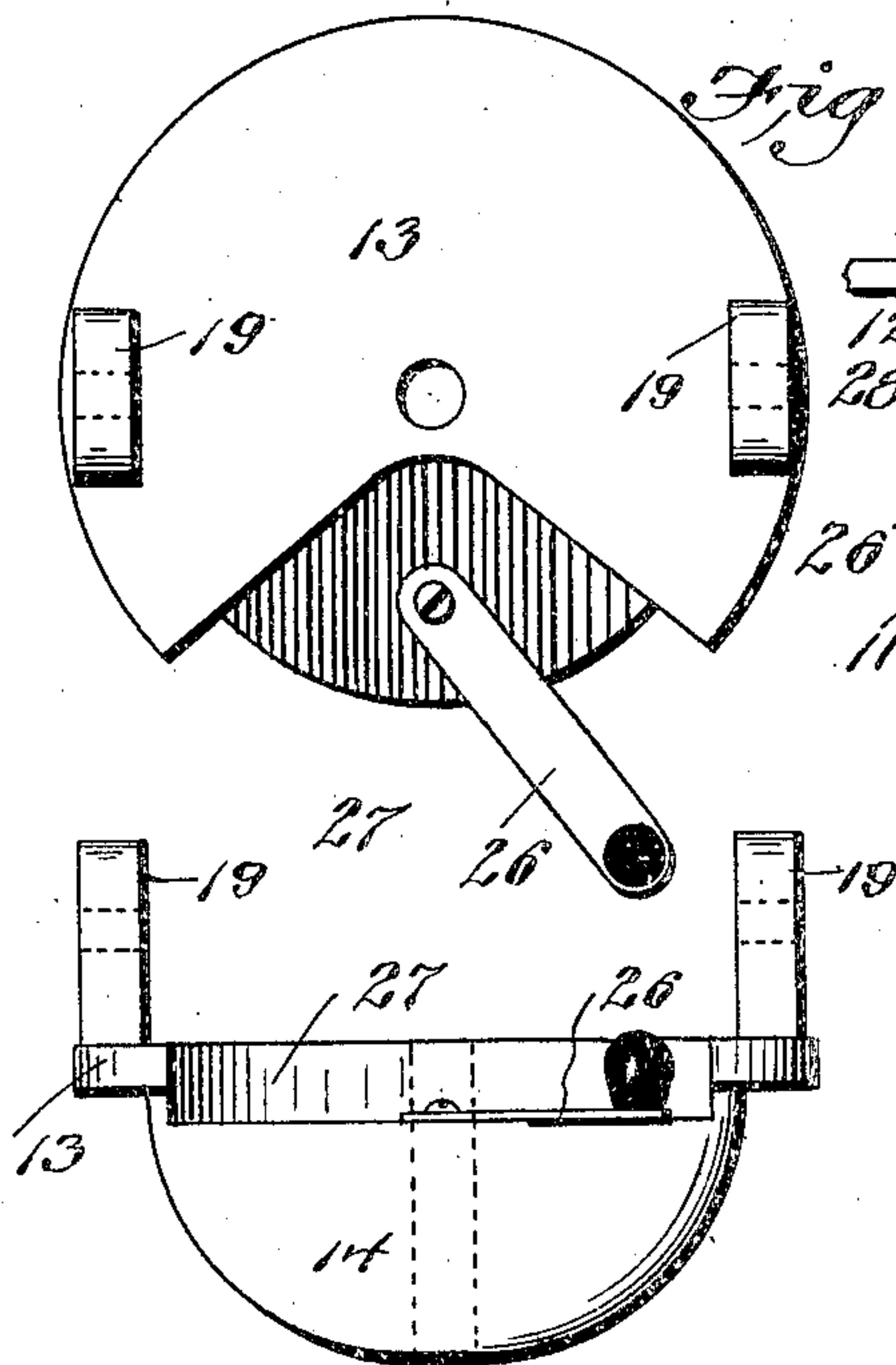


Fig. 6.

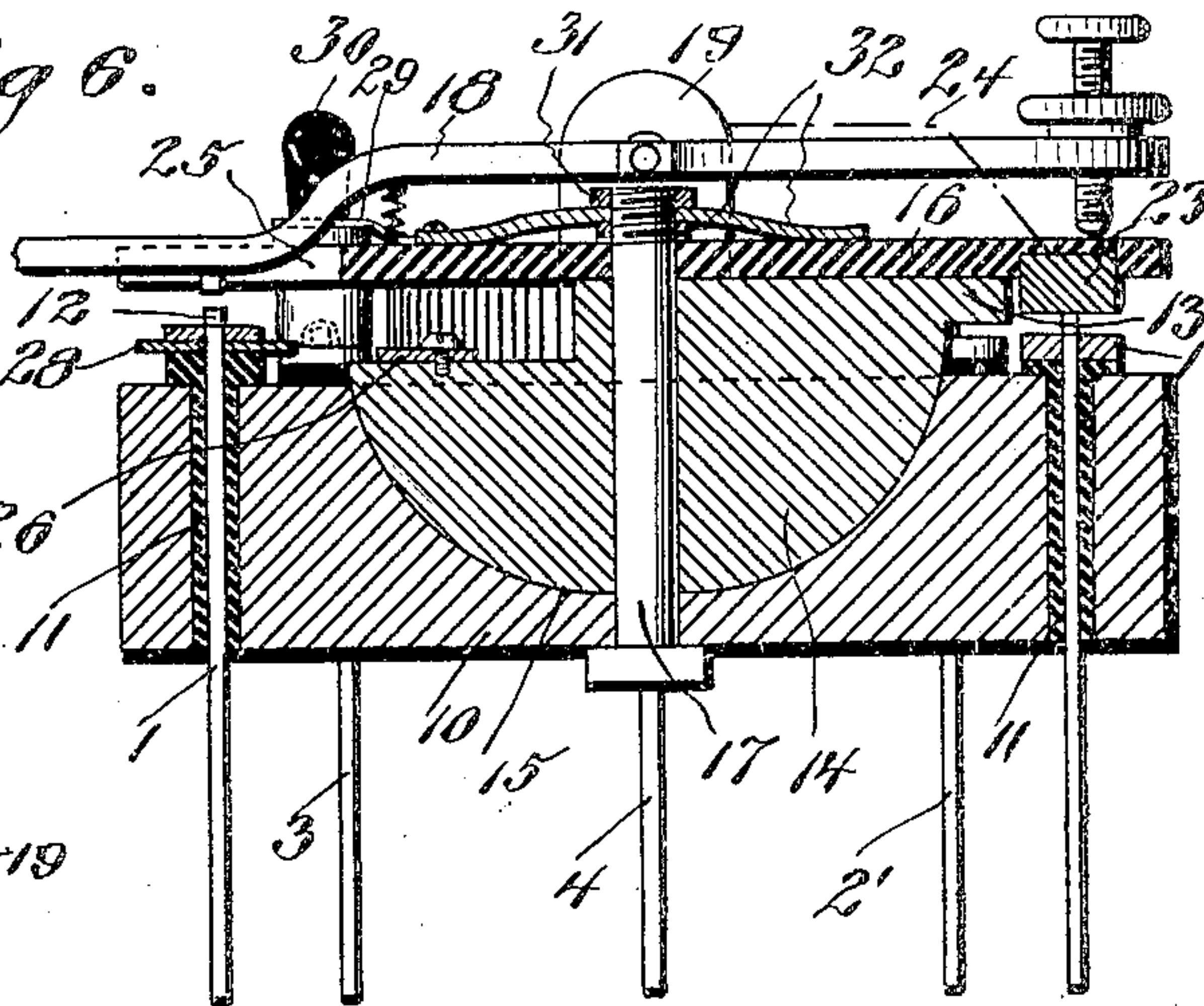


Fig. 7.

Witnesses
O. E. Murray
Maschmidt

Addison E. Peterman,
Inventor
by
Milo B. Stevens and Co.
Attorneys

UNITED STATES PATENT OFFICE.

ADDISON EUGENE PETERMAN, OF REPTON, ALABAMA.

TELEGRAPH-KEY.

No. 808,777.

Specification of Letters Patent.

Patented Jan. 2, 1906.

Application filed October 13, 1905. Serial No. 282,674.

To all whom it may concern:

Be it known that I, ADDISON EUGENE PETERMAN, a citizen of the United States, residing at Repton, in the county of Conecuh and State of Alabama, have invented new and useful Improvements in Telegraph-Keys, of which the following is a specification.

My invention is a telegraph-key, and has for its object certain novel features of construction whereby a single key may be used to operate a number of circuits.

The invention comprises a base having a number of main-line contacts, each of which is connected to a different line. The base is also fitted with a corresponding number of contacts, each of which is connected to a relay controlling a local circuit which operates the sounder. An ordinary key is carried by a turn-table, so as to operate on any one of the main-line contacts. Means are also provided for keeping all the other circuits closed when one of the circuits is opened for sending, so that the operator can hear his call if needed on the other wires.

In the accompanying drawings, Figure 1 is a side elevation of the instrument. Fig. 2 is a plan view. Fig. 3 is a central vertical section. Fig. 4 is a plan view of the base. Figs. 5 and 6 are plan views of the parts constituting the turn-table. Fig. 7 is an elevation of the part shown in Fig. 6.

Referring specifically to the drawings, 10 denotes the base of the instrument, in which are fitted a number of main-line contacts 1, 2, 3, and 4. At diametrically opposite points the base is fitted with a like number of contacts 1', 2', 3', and 4', which are in connection with the usual relay controlling a local circuit which operates a sounder in the ordinary manner. The contacts are all insulated from the base, as indicated at 11. The main-line contacts have platinum points or anvils 12, which cooperate with the platinum point on the key-lever to close the circuits in the ordinary manner.

At 13 is indicated a block having at the bottom a projection 14, which extends into and is shaped to fit snugly in a cup-shaped socket 15, formed in the top of the base 10. On top of the block 13 a disk 16 of non-conducting material is placed. The block and disk form a turn-table, being secured to the base 10 by a central bolt 17. The key-lever 18 is carried by the turn-table, being mounted in bearing-ears 19 in the usual manner, said ears being formed integral with the block 13 and extend-

ing through holes 20 in the disk 16. The disk 16 carries a number of contacts 21, which are arranged in pairs, each member of each pair being diametrically opposite each other and electrically connected. Said connection may be by wires embedded in the disk, as indicated by dotted lines 22. The disk also carries a contact 23, which is electrically connected by a wire 24 or other suitable means to one of the ears 19 or other part of the key. Opposite the contact 23 the disk is recessed or cut away, as at 25, through which recess the key-lever extends. The contacts 21 and 23 are to be in contact with those of the base, so that all circuits except the one represented by the contact which happens to be below the recess 25 are closed. By means of this arrangement when the turn-table is shifted to bring the key-lever into position above any one of the main-line contacts the circuit of that contact will be opened, while at the same time all the other circuits will be held closed. It is therefore possible to work any one of the wires without interrupting the others.

When the instrument is not in use, the turn-table will preferably be in the position shown in Figs. 1 and 2, the key-lever being above the contact 1. As in this position the circuit of said contact would be open, a switch 26 is provided for closing it. The switch is pivoted in a recess 27, made in the top of the block 13, and engages a lip 28 on the contact 1. When sending on this circuit, the switch 26 will be opened, but when receiving the switch will be closed. The contacts 2, 3, and 4 are also provided with lips 28^a for the switch 26 to avoid the necessity of shifting the key back to contact 1 when a circuit other than that of contact 1 is being worked. The switch is sufficiently flexible to permit it to pass over the main-line contacts when shifting the turn-table.

The contacts 21 and 23 are firmly embedded in the disk 16, except one, which is indicated at 21^a. This contact works loosely through an opening in the disk, being fastened at its top end to a flat spring 29, secured to the top of the disk. The spring presses the contact firmly against the contact on the base and prevents accidental shifting or displacement of the turn-table when the instrument is in use. A head 30 of insulation is provided for lifting the contact when the turn-table is to be shifted around. The upper end of the bolt 17 extends above the disk 16 and is threaded to receive a securing-nut 31, under which nut are

placed flat springs 32, which bear on the top of the disk and serve to hold the turn-table firmly in position.

The circuits through the instrument may be traced as follows: When the key-lever is in a position as shown in Figs. 1 and 2, the current enters by the contact 1 and flows through the switch 26, supporting-frame of the key-lever, wire 24, contact 23, contact 1', and thence to the relay. To send, the switch 26 is opened, which breaks this circuit, and the key-lever is then operated in the usual manner, its platinum point being brought down in contact with the point 12. When the turn-table is shifted to bring the key-lever above a different main-line contact, the current flows from said contact through the key-lever and frame, wire 24, contact 23, and relay-contact opposite the main-line contact which is being worked.

Having thus described my invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. A telegraph-key comprising a base having a plurality of contacts representing different lines; a turn-table mounted on the base and carrying a key-lever to operate any one of the lines; and means carried by the turn-table to hold the other lines closed.

2. A telegraph-key comprising a base having a plurality of contacts arranged in pairs, and each pair representing a different line; a

turn-table mounted on the base and carrying a key-lever to operate any one of the lines; and contacts carried by the turn-table and bearing on those on the base, one of the contacts on the turn-table being in electrical connection with the key-lever, and the others being arranged in electrically-connected pairs.

3. A telegraph-key comprising a base having a plurality of contacts arranged in pairs, each pair representing a different line and the members of each pair being disposed diametrically opposite each other; a turn-table mounted on the base and carrying a key-lever to operate any one of the lines; a switch carried by the turn-table and arranged to engage one of the contacts on the base; a contact on the turn-table opposite the switch and bearing on one of the contacts on the base, and electrically connected to the key-lever; and a plurality of contacts carried by the turn-table and bearing on the other contacts of the base, and arranged in pairs each member thereof being diametrically opposite each other and electrically connected.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ADDISON EUGENE PETERMAN.

Witnesses:

JOHN ALFRED MILLEN,
RALPH WITMAN.