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APPARATUS FOR TRANSMITTING MESSAGES.

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1,280,566. Patented Oct. 1, 1918.

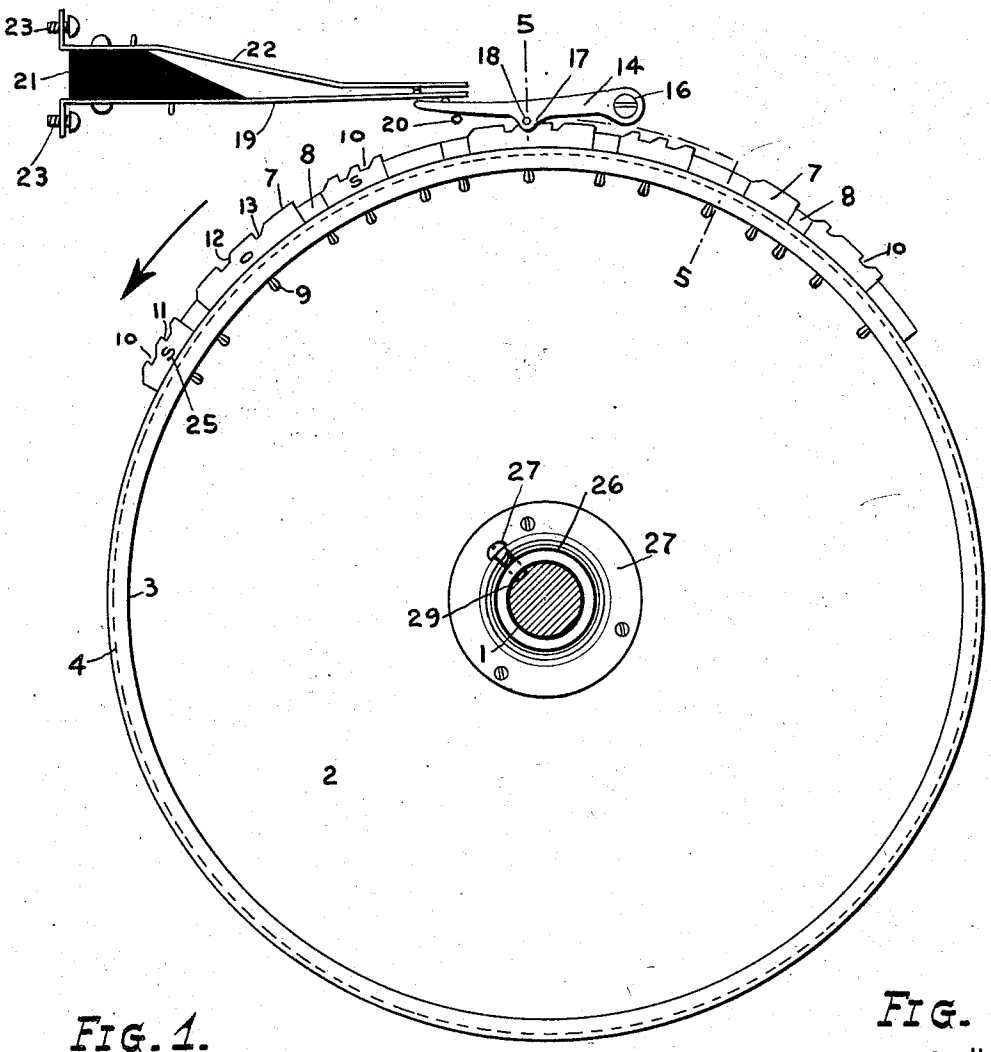


FIG. 1.



FIG. 2.

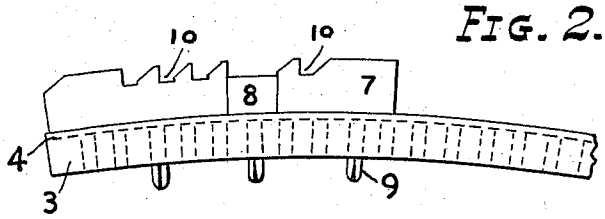


FIG. 3.

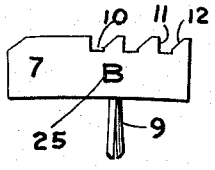


FIG. 4.

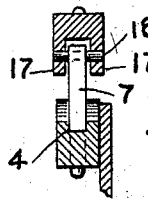


FIG. 5.

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APPARATUS FOR TRANSMITTING MESSAGES.

1,280,566. Specification of Letters Patent. Patented Oct. 1, 1918.

Application filed October 3, 1917. Serial No. 194,454.

To all whom it may concern:

Be it known that we, JOHN J. SHERRY and JOHN L. DU FRANE, citizens of the United States, residing at Oakland, in the county of Alameda and State of California, have invented certain new and useful Improvements in Apparatus for Transmitting Messages, of which the following is a specification.

The present invention is an improvement in means for sending messages telegraphic or wireless.

The principal object of the invention is to provide a sending apparatus with which one unskilled in the art of transmitting or one unfamiliar with the codes may send a message either by telegraph or wireless relay.

A further object is to provide a means of repeating the message indefinitely after the apparatus is set without human attention.

Obviously the accomplishment of these objects will result in a great improvement in the art and will be the means of saving life in many instances where wireless is used.

For instance, in the case of a ship afire at sea, an operator may, by using this device, arrange a distress signal to repeat indefinitely after the ship has become untenable to human occupation. An abandoned ship may be made to repeat the distress call and give its name and position as long as it is afloat, and the survivors benefit by the signals even though they may have abandoned the ship sometime previous to the picking up of the signal by relief ships.

Commercially this device will be of great benefit as its use will enable a captain or clerk to operate the wireless in case the operator is incapacitated.

The aforementioned objects are fully accomplished in the novel structure described in the following specification and illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of our improved sending apparatus.

Fig. 2 is a fragmentary view of the periphery of an impulse wheel.

Fig. 3 is a side view of same with character forming slugs in place therein.

Fig. 4 is a side view of a character forming slug.

Fig. 5 is a section taken on the line 5—5 of Fig. 1.

Referring to the drawing, 1 indicates a shaft driven by any motor, clockwork or suitable train of gears, preferably a weight driven gearing.

To the shaft 1 is secured a circular disk 2. Suitably secured to one side of the disk 2 is a ring 3 having on its periphery a groove 4. The bottom of the groove 4 is provided with a series of holes 6 bored radially and extending through the ring.

The purpose of the groove 4 and holes 6 is to receive and retain character forming slugs 7 and spacing slugs 8. The slugs 7 and 8 have circular top and bottom edges adapted to fit the groove 4, the circular edges being coaxial with the ring 3.

The body portion of the slugs 7 and 8 are arranged to easily enter the groove 4 and are kept in place therein by pins 9 which are rounded at the base for easy entrance into holes 6 and are split and sprung slightly apart so that they expand after being forced through holes 6 and prevent the slugs from falling out as the disk 2 rotates.

The upper edges of the slugs 7 are provided with notches 10 having one vertical wall 11 and one oblique wall 12 and a bottom wall 13. The slugs 8 are on a level as regards height with the bottom walls 13 of the notches 10.

The purpose of this construction is to operate, when the disk 2 is rotated in the direction of the arrow in Fig. 1, a pawl 14 pivoted on a bolt 16. The pawl 14 is provided with two lips 17 extending downward on either side of the slugs 7.

Journaled in the lips 17 is a pin 18 adapted to traverse the upper surfaces of the slugs as they are rotated. It will be seen that the pawl will rise as the pin 18 travels up the oblique walls 12 of the notches and drops as it encounters the vertical wall 11.

The pawl 14 is normally depressed against the edges of the slugs by a spring clip 19 secured to a piece 21 of insulative material. As the pawl 14 presses up the clip 19 it contacts with a clip 22 also connected with the insulated piece 21.

In order to support pawl 14 and prevent its interference in case of a gap in a message, we provide a stationary pin 20 suitably supported to a wall or portion of the device.

The ends of the clips 19 and 22 are provided with binding posts 23 which are connected with the wires of a telegraph line or with a relay and thence to a key in case of a wireless connection. The slugs 7 are of dif-

ferent lengths to form stops or spaces between letters or between words as desired.

Each of the slugs 7 is stamped with the alphabetical or code equivalent of the character it represents, as shown at 24.

In order to easily change disks or messages thereon, we have provided a collar 26, the flange 27 of which is screwed to disk 2. A set screw 27 threaded into a hole in the collar engages a groove 28 in shaft 1.

What we claim as new and wish to cover by Letters Patent is:—

A device for transmitting telegraphic or wireless messages comprising a driven shaft, a disk removably attached to said shaft, a ring secured to said disk, said ring provided with a groove in its periphery, the bottom of said groove provided with holes and bored through said ring in radial directions coaxial with said shaft, segmental slugs of a width to be removably engaged by said groove, said slugs provided with pins on the lower surfaces to extend through said holes in the bottom of said groove, said pins being slitted and spread apart to be removably engaged by said holes, the said slugs having on their outer or greater edge notches arranged in character forming position and adapted to vibrate, when revolved, a pawl suitably pivoted at one end and arranged to contact when reciprocated, spring clips suitably connected to an insulated block, and binding posts on said spring clips for wire connection.

In testimony whereof we affix our signatures.

JOHN J. SHERRY.
JOHN L. DU FRANE.