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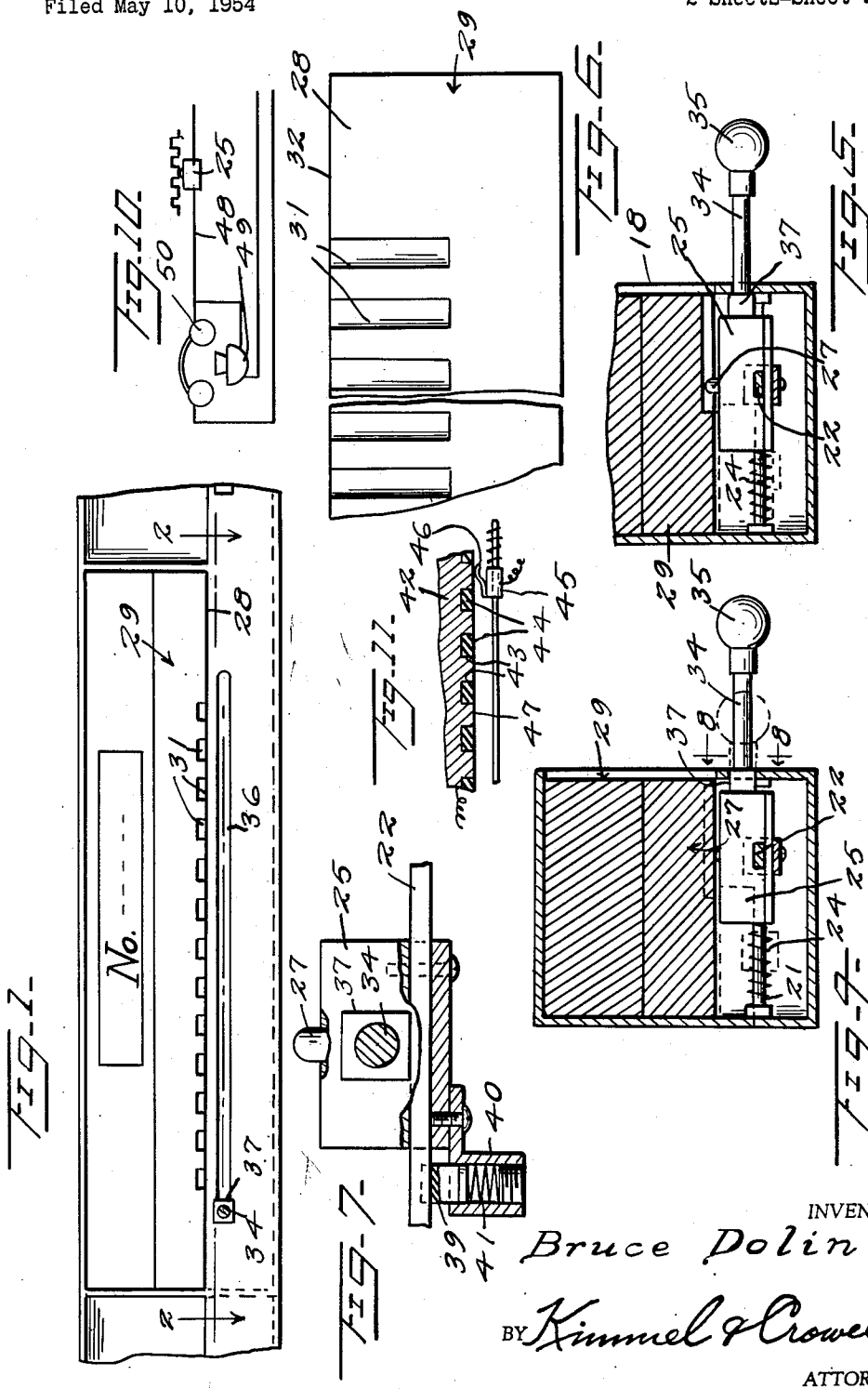
B. DOLIN

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AUTOMATIC DIALER FOR TELEPHONES

Filed May 10, 1954

2 Sheets-Sheet 1



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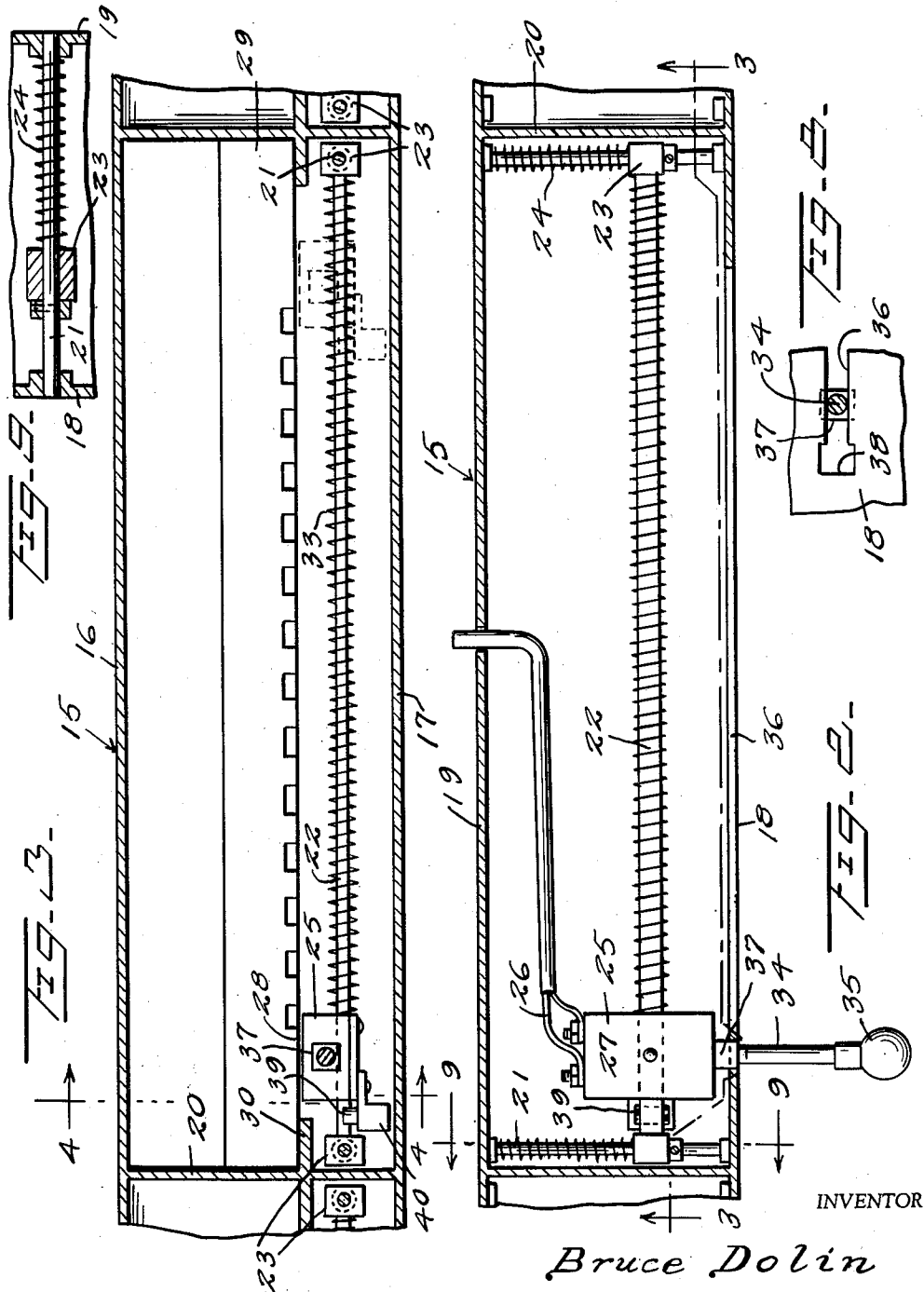
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AUTOMATIC DIALER FOR TELEPHONES

Bruce Dolin, Brooklyn, N. Y.

Application May 10, 1954, Serial No. 428,590

4 Claims. (Cl. 179-90)

This invention relates to an attachment for dial telephones.

An object of this invention is to provide an attachment for dial telephones whereby a predetermined telephone may be automatically dialed without turning and accumulating the number on the dial. It is well known that in an emergency where it is desired to quickly call the fire department, police, doctor or the like, a delay usually occurs in looking up the number and then dialing such number, with the possibility that a wrong number will be dialed. It is, therefore, an object of this invention to provide an attachment which is pre-set for calling a particular number so that the possibility of error is eliminated.

Another object of this invention is to provide an attachment for dial telephones which is simple in construction, positive in action, and capable of producing the necessary impulses to actuate the automatic mechanism.

With an attachment as herein disclosed there may be an attachment for each emergency number so that a particular number may be called or dialed by actuating a particular attachment.

With the above and other objects in view, my invention consists in the arrangement, combination and details of construction disclosed in the drawings and specification, and then more particularly pointed out in the appended claims.

In the drawings:

Figure 1 is a detail front elevation of a dialing unit constructed according to an embodiment of this invention.

Figure 2 is a sectional view taken on the line 2-2 of Figure 1.

Figure 3 is a sectional view taken on the line 3-3 of Figure 2.

Figure 4 is a sectional view taken on the line 4-4 of Figure 3.

Figure 5 is a fragmentary transverse section showing the switch element in operative dialing position.

Figure 6 is a fragmentary bottom plan of the switch operating member.

Figure 7 is a fragmentary front elevation, partly in section, of the switch element.

Figure 8 is a fragmentary sectional view taken on the line 8-8 of Figure 4.

Figure 9 is a fragmentary sectional view taken on the line 9-9 of Figure 2.

Figure 10 is a diagrammatic view of the electric circuit embodied in this invention.

Figure 11 is a fragmentary longitudinal section showing a modified form of this invention.

Referring to the drawings, the numeral 15 designates generally a housing which is formed of a top wall 16, a bottom wall 17, front and rear walls 18 and 19, and opposite end walls 20.

The housing 15 has disposed therein a pair of transversely extending guide bars 21 fixed between the front and rear walls 18 and 19 closely adjacent the end walls 20.

An elongated sliding bar 22 having end blocks 23 slidable on the guide bars 21 is positioned in the housing

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15 and the slide bar 22 is normally urged to a forward position by means of springs 24 engaging about the transverse guide bars 21.

The longitudinal guide and slide bar 22 has slidably mounted thereon a switch member 25 which is normally disposed in circuit breaking position and is adapted to be connected by means of a pair of conductors 26 in the telephone system. The telephone system is of the automatic dial type.

The switch 25 includes an operating button 27 extending upwardly therefrom which is adapted to slidably engage the lower side 28 of an elongated switch operating bar 29.

When the switch button 27 engages the lower side 28 of the operator 29 between the notches 31, switch 25 will be disposed in circuit closing position. When the button 27 engages in a notch 31 the switch 25 will be disposed in circuit breaking position.

In this manner as switch 25 is moved lengthwise of the guide bar 22 with button 27 alternately engaging in notches 31 and the lower side 28 of operator 29 switch 25 will produce electric impulses of a predetermined number which will coincide with the dialing number and code of a particular telephone such as a police, ambulance, or fire department telephone.

The switch 25 is constantly urged in one direction such as to the left, as viewed in Figures 1, 2, and 3, by means of a spring 33 which engages about the guide bar 22.

Switch 25 has secured thereto a forwardly projecting rod 34 having a knob 35 at its outer or forward end. The front wall 18 of housing 15 is provided with an elongated slot 36 through which the rod 34 is adapted to loosely engage, and in order to provide a means whereby the switch 25 cannot be moved to the right during the initial operation of the device, I have provided a polygonal bushing 37 disposed at the inner end of the rod 34 which in the starting position of switch 25 is adapted to project through an enlarged polygonal opening 38 formed at one end of the slot 36.

The switch 25 after being moved inwardly by pushing on the knob 35 and then being moved to the right and released for forward movement by action of the springs 24 is retarded in its alternate circuit closing and breaking operation by means of a retarding member 39 carried by a housing 40.

The retarding member 39 is here disclosed as a friction braking element engaging the lower side of the slide bar 22 and braking member 39 is constantly urged upwardly to braking position by means of a tension spring 41.

The switch 25 is retarded in its alternate circuit closing and breaking movement so that there will be a sufficient time lapse in communicating the impulses to the telephone system for effecting operation of the automatic dialing means forming part of the dialing system.

Referring now to Figure 11, there is disclosed a modified form of this invention embodying a switch operator 42 which is provided with a plurality of notches 43 and insulating means 44 is fixed in each notch 43.

The switch in this form of invention embodies the stationary terminal 42 and a movement notch member 45 having a wiper 46 engaging the lower side 47 of the switch member 42.

In other respects the structure shown in Figure 11 will be identical to that shown in Figures 1 to 9, inclusive.

Referring to Figure 10, the switch 25 is interposed in one side 48 of the telephone system, which side is common to the transmitter 49 and the receiver 50.

In the use and operation of this device when it is desired to dial the number for which the device has been designed, knob 35 is pushed inwardly from its normal position at the left of the housing 15 so that switch 25 with bar 22 will be moved rearwardly to a point where

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knob 27 will be positioned rearwardly of the rear ends of notches 31.

Knob 35 is then manually moved to the right and to the opposite end of the housing 15. Knob 35 may then be released whereupon springs 24 will move bar 22 forwardly so that when spring 33 is active switch 25 will be moved to the left with button 27 alternately engaging in notches 31.

During the time that the switch 25 is manually moved inwardly and then to the right end of housing 15, the telephone circuit will be unbroken inasmuch as knob 27 will be slidingly engaging the unbroken lower side 23 of switch operator 29.

The movement of switch 25 by spring 33 is herein disclosed as being retarded by the brake element 39 which is a friction brake, but it will be understood that any suitable retarding means may be used for retarding the movement of switch 25 in its dialing cycle.

It will be understood that in practice there may be a number of these dialing units grouped together for use in dialing certain telephone numbers which are considered as emergency numbers so that such emergency number may be quickly and accurately dialed by operating the knob of the desired dialing unit.

What is claimed is:

1. An automatic dialing attachment for interposing in an automatic telephone system comprising a housing, a pair of transversely disposed guide bars fixed in said housing adjacent each end thereof, a longitudinal guide bar in said housing formed with a slide block at each end

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each slidably engaging one of said pair of guide bars, springs about said pair of guide bars normally urging said longitudinal bar forwardly, a switch in said housing spring-pressed to a circuit breaking position, said switch slidably engaging said longitudinal bar, a spring about said longitudinal bar constantly urging said switch toward one end of said housing, a manual operator fixed to said switch and projecting from said housing, and means carried by said housing engaging said switch to effect alternate operation of said switch to circuit closing and circuit breaking position upon movement of said switch in one direction.

2. A device as claimed in claim 1 in which said switch includes a button operatively associated with said switch and with said button extending from said switch for engagement with said means carried by said housing.

3. A device as claimed in claim 1 in which said means carried by said housing includes a longitudinal member having a series of switch operating detents formed therein.

4. A device as claimed in claim 1 in which said means carried by said housing includes a multiplicity of switch operating elements longitudinally disposed along said means.

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