

1,047,090.

S. LAPIN.
STAGE NOISE CABINET.
APPLICATION FILED AUG. 5, 1911.

Patented Dec. 10, 1912.

5 SHEETS—SHEET 1.

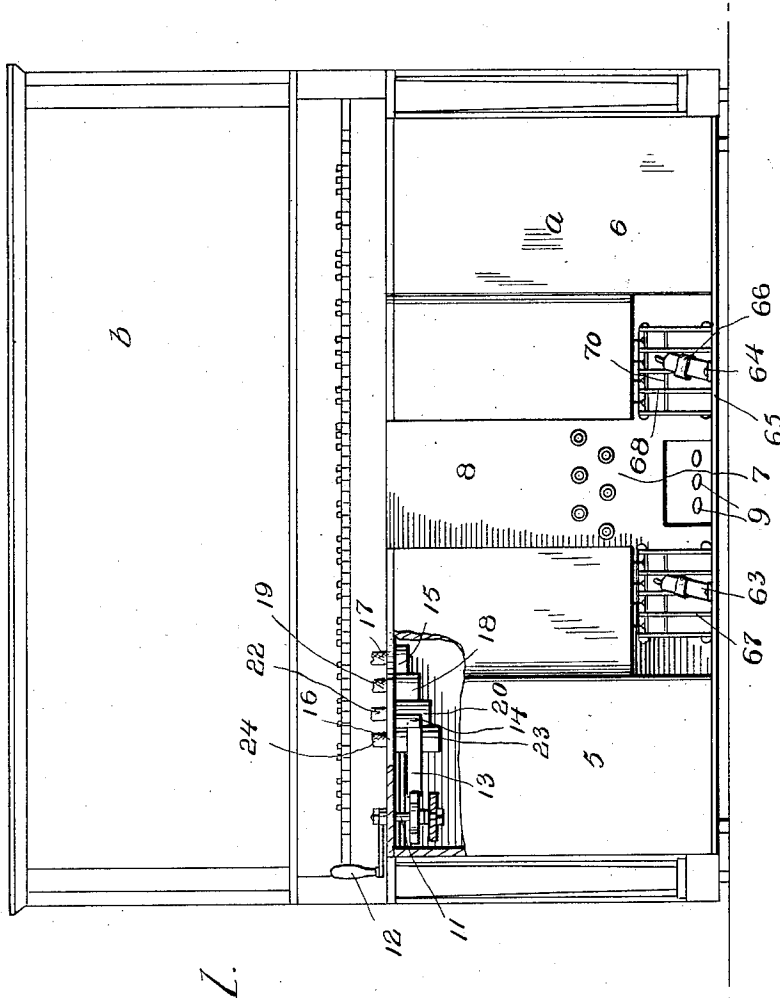


Fig. 1.

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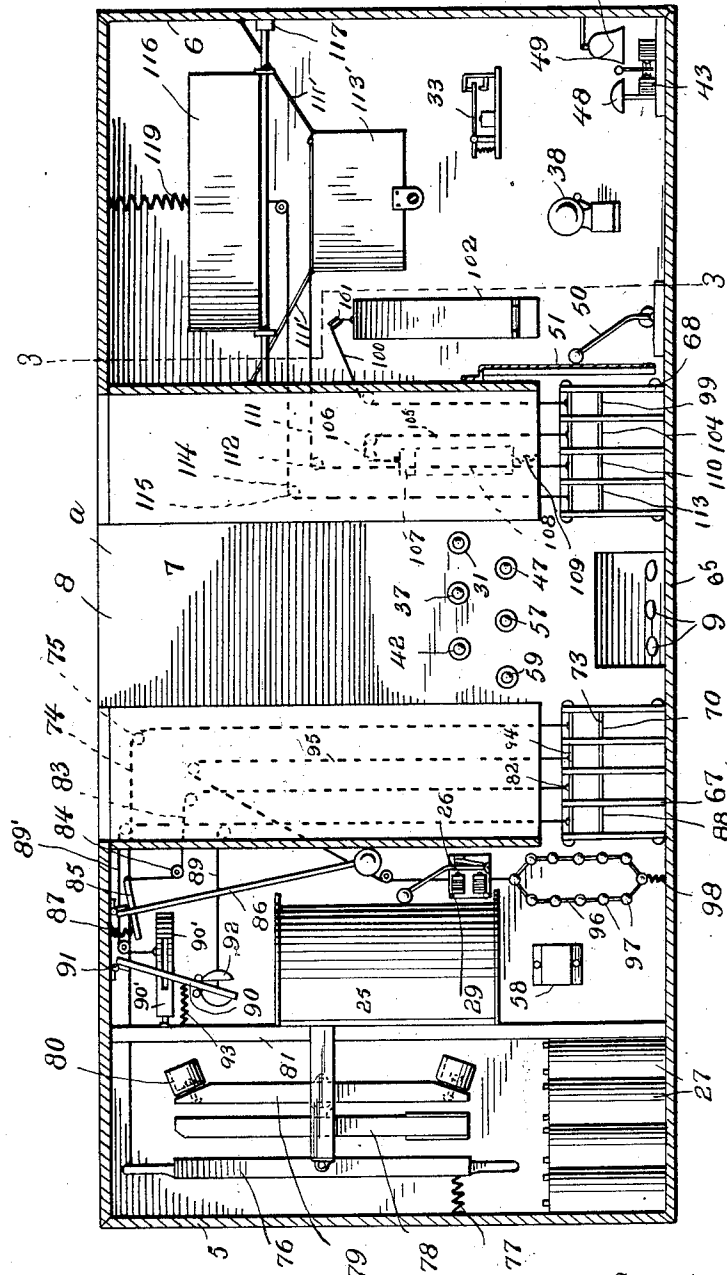
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5 SHEETS--SHEET 2.



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5 SHEETS—SHEET 3.

Fig. 3.

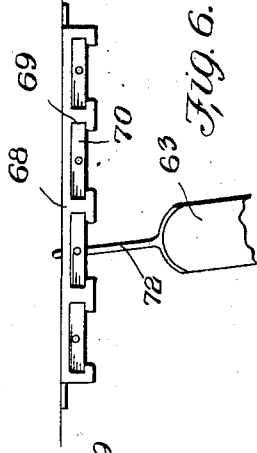
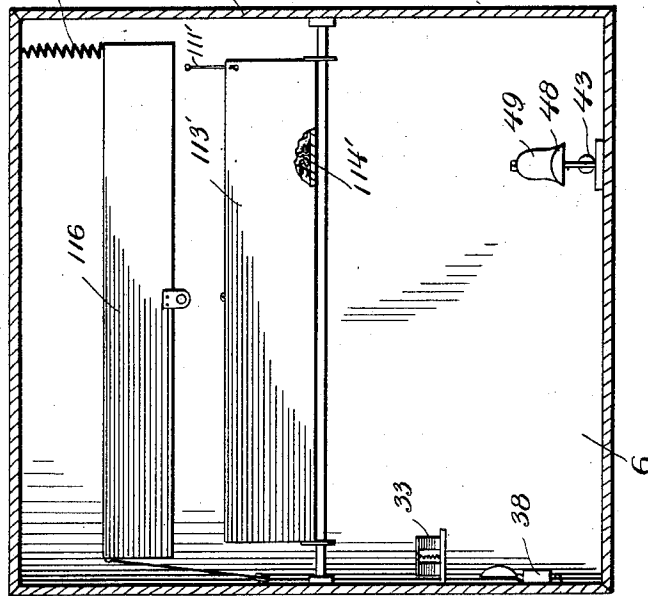
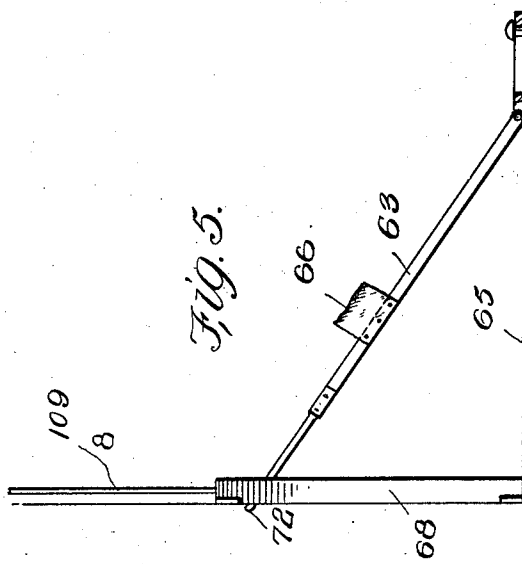


Fig. 5.



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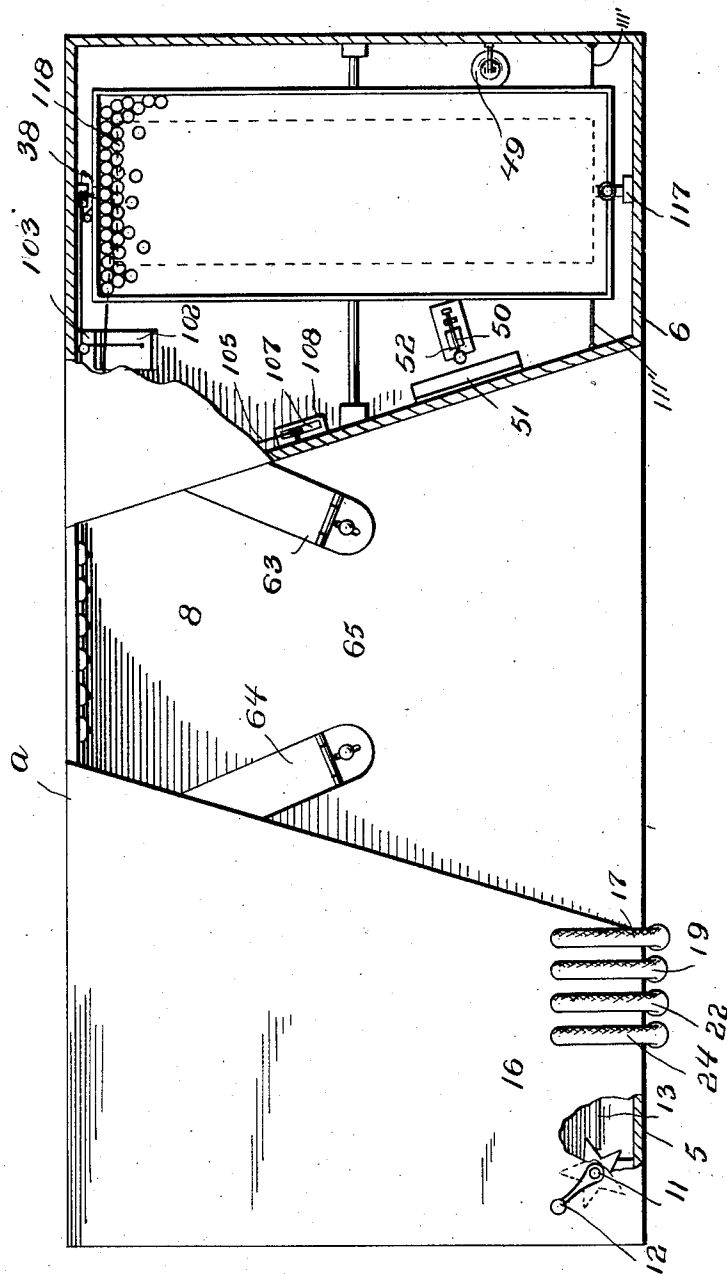
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5 SHEETS-SHEET 4.

Fig. 4.



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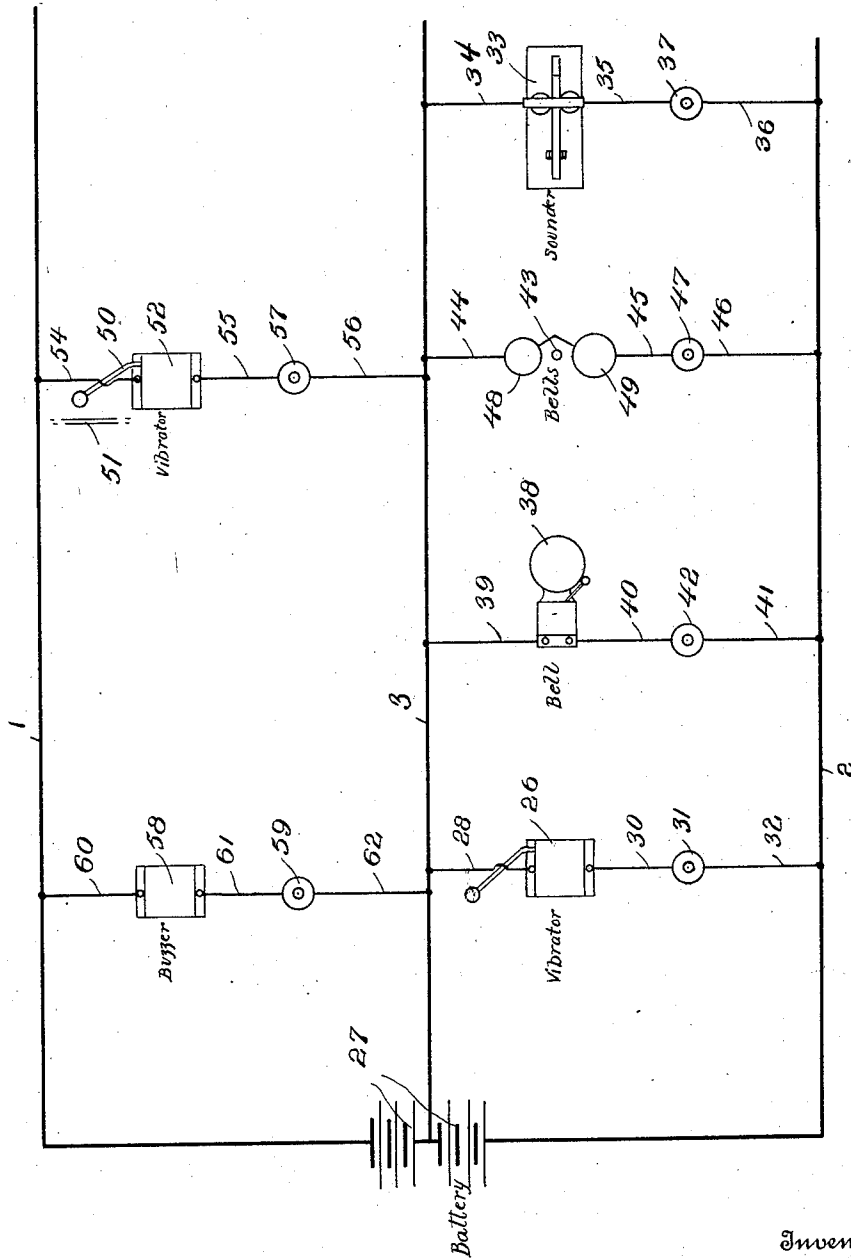
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5 SHEETS—SHEET 5.

Fig. 7.



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UNITED STATES PATENT OFFICE.

SAMUEL LAPIN, OF PHILADELPHIA, PENNSYLVANIA.

STAGE-NOISE CABINET.

1,047,090.

Specification of Letters Patent.

Patented Dec. 10, 1912.

Application filed August 5, 1911. Serial No. 642,529.

To all whom it may concern:

Be it known that I, SAMUEL LAPIN, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented new and useful Improvements in Stage-Noise Cabinets, of which the following is a specification.

The invention has for one of its objects the connecting of a plurality of stage noise devices so that they may be operated either independently or severally by the player of a musical instrument and without hindering the proper manipulation of such instrument.

Other objects will appear and be better understood from the following description taken in connection with the accompanying drawings, in which,

Figure 1 is a front elevation of the device partly in section and arranged to be operated by the player of a musical instrument. Fig. 2 is a detail front elevation partly in section. Fig. 3 is a vertical cross section on the line 3—3 of Fig. 2. Fig. 4 is a detail plan of the device partly in section. Fig. 5 is a detail side elevation partly in section of one of the selectors and slides. Fig. 6 is a fragmentary plan of the same. Fig. 7 is a diagrammatic view of the electrically operated elements and their circuits.

The casing *a* may be of any suitable shape or contour to conform to the shape of the space or compartment in which it is arranged and for purposes of illustration, I have shown this casing as adapted for application to a well-known form of upright piano *b*. The sections 5 and 6 of the casing are herein shown as arranged in spaced relation and connected by a cross piece 7, the space 8 between the sections 5 and 6, in the present instance, serving as a harbor for the limbs of the musician in order that the latter may operate the pedals 9 of the piano *b* with his feet in a well-known manner. The sections 5 and 6 contain a plurality of devices for producing noises and sounds corresponding to the scenes projected by a motion picture machine onto a suitable screen. This, however, is descriptive of only one adaptation of the device and from what will appear later, it will be manifest that the device might be equally as well employed to produce stage noises required in the ordinary theatrical performance.

The noise producing elements arranged in

the sections 5 and 6 are those which are required under ordinary circumstances to imitate the sounds of certain animals, breaking glass, musical instruments, castanets, etc. It is to be understood, however, that I am not to be limited to any whole number of noise devices nor am I to be limited to the employment of the devices for producing the specific noises hereinafter stated since other devices may be added for producing noises not hereinafter stated or some of those devices shown may be replaced with others adapted to produce different noises.

A wood crash may be constructed in any preferred manner such as by securing a toothed wheel on a vertical shaft 11 arranged in the section 5, one end of the shaft extending above the casing and having a crank handle 12 for turning the same and wheel, the latter actuating an ordinary wood vibrator 13 secured at one end to a block 14 connected to the casing. A suitable wind instrument 15 adapted to simulate the neighing of a donkey is arranged in the section 5 and is extended at its upper end through the upper end wall 16 of the casing and has suitably secured thereto a tube 17 through which the operator blows. Arranged adjacent to the element 15 is a similar wind instrument 18 of different type than the instrument 15 and adapted to simulate the cry of a baby. One end of this instrument extends through the upper wall 16 of the casing and has a tube 19 connected thereto and through which the operator blows. A siren 20 or analogous device for imitating the sound of high wind is arranged in the section 5 and extends through the upper wall 16 thereof and has a tube 22 through which the operator blows. A steamboat whistle 23 is arranged in the section 5 and extends through the upper end wall 16 thereof and has a tube 24 secured thereto, through which the operator blows. A suitable drum 25 is arranged in the section 5 and is sounded by means of an electrically actuated vibrator 26 arranged adjacent thereto, as shown, being controlled by an electric circuit, including conductors 1, 2 and neutral wire 3 from a source of electric energy, such as a battery of cells 27. The vibrator device 26 and a push button 31 therefor, are connected in the circuit by wires 28, 30 and 32. The push button 31 is located within easy reach of a limb of the operator. A push button 37, located within easy reach of the operator and a well-known

form of telegraph sounder 33 are arranged in the section 6 and are connected in the circuit by the wires 34, 35, and 36. A push button 42 located adjacent to the buttons 31 and 37, and electric bell 38 are connected in the circuit by means of the wires 39, 40, and 41. A push button 47 located adjacent to the other push buttons and vibrator 43 located in the casing 6, are connected in the circuit by the wires 44, 45, and 46. The vibrator is positioned between a pair of differently pitched bells 48 and 49 and when the circuit is closed, strikes these bells and simulates the sound of the gong of a police patrol or fire engine. A sword clashing device is herein shown to comprise an arm 50 which moves over and contacts with the surface of a metallic plate 51, said arm being resilient and attracted from normal position by an electro-magnet 52 energized by the circuit, through the wires 54, 55, and 56 which are connected with a push button 57 located within easy reach of the operator. A push button 59, arranged adjacent to the other push buttons and an electrically actuated buzzer 58 for imitating the sound produced by a wireless telegraph apparatus are connected in the circuit by means of the wires 60, 61 and 62.

The foregoing is merely descriptive of certain electrically actuated noise producing apparatus which I may employ, which, together with the circuit described, are shown diagrammatically in Fig. 7. Other electrically actuated devices may be added as desired or substituted for some or all of those shown.

In addition to the electrically actuated devices I also employ a number of mechanically operated devices of which the following is a description of those which I now employ, although their character and number may be changed as desired. The operating means for these devices are located adjacent to the pedals 9 so that the musician may operate the same with his feet and in the manner in which the pedals 9 are operated. Any improved means may be employed for carrying out this structure such as a pair of selectors or pedals 63 and 64, connected for universal movement to that portion of the bottom 65 located below the space 8, the selectors or pedals being arranged on either side of the pedals 9 and having loops 66 through which the operator inserts his feet prior to moving the pedals or selectors, the said loops serving to prevent disengagement of the feet with the pedals or selectors. A pair of plates 67 and 68 are arranged at either side of the pedals 9 and have vertical guideways 69 in which slide the frames 70. The frames receive and are depressed by extensions 72 on the free ends of the selectors or pedals 63 and 64. The frame or slide 73 on the right of the plate 67 is connected by

a flexible element 74 trained over pulleys 75 to one end of a rock lever 76 pivoted in the section 5. A compression spring 77 serves to hold the lever 76 in the position shown. The element 73 holds the slide adjacent to the upper end of the guide in which it is arranged so that when the said slide is depressed, the lever 76 will be rocked against the action of the spring 77 and engage with one end of an intermediate lever 78 which in turn will strike against a lever 79 having at its opposite ends cups 80 which alternately strike on a plate 81, thereby imitating the sound of horses feet on a road. It will be seen that when the connected end of the lever 76 is pulled by the element 73, one of the cups 80 will strike against the plate 81 and when the slide 73 is released, the spring 77 will rock the lever 76 so that the opposite cup 80 will strike against the plate 81. With this construction it will be seen that the lever 79 may be actuated so that the cups will strike the plate to imitate the sound of either a trotting or running horse. The slide 82 in the plate 67, is connected by a flexible element 83 trained over pulleys 84 to one arm 85 or a T-shaped drum stick 86 which is adapted to strike the drum 25 when the slide 82 is depressed, the stick 86 being held in spaced relation to the drum by means of a thrust spring 87. The slide 88 adjacent to the slide 82 is connected by flexible elements 89 and 89' to a pivoted tambourine 90' and an arm 90 pivoted at one end as at 91 and carrying castanets 92 which are adapted to strike when the arm is oscillated by reciprocating the slide 88, a spring 93 coöperating with the slide 88 and its connection to oscillate the arm 90. The slide 94 adjacent to the slide 82 is connected by a flexible element 95 to a flexible loop 96 having arranged thereon a plurality of sleigh bells 97. The flexible element 95 contracts the loop against the action of a retractile spring 98 when the slide 94 is depressed. The slide 99 adjacent to the right hand side of the plate 68 is connected by a flexible element 100 trained over pulleys 101 to the movable member 102 of a slap-stick, the element 102 being over-balanced and striking a coöperating element when the slide 99 is depressed. The slide 104 adjacent to the slide 99 is connected by a flexible element 105 trained over pulleys 106 to one end of a sand-papered board 107 arranged between boards 108 and contacting with the same, the board 107 being moved by the slide 104 against the action of a spring 109. The slide 110 adjacent to the slide 104 is connected by a flexible element 111 trained over pulleys 112 to a pivoted box 113', containing broken glass 114' and held upright by the element 111, and elastic elements 111', so that when the slide 110 is depressed the movement of the material in the box will simulate the sound of breaking

glass. The slide 113 adjacent to the slide 110 is connected by a flexible element 114 trained over pulleys 115 to a metal pan or casing 116 pivoted as at 117 and containing
 5 a number of metallic spheres 118 which will move to either end of the pan and simulate the noise of a starting engine, or the like, when the pan is oscillated by depressing the slide 113, the pan being held in the position
 10 shown, by means of a spring 119 which co-operates with the slide and its connection to oscillate the pan.

From the foregoing the operation of the device will be obvious, since it can be seen
 15 that the selector or pedal 63 may be moved into engagement with any of the slides in the plate 67; so also may the selector 64 be moved into engagement with any of the slides in the plate 68.

20 What I claim as new is:

1. In a device for producing stage noises, the combination with a casing and a plurality of different noise producing devices arranged in the casing; of means for operating
 25 said devices and including a plurality of movable elements and a manually operated universally movable selector for controlling the operation of any of said elements for the purpose described.

30 2. In a device for producing stage noises, the combination with a casing and a plurality of different stage noise producing devices arranged in the casing; of means for operating said devices and including a plurality
 35 of movable elements, and a manually operated pivoted selector for controlling the operation of any of said elements.

40 3. In a device for producing stage noises, the combination with a casing and a plurality of different stage noise producing devices arranged in the casing; of manually operated

means for controlling the operation of said devices and located exteriorly of the casing and including a plurality of movable elements and a plurality of pivotally mounted
 45 selectors.

4. In a device for producing stage noises, the combination with a casing, and a plurality of different stage noise producing devices arranged in the casing; of manually operated
 50 means for controlling the operation of said devices and including a plurality of movable elements, and a universally movable selector.

5. The combination of a casing, a plurality of stage sound producing devices arranged therein, a plurality of flexible operating elements connected to said devices, and
 55 a universally movable selector adapted to engage any of said operating elements.

6. The combination of a casing, a plurality of stage sound producing devices arranged therein, a plurality of flexible operating elements connected to said devices, and
 60 a manually operated pivoted selector adapted to engage any of said elements.

7. In a device of the class described, in combination with a casing, and a plurality of stage sound producing devices located
 65 therein; of a plurality of flexible elements extending into the casing and connected to said devices, a plurality of slides located exteriorly of the casing and connected to said flexible elements and a selector adapted to
 70 engage any of said slides for the purpose described.

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

SAMUEL LAPIN.

Witnesses:

IRA L. STANGER,
 WM. D. CROMMIE.