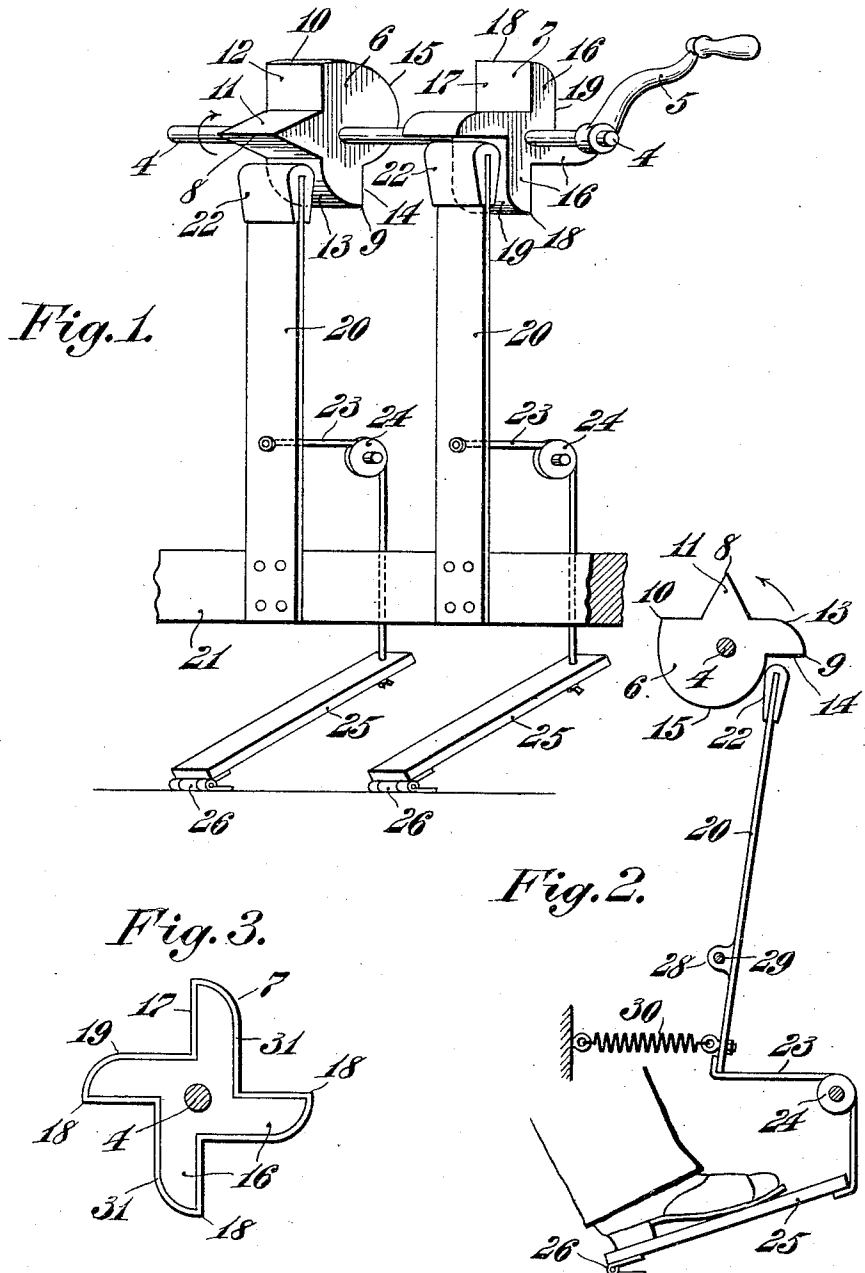


I. L. STANGER.
STAGE NOISE APPARATUS.
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UNITED STATES PATENT OFFICE.

IRA L. STANGER, OF PENSANKEN, NEW JERSEY.

STAGE-NOISE APPARATUS.

1,052,185.

Specification of Letters Patent.

Patented Feb. 4, 1913.

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To all whom it may concern:

Be it known that I, IRA L. STANGER, a citizen of the United States, residing at Pensauken, in the county of Camden and State of New Jersey, have invented certain new and useful Improvements in Stage-Noise Apparatus, of which the following is a specification.

My invention relates to stage noise apparatus, that is to say, to apparatus for simulating noises for the purpose of rendering more realistic the scenic effects of dramatic productions and moving picture exhibitions.

My invention relates more particularly to a device for imitating the noise of trotting or running horses, either singly or in groups.

The principal object of my invention is to provide a simple and efficient apparatus for the aforesaid purpose which is so arranged that the quality of the sound can be varied at will, and by means of which a variety of effects can be produced under the easy control of the operator.

The nature and characteristic features of my invention will be more readily understood from the following description taken in connection with the accompanying drawings forming part hereof, in which—

Figure 1 is a perspective view of the essential parts of an apparatus for producing stage noises embodying the main features of my present invention. Fig. 2 is a transverse vertical section illustrating a modified form of the apparatus; and Fig. 3 is an end elevation of one of the operating elements, showing one preferred form of the construction of the same.

Referring to the drawings, in the particular embodiment of my invention shown in Fig. 1, there is provided a horizontal shaft 4 which is adapted to be mounted in suitable journals not shown and is provided at a convenient point with an operating hand crank 5. Mounted on the shaft 4 are two or more of the main operating elements 6 and 7 of such contour in transverse section as to produce in conjunction with

other parts of the apparatus the desired effects when the shaft 4 is rotated. The member 6 comprises a block having three peripheral edges 8, 9 and 10, circumferentially spaced to produce a noise similar to that of a trotting horse. The peripheral surfaces of the member 6 are arranged as follows:—The edge 8 forms the limiting margin or the line of intersection of the side surfaces of a V shaped extension of the member 6, from which side surfaces a surface 12 extends on one side in a direction tangent to the base of the V shaped portion 11 while on the other side thereof a surface 13 extends in curvilinear direction to the edge 9, from whence it extends as at 14 in a plane substantially parallel to that of the surface 12 and thence by a substantially involute curve 15 to the edge 10 which forms the outer margin of surface 12. The member 7 comprises a block somewhat similar to member 6 but having four symmetrically spaced arms 16 each having a radial surface 17 which terminates in the outer marginal edge 18 and the other surface 19 of each arm 16 extends from the surface 17 of the adjoining arm, curving at its outer portion to the outer marginal edge 18.

Mounted in front of each of the rotatable members 6 and 7 is a slap stick 20 rigidly secured at its lower end to a portion 21 of the stationary frame work of the machine. The outer free end of each slap stick 20 is provided with a pad 22 of any suitable material for producing the desired sound. In some cases this pad 22 will be made of leather or a leather covered pad while in other instances metal may be used either for the pad in its entirety or for a covering thereof.

A strap or cable 23 is secured to the slap stick 20 at some point between the respective fixed and loose ends thereof and runs over a suitably arranged pulley 24 to the free end of a foot treadle 25, the other end of which is hinged as at 26 either to the floor or to any suitable part of the frame work of the machine. The treadles 25 for the control of the separate slap sticks 20 are

preferably located in proximity to each other for the convenient manipulation of the same either separately or in unison.

In the normal arrangement of the apparatus the pads 22 of the slap sticks 20 are maintained out of contact with their respective members 6 or 7 and are adapted to be brought in contact with the same by the depression of the treadles 25 with a greater or less degree of force according to the sound effect to be produced. It should be understood that the slap sticks 20 are made of thin wood or other resilient material so that when the elements 6 and 7 are rotated the pads will be forced backwardly by the extending portions of said members until the outer edges are passed whereupon the slap stick will be released and the pad 22 will be caused to be brought forcibly against one of the peripheral surfaces of the respective elements 6 or 7. By rotating the shaft 4 with greater or less rapidity and by depressing the treadles 25 to a greater or less extent and either separately or in unison, a variety of effects can be produced under the easy control of the operator.

In the modified form of the apparatus as shown in Fig. 2 the slap stick 20, instead of being rigidly secured at its lower end to a portion of the frame work of the machine, is hinged as at 28 to a transverse shaft 29 or any other suitable part of the structure and there is provided a spring 30 secured at one end to the lower end of the slap stick 20 and having its other end secured to a portion of the stationary frame work of the apparatus. In this instance also the cable or strap 23 is secured to the lower end of the slap stick below the hinge so that the depression of the treadle 25 will serve to force the slap stick against the rotatable member 6 against the tension of the spring 30 which normally tends to retract the pad 22 therefrom.

In Fig. 3 there is shown a preferred form of construction of the rotatable member 7 in which the main or body portion thereof is made of wood or the like and the periphery is covered with sheet metal 31 or other suitable material according to the nature of the sound it is desired to produce.

Having thus described the nature and characteristic features of my invention, what I claim as new and desire to secure by Letters Patent is:—

1. In an apparatus of the character described, a rotatable member having a plurality of suitably spaced projections, a striking device normally out of engagement with said projections, and means for arbitrarily causing said striking device to engage said projections.

2. In an apparatus of the character de-

scribed, a rotatable member having a plurality of suitably spaced projections, a striking device, resilient means for normally maintaining said striking device out of engagement with said projections, and means for arbitrarily causing said striking device to engage said projections.

3. In an apparatus of the character described, a rotatable member having a plurality of suitably spaced projections, a striking device, resilient means for normally maintaining said striking device out of engagement with said projections, and a treadle operatively connected with said striking device whereby the same may be arbitrarily caused to engage said projections.

4. In an apparatus of the character described, a rotatable member having a plurality of suitably spaced projections, a slap stick the free end of which is adapted to engage said projections, and means for arbitrarily varying the force of the engagement of said slap stick with said projections.

5. In an apparatus of the character described, a rotatable member having a plurality of suitably spaced projections, a resilient slap stick rigidly secured at one end and having its other free end adapted to engage said projections, and means connected to said slap stick between its ends for arbitrarily causing the free end of said slap stick to engage said projections.

6. In an apparatus of the character described, a rotatable member having a plurality of suitably spaced projections, a resilient slap stick rigidly secured at one end and having its other free end adapted to engage said projections, a treadle, and means connecting said treadle to said slap stick between its ends.

7. In an apparatus of the character described, a shaft, a plurality of rotatable members mounted on said shaft each having a series of suitable spaced projections, a plurality of striking devices, one for each rotatable member, and means for selectively and arbitrarily causing said striking devices to engage their respective rotatable members,

8. In an apparatus of the character described, a shaft, a plurality of rotatable members mounted on said shaft each having a series of suitably spaced projections, a plurality of striking devices, one for each rotatable member, and a plurality of treadles respectively connected with said striking device for selectively and arbitrarily controlling said striking devices.

9. In an apparatus of the character described, a rotatable member, and a striking device adapted to engage the same, said rotatable member having a plurality of pro-

jections, one of said projections being V shaped (point outward), another of said projections having a relatively short rounded operating surface, and the other
5 of said projections having a relatively long rounded operating surface.

In testimony whereof, I have hereunto

signed my name in the presence of two witnesses.

IRA L. STANGER.

Witnesses:

CHARLES B. PITHIAN,
LILLIAN H. NEVEIL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."
