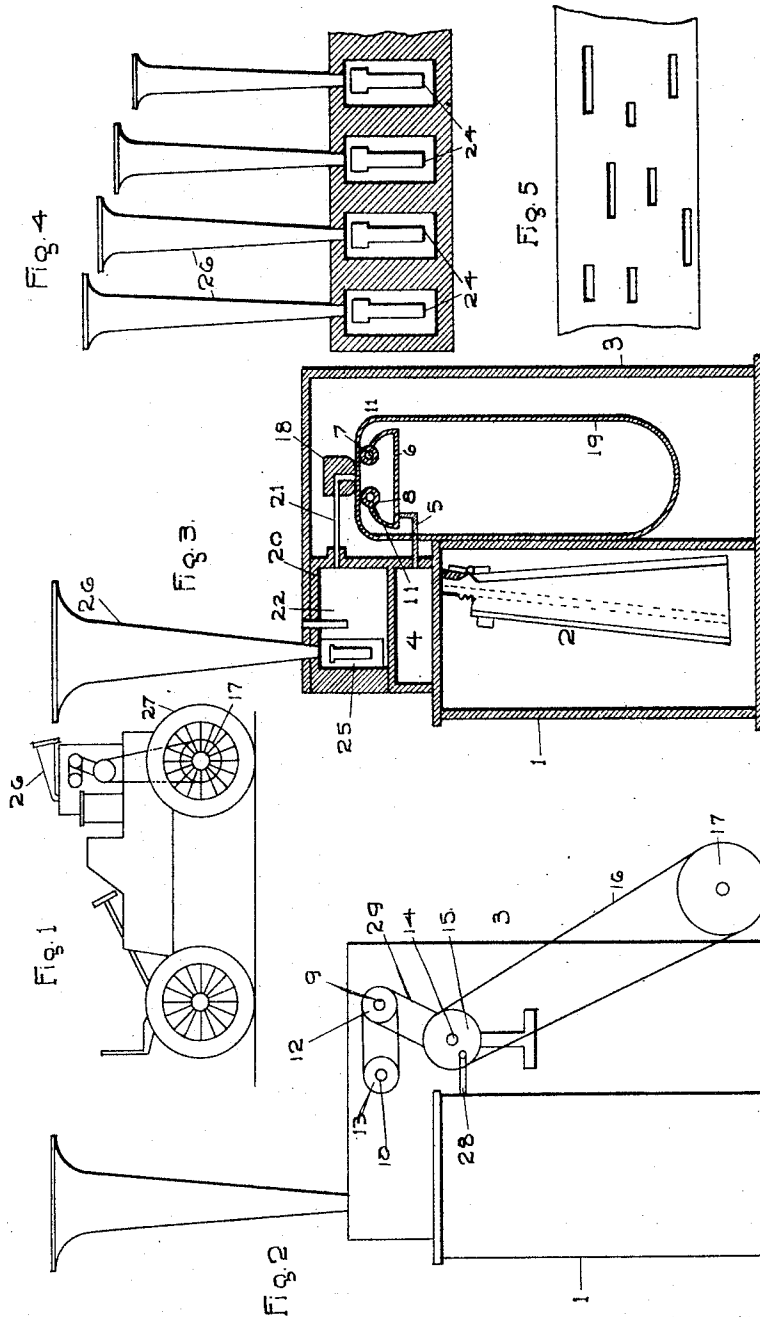


J. R. ENGLAND.
 AUTO ORGAN.
 APPLICATION FILED NOV. 1, 1909.

977,084.

Patented Nov. 29, 1910.



Witnesses,
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J. E. Stitt

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UNITED STATES PATENT OFFICE.

JAMES ROSS ENGLAND, OF DALLAS, TEXAS.

AUTO-ORGAN.

977,084.

Specification of Letters Patent.

Patented Nov. 29, 1910.

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To all whom it may concern:

Be it known that I, JAMES ROSS ENGLAND, a citizen of the United States, residing at Dallas, in the county of Dallas and State of Texas, have invented an Auto-Organ, of which the following is a specification.

My invention relates to musical instruments and more particularly to organs which can be operated automatically, and the object is to provide organs which may be operated by gearing the same to automobiles or other vehicles or to windmills or to any other suitable driving mechanism and to provide organs which will be inexpensive and which will furnish pleasure and amusement.

Other objects and advantages will be fully explained in the following description and the invention will be more particularly pointed out in the claims.

Reference is had to the accompanying drawings which form a part of this application.

Figure 1 is a side elevation of an automobile with the improved organ mounted thereon and geared to one of the wheels thereof. Fig. 2 is a side elevation of the organ, illustrating the driving gear. Fig. 3 is a vertical section of the organ showing the arrangement for operating the music roll. Fig. 4 is a transverse broken section, illustrating the reed cells. Fig. 5 is a section of a music roll.

Similar characters of reference are used to indicate the same parts throughout the several views.

This invention is provided with a casing 1 for the bellows 2 and connected to the casing 1 is a casing 3 for the music roll. The bellows shown is for creating a blast through the reeds and the horns connected to the reed cells. The blast passes from the bellows 2 to an air compressor casing 4. From the casing 4 the air passes by a pipe 5 to the air vent casing 6. The air passes from the casing 6 between two rollers 7 and 8. The rollers 7 and 8 consist of shafts 9 and 10 and rubber coverings 11. The shafts 9 and 10 are driven by wheels 12 and 13. The wheel 12 is driven by the shaft 14 and this shaft is driven by the wheel 15. The wheel 15 is driven by the belt 16, which belt is driven by the wheel 17. A roll holder 18 presses on the music roll 19 as this music roll passes under the holder 18. The holder 18 is connected to the box 20 by flexible pipes 21, the holder 18 having suitable ducts for the passage of drafts which come through the mu-

sic roll 19. The drafts are delivered through flexible pipes 21 to the resonance compartment 22. From the resonance compartment 22 the drafts pass through or by reeds 24 into reed cells 25. From the reed cells 25 the vibrations pass through horns 26, which horns are to be made of suitable metal, preferably of spun brass. The horns may be made any suitable size and it is preferable when the horns are attached to a moving body, as a vehicle, to bend the horns backward, as shown in Fig. 1. The horns 26 are to be graduated in size, corresponding to the graduated reeds. The gear wheel 17 in the illustrations is attached to the wheel 27 of the automobile.

The power is transmitted to the bellows from wheel 15 by means of a pitman 28. The music roll 19 is driven by the drums 7 and 8, the drums 7 and 8 being driven by power transmitted from wheel 15 by the belt 29. The drum 7 pushes the roll under the holder 18 and the drum 8 pulls the roll at the same time, thus causing continual movement of the music roll 19. When a roll is to be changed the holder 18 may be raised and the music roll in use be removed and another roll inserted in its place.

Having fully described my invention, what I claim as new and desire to secure by Letters Patent, is,—

1. An auto-organ comprising a bellows and a casing therefor, a music roll casing connected to said bellows casing, a compressed air casing connected with and having communication with said bellows casing, an air vent casing mounted in said music roll casing, a pipe connecting said compressed air casing and said air vent casing, music roll rollers mounted on each side of the discharge opening of said air vent casing, a music roll holder bearing yieldingly on a music roll passing over said rollers and provided with ducts therethrough, reeds and cells therefor, flexible pipes connecting said reed cells and said music roll holder and forming a communication with said reeds and the music roll passing under said holder, and horns operatively connected to said reed cells.

2. An auto-organ having a music roll casing, an air vent chamber mounted in said music roll casing and provided with a discharge opening, means for supplying air to said air vent chamber, music roll rollers mounted on each side of said discharge opening, a

music roll holder bearing yieldingly on a music roll passing over said rollers, a resonance chamber, flexible pipes forming a communication from the music roll through
 5 said holder to said resonance chamber, reeds in operative relation with said resonance chamber, reed cells in communication with said reeds, and horns connected with said reed cells.

10 3. An auto-organ having an air vent chamber provided with a discharge opening, means for supplying air to said chamber, roll rollers forming the edges of said opening, a roll holder having ducts therethrough and
 15 bearing yieldingly on a music roll passing over said rollers, a resonance chamber, means for conveying drafts from said holder to said resonance chamber, reeds and cells therefor in said resonance chamber, and
 20 graduated horns connected with said reeds.

4. An auto-organ having an air vent chamber provided with a discharge opening, roll rollers having yielding surfaces and forming the edges of said opening, means for
 25 supplying air to said chamber, a roll holder bearing yieldingly on a music roll passing

over said rollers, reeds and cells therefor in communication with said roll holder, said holder having ducts for the passage of drafts from the music roll, and graduated horns in
 30 communication with said reed cells.

5. An auto-organ having an air vent chamber provided with a discharge opening, roll rollers having yielding surfaces and forming the edges of said opening, means for supplying air to said chamber, a roll holder
 35 bearing yieldingly on a music roll passing over said rollers, reeds and cells therefor in communication with said roll holder, said holder having ducts for the passage of drafts from the music roll, graduated horns in
 40 communication with said reed cells, a wheeled vehicle carrying said organ, and gearing actuated by the wheels of the vehicle for driving said music roll rollers. 45

In testimony whereof, I set my hand in the presence of two witnesses, this 12th day of Oct. 1909.

JAMES ROSS ENGLAND.

Witnesses:

L. T. MATHES,
 D. K. GOLD.