No. 733,528. PATENTED JULY 14, 1903.

F. R. WYCKOFF.

MECHANISM FOR PLAYING MUSICAL INSTRUMENTS.

APPLICATION FILED MAR. 5, 1902.

NO MODEL.

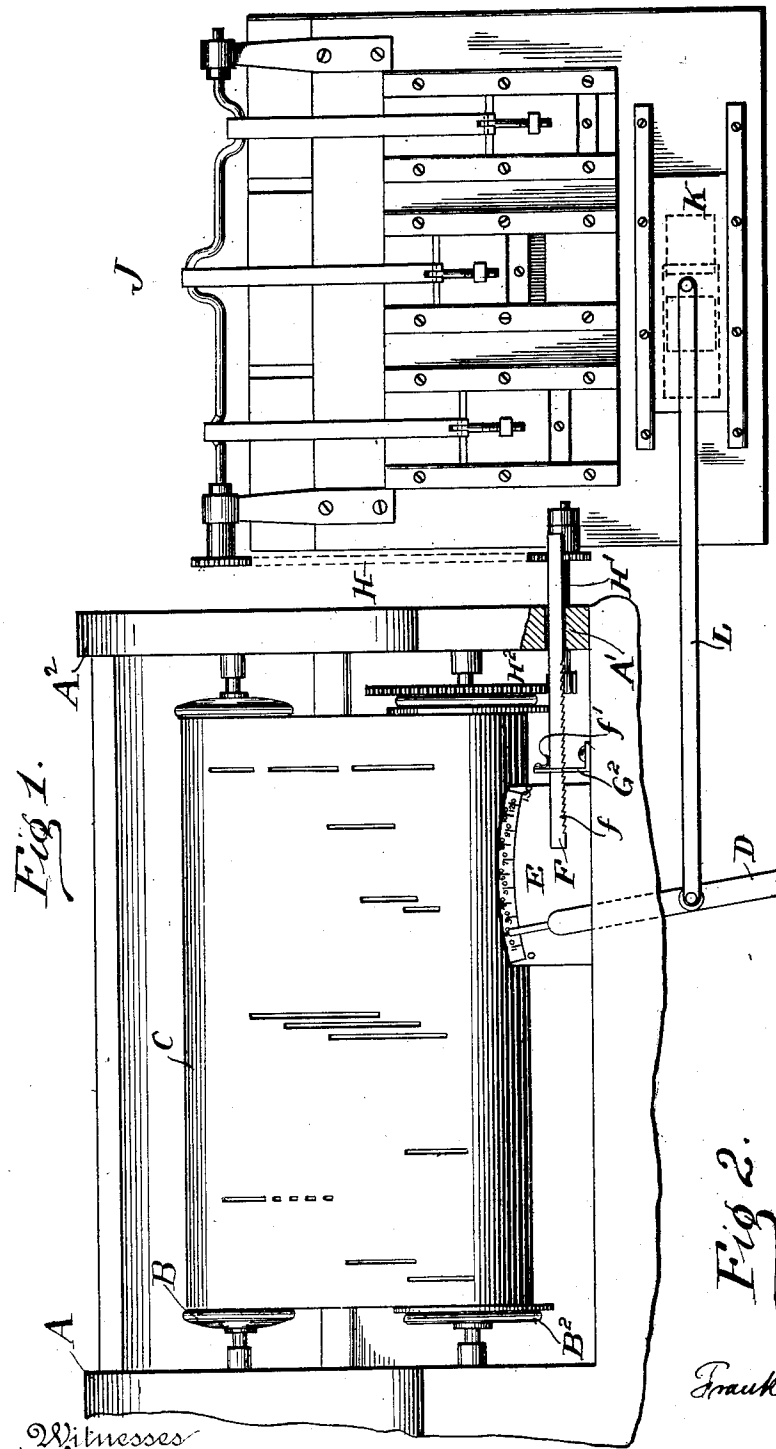

Fig 1.

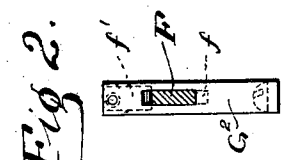

Fig 2.

Witnesses
H. Gildersleeve
H. L. Oberlinger

Frank R. Wyckoff
Inventor
By his Attorneys Dickerson Brown and Ragner.

No. 733,528. Patented July 14, 1903.

UNITED STATES PATENT OFFICE.

FRANK R. WYCKOFF, OF BROOKLYN, NEW YORK, ASSIGNOR TO THE AEOLIAN COMPANY, OF NEW YORK, N. Y., A CORPORATION OF CONNECTICUT.

MECHANISM FOR PLAYING MUSICAL INSTRUMENTS.

SPECIFICATION forming part of Letters Patent No. 733,528, dated July 14, 1903.

Application filed March 5, 1902. Serial No. 96,734. (No model.)

To all whom it may concern:

Be it known that I, FRANK R. WYCKOFF, of the borough of Brooklyn, county of Kings, city and State of New York, have invented a new and useful Improvement in Mechanism for Playing Musical Instruments, of which the following is a specification.

My improvement relates to mechanism for playing musical instruments, and not only to such mechanism when constituting a machine which is separate and distinct from the musical instrument to be played by it, but also to such mechanism when it is incorporated into the musical instrument itself.

My improvement relates particularly to speed-regulating devices. Commonly a lever or analogous part is adjusted manually to different positions for producing desired speeds. It has been found advantageous to use a scale or indicator with such a part to facilitate the production of any desired speed. Generally speaking, there is an appropriate time for the major portion of any tune; but necessities occur for varying this speed.

The object of my improvement is to facilitate the resumption of the speed which is appropriate to the greater part of any tune.

My improvement consists in the combination with a lever or similar part for changing the speed of a stop capable of adjustment into different positions. This stop will be adjusted for each particular tune, and then it will be only necessary to move the lever or analogous part into contact with the stop to secure that speed which is appropriate to the greater part of a tune; but nevertheless the lever or analogous part will be capable of all necessary adjustments away from such stop.

In the accompanying drawings, Figure 1 is a front view of parts of a mechanism for playing a musical instrument embodying my improvement. Fig. 2 is a transverse vertical section at the line 2 2, Fig. 1.

Similar letters of reference designate corresponding parts in both figures.

A' A^2 designate two uprights, which occupy positions somewhat higher than the position of the keys in an ordinary keyboard instrument. B' B^2 designate rolls journaled in bearings provided in said uprights.

B' is what is ordinarily termed a "music-roll," and B^2 a "take-up roll."

C is a music-sheet, which is permanently connected to the music-roll and detachably engaged with the take-up roll. The take-up roll may be permanently engaged with its bearings; but the music-roll must be detachably engaged with its bearings, so as to provide for its removal to make possible the substitution of another music-roll which has attached to it a music-sheet capable of playing a different tune.

Commonly the music and take-up rolls are propelled by driving mechanism H H' H^2, actuated by a pneumatic motor J, and the speed at which the music-sheet is propelled during the playing of a tune is varied by a lever or similar device controlling the motor-valve K. D designates such a lever, and L the link which connects with the valve K, all these parts being well known to those familiar with this art. It has been found advantageous to combine with such a lever a scale E, marked with indications for different speeds. In addition to this I have provided an adjustable stop. In the present instance this adjustable stop consists of a bar F, extending across the face of the scale far enough to arrest the movement of the lever D in one direction. The under side of the bar F is shown as provided with ratchet-teeth *f*. The bar may be slid in the upright A' and also in an upright bracket G. The lower edge of the slot in the upright bracket G, through which the bar F passes, may be engaged by the ratchet-teeth of the bar. Preferably a spring *f'* will be employed for pressing the bar downward, so as to secure the engagement of its teeth with the upright bracket G. Before playing a tune the adjustable stop will be shifted into a position to stop the movement of the lever in one direction at that point which will produce the speed necessary for the greater part of the tune to be played. The lever then cannot be moved farther in that direction, but will remain entirely

free to be shifted from that point in the other direction to the beginning of the scale of speed indications. Thus the performer will always be able to restore, even without looking at the scale, that speed which is necessary for the greater part of any tune. Thus, for example, if the stop is set for a desired maximum tempo the tempo-lever D is free to be moved to give retards or pauses and can be instantly brought back to such maximum without danger of passing it, and at all times the player may readjust the stop to suit changes in the maximum tempo of different motifs or portions of the composition.

As already intimated, I do not wish to be confined to any particular form of adjustable stop.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination with means for carrying and actuating a music-sheet, of an adjustable tempo or speed controlling mechanism therefor, and an adjustable device for limiting the range of adjustment of said mechanism at will, for substantially the purposes set forth.

2. The combination with means for carrying and actuating a music-sheet, of an adjustable tempo or speed controlling mechanism therefor, and an adjustable device for limiting the range of adjustment of said mechanism at will, said adjustable device being provided with means for fastening it in various positions of adjustment, for substantially the purposes set forth.

3. The combination of mechanism for carrying and actuating a music-sheet, of a lever adapted to change the speed of said mechanism, and a stop consisting of a longitudinally-adjustable bar having ratchet-teeth for securing it in different positions, for substantially the purposes set forth.

4. The combination of mechanism for carrying and actuating a music-sheet, of a lever adapted to change the speed of said mechanism, a stop consisting of a longitudinally-adjustable bar having ratchet-teeth for securing it in different positions, and a spring for securing the engagement of the ratchet-teeth, for substantially the purposes set forth.

5. The combination in mechanism for playing musical instruments and with the music-roll support and take-up roll thereof, and the tempo-controlled device and scale therefor, of an adjustable stop for limiting the adjustment of the tempo device at will, for substantially the purposes set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FRANK R. WYCKOFF.

Witnesses:
JOSEPH F. MEADE,
W. C. MANSFIELD.