To all whom it may concern:

Be it known that I, JOHN BALLANCE, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in a Combined Phonograph and Stereopticon; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to combined phonographs and picture-exhibitors; and one of the principal objects of the same is to provide a transparent recording-tape for the phonograph and to utilize said tape as the film for the picture attachment in order that a series of pictures may be exhibited simultaneously with a musical production.

Another object is to provide simple mechanism for winding the tape upon a reel and in position before a projector for throwing the pictures upon a screen.

These and other objects are attained by means of the construction illustrated in the accompanying drawing, in which the figure of the drawing is a perspective view of an apparatus made in accordance with my invention.

Referring to the drawing for a more particular description of my invention, the numeral 1 designates a tape or film made of transparent celluloid or other similar material, such tape or film adapted to have a series of drawings or photographs thereon and at one side of said pictures a series of sound-grooves for the production of a musical composition. The tape or ribbon 1 is also provided with a series of perforations 2 at the sides thereof, designed to engage the teeth of crown gear-wheels for moving said tape during the operation of the instrument. The tape 1 is wound upon a reel 3, suitably supported upon standards 4. A pair of spur gear-wheels 5 are mounted to revolve upon uprights 6, said spur-gears engaging the perforations in the sides of the tape or ribbon. Any suitable number of these crown-gears are utilized as will insure the proper feeding and alignment of the tape 1. The tape or ribbon is wound upon a drum 6, actuated by bevel-gears 7, rotated by any suitable motor, as 8. The tape 1 in its passage from the reel to the drum extends immediately over a flat table or support 9, said table being supported from below by means of an upright 11, said upright being also utilized as a holder for a suitable projector designed for the purpose of projecting the pictures on a screen 12. Any suitable light A may be used behind the projector, and any suitable mechanism may be used for throwing the pictures upon a screen. Any suitable phonographic reproducer 13 and horn 14 may be used.

From the foregoing it will be obvious that my invention may be utilized to illustrate certain musical compositions by throwing the picture of the performer upon a screen and simultaneously producing suitable music.

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

1. In an apparatus of the character described, a transparent tape or ribbon having thereon a series of pictures and also a series of sound-grooves for use with a phonographic reproducer.

2. In an apparatus of the character described, a transparent tape or ribbon provided with a series of pictures thereon, and a series of phonographic sound-grooves thereon, means for reproducing a musical composition, and means for simultaneously projecting the pictures upon a screen, substantially as described.

3. In an apparatus of the character described, a transparent tape or ribbon having a series of pictures thereon and a phonographic composition thereon, means for feeding said ribbon under a reproducer into position to have its pictures projected upon a screen, in combination with such producer and picture-projector, substantially as described.

4. In an apparatus of the character described, a transparent celluloid tape or ribbon provided with a series of pictures thereon and containing the record of a musical composition, said tape having a series of perforations at each edge thereof, in combina-
tion with a reel, a drum, an intermediate table over which the tape is adapted to pass, a sound box and horn, a picture-projector, and means for rotating the drum and moving the tape over the table and in front of the projector, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JOHN BALLANCE.

Witnesses:

JOHN FOX,

W. MONROE WESTON.