

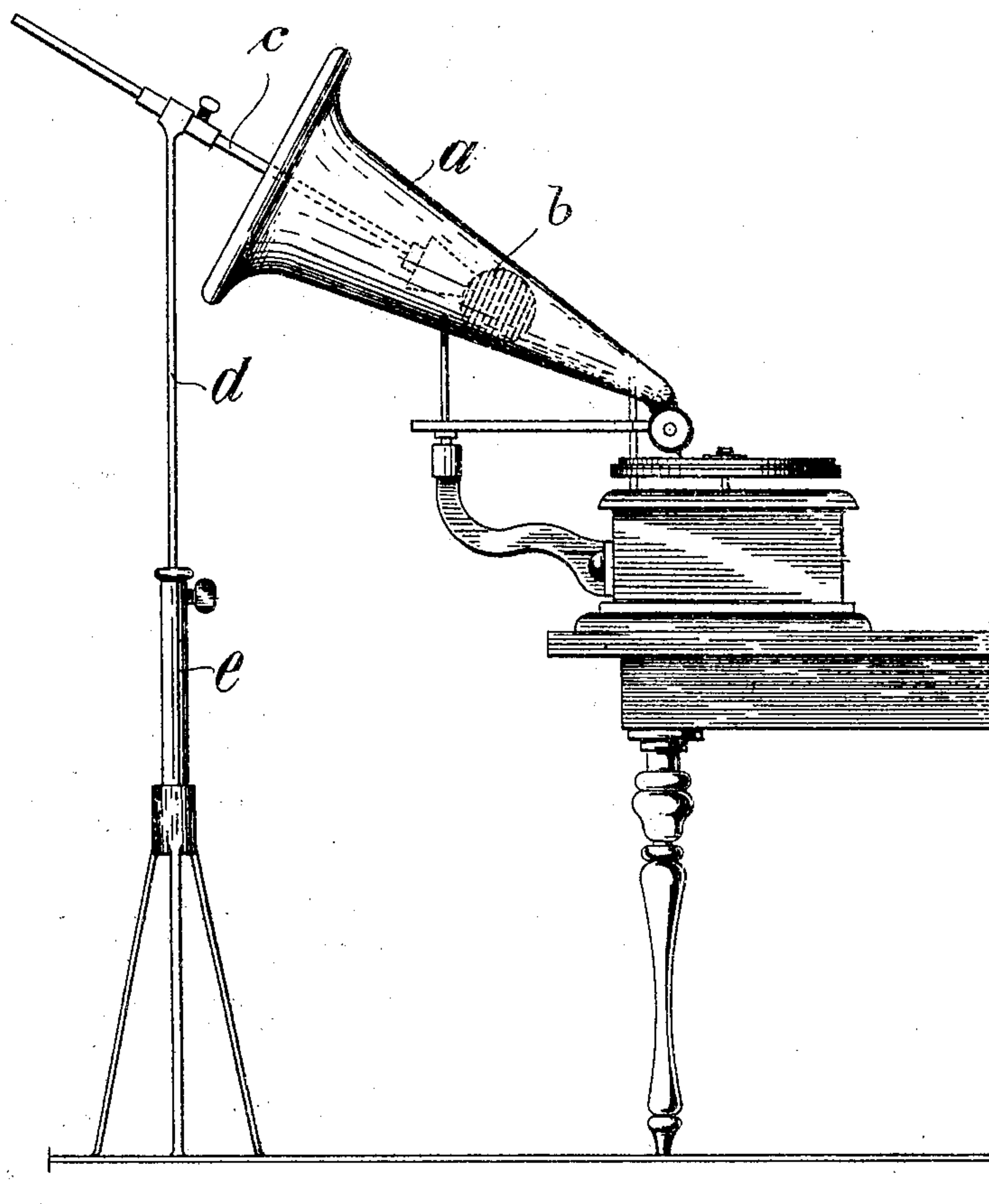
No. 800,987.

PATENTED OCT. 3, 1905.

A. CONZE.

SOUND REGULATOR FOR GRAMOPHONES, PHONOGRAPHS, AND LIKE  
INSTRUMENTS.

APPLICATION FILED MAR. 21, 1905.



Witnesses

Chas. H. Smith  
Leopold Lee

Inventor

Albert Conze  
Per Harold Serrell  
att'y

# UNITED STATES PATENT OFFICE.

ALBERT CONZE, OF BERLIN, GERMANY.

SOUND-REGULATOR FOR GRAMOPHONES, PHONOGRAPHS, AND LIKE INSTRUMENTS.

No. 800,987.

Specification of Letters Patent.

Patented Oct. 3, 1905.

Application filed March 21, 1905. Serial No. 251,184.

*To all whom it may concern:*

Be it known that I, ALBERT CONZE, a subject of the King of Prussia, German Emperor, residing in Berlin, Germany, have invented an Improvement in Sound-Regulators for Gramophones, Phonographs, and Like Instruments, of which the following is a specification.

Heretofore the rendering of selections of instrumental or vocal music by gramophones, phonographs, and like instruments has been accompanied by peculiar incidental screeching sounds, as well as the disagreeable scratching noise made by the point of the reproducer; and the object of my invention is the elimination of these unseemly sounds and noises as far as this is possible.

In carrying out my invention I employ a regulator or muffler placed in the horn or megaphone of the gramophone or phonograph, means for adjusting the regulator to any desired position within the horn, and means for supporting and maintaining the regulator in any adjusted position, all of which will be hereinafter more specifically set forth.

The drawing represents an elevation of a gramophone, the horn of which is fitted with my improved regulator.

Referring to the drawing, *a* designates the horn or megaphone of a gramophone or similar instrument. Within the horn *a* I employ a regulator or muffler *b*, preferably a sphere or spherical in form and made of felt, leather, cork, or other suitable material. The regulator *b* is secured by any suitable connection to one end of a rod *c*, extending beyond the mouth of the horn and through a suitable bearing fixed in the upper end of a support-rod *d*, mounted adjustably in the tripod or other holder *e*. The rod *c* is adjustable in the bearing through which it passes and may be maintained in any adjusted position by means of a set-screw or otherwise, as may be found expedient.

The relative position of parts hereinbefore described is such that in adjusting the regulator *b* the movements of the rod *c* are in the central longitudinal line or axis of the horn *a*, so that in all positions, except when the regulator may accidentally be in contact with the interior walls of the horn, there will be an

annular space of varying degree between the exterior of the regulator and the interior walls of the horn, and it will be manifest that, depending upon the distance of the regulator from the walls of the horn, a greater or lesser muffling of the sound will be effected with a correspondingly greater or lesser elimination of the disagreeable sounds aforesaid.

The volume of sound produced by different records varies, some being moderate in extent and some very loud and harsh, and this condition will require the adjustment of the regulator *b* to deliver an acceptable and modulated tone, the regulator being differently positioned for different records for rendering tones of substantially corresponding volume.

I do not limit myself to the precise form of the regulator *b* or to the materials of which the same is made or the manner of making, as the same may be varied without departing from my invention.

I claim as my invention—

1. In a gramophone and like instruments and in combination with the horn thereof, a regulator placed within the said horn, means for adjusting said regulator to any desired position within the horn, and means exterior to the horn for supporting and maintaining said regulator in any adjusted position.

2. In a gramophone and like instruments and in combination with the horn thereof, a spherical regulator within said horn, a rod to one end of which the regulator is secured, a bearing in which the rod is movable longitudinally of the horn, means for holding the rod in any position in said bearing, and a support for said bearing.

3. In a gramophone and like instruments, and in combination with the horn thereof, a spherical regulator within said horn, a rod to one end of which the regulator is secured, a bearing in which the rod is movable longitudinally of the horn, means for holding the rod in any position in said bearing, and a vertically-adjustable tripod-support carrying said bearing at its upper end.

Signed by me this 3d day of March, 1905.

ALBERT CONZE.

Witnesses:

JOHANNES HEIN,  
WOLDEMAR HAUPT.