

Specification of Francis Fearon : softening or deadening sound.

Contributors

Fearon, Francis.

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A.D. 1864, 11th NOVEMBER. N° 2809.

SPECIFICATION

OF

FRANCIS FEARON.

SOFTENING OR DEADENING SOUND.

LONDON:

PRINTED BY GEORGE E. EYRE AND WILLIAM SPOTTISWOODE,

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Price 6d.

1865.





A.D. 1864, 11th *NOVEMBER*. N° 2809.

Softening or Deadening Sound.

LETTERS PATENT to Francis Fearon, of Great George Street, Westminster, in the County of Middlesex, Gentleman, for the Invention of "IMPROVED APPARATUS FOR SOFTENING OR DEADENING SOUND."

Sealed the 13th April 1865, and dated the 11th November 1864.

PROVISIONAL SPECIFICATION left by the said Francis Fearon at the Office of the Commissioners of Patents, with his Petition, on the 11th November 1864.

I, FRANCIS FEARON, of Great George Street, Westminster, in the County of Middlesex, Gentleman, do hereby declare the nature of the said Invention for "IMPROVED APPARATUS FOR SOFTENING OR DEADENING SOUND," to be as follows:—

The object of my Invention is to lessen the effect of sound in the ears of travellers by railway, or in other cases where continuous sound may be unpleasant or distressing to individuals. In order to effect this I cause a small plate (padded or otherwise) made of any suitable material, to press on each tragus of the ear. This may be effected in various ways, several of which will be herein-after alluded to, but it will be sufficient in this my Provisional Specification to describe that which I prefer.

I make a thin piece of steel (or other metal or material) in the form of a bow compass (or nearly so) the bow coming under the neck and the ends of the legs under or near the lobes of the ear, and it is on the ends of these legs

Fearon's Improved Apparatus for Softening or Deadening Sound.

that the plates (which are about the size of a farthing) are fixed or fitted. The centre of the bow is formed as a spring and so elongated downwards as to admit of pressure from thumb and finger for the purpose of fixing the apparatus or removing it. When worn, each of the two plates closes and presses lightly on the tragus of each ear, the metal pieces or wires descending 5 in curve or straight under the lobes of the ears, and so downwards below the under jaw, meeting at the centre as aforesaid, where a spring or other contrivance allows of their being pressed outwards to release the plates or one of them. The plates and wires may be enameled color of flesh if preferred, and I would here observe that the apparatus may be made to fit on from the back 10 of the neck (with very slight alteration of the parts) or even from the top of the head, but I prefer to effect my object from under the lower jaw, as then nearly all the parts of the apparatus are less visible, and if the wearer has whiskers or beard entirely so, except as to the plates on the tragus, which may, as aforesaid, be enameled the color of the skin. 15

SPECIFICATION in pursuance of the conditions of the Letters Patent, filed by the said Francis Fearon in the Great Seal Patent Office on the 10th May 1865.

TO ALL TO WHOM THESE PRESENTS SHALL COME, I, FRANCIS FEARON, of Great George Street, Westminster, in the County of Middlesex, 20 Gentleman, send greeting.

WHEREAS Her most Excellent Majesty Queen Victoria, by Her Letters Patent, bearing date the Eleventh day of November, in the year of our Lord One thousand eight hundred and sixty-four, in the twenty-eighth year of Her reign, did, for Herself, Her heirs and successors, give and grant unto 25 me, the said Francis Fearon, Her special licence that I, the said Francis Fearon, my executors, administrators, and assigns, or such others as I, the said Francis Fearon, my executors, administrators, and assigns, should at any time agree with, and no others, from time to time and at all times thereafter during the term therein expressed, should and lawfully might 30 make, use, exercise, and vend, within the United Kingdom of Great Britain and Ireland, the Channel Islands, and Isle of Man, an Invention for "IMPROVED APPARATUS FOR SOFTENING OR DEADENING SOUND," upon the condition (amongst others) that I, the said Francis Fearon, my executors or administrators, by an instrument in writing under my, or their, or one of their 35 hands and seals, should particularly describe and ascertain the nature of the

Fearon's Improved Apparatus for Softening or Deadenng Sound.

said Invention, and in what manner the same was to be performed, and cause the same to be filed in the Great Seal Patent Office within six calendar months next and immediately after the date of the said Letters Patent.

5 NOW KNOW YE, that I, the said Francis Fearon, do hereby declare the nature of my said Invention, and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement, reference being had to the accompanying Sheet of Drawing, forming part of this my Specification, and to the figures and letters of reference
10 placed thereon:—

The object of my Invention is to lessen the effect of sound in the ears of persons travelling by railway, and of other persons in the many other cases where continuous noise or din may be distressing to the ears.

I make an apparatus by means of which a small plate made of iron, steel,
15 silver, or any suitable material, and padded on its inner surface with a soft or smooth elastic or semi-elastic substance, is made to press on the tragus of each ear, by which means the ear is stopped and the entry of sound is to a considerable extent prevented. The pressure is produced by means of a spring formed by a stiff elastic rod, of metal or other suitable material,
20 branching out of and connecting the two plates, which rod is curved or arched, and when the apparatus is worn usually passes down the sides of the face and immediately under, above, or in front of the chin. The arch of the spring is so shaped that when the apparatus is not in wear the space by which the padded plates at its extremities stand apart is narrower than the face of the
25 intended wearer, so that when the apparatus is put on the padded plates are forced further apart than is natural to them, and this force being resisted by the elasticity of the spring a pressure is produced which, when the padded plates are placed over the tragi of the ears, has the effect of closing them. The natural spring of the arched rod may be increased by forming one or
30 more convolutions or twistings of the rod itself at or near the point of the arch, as shown on the Drawing, or by extraneous means.

Figure 1 of the annexed Drawing is a front elevation (about natural size) of one form of the apparatus above described, the spring being made of strong wire, two plates of brass, and their padding covered with velvet; and Figure 2
35 is a side view of the same. *a*, spring; *b*, metal plates; *c*, pads which press on the tragus of the ear.

I would here observe that the form of apparatus illustrated on the Sheet of Drawing is but a type of my Invention, and that I make the spring part of my apparatus of various forms; further, that I do not limit myself to the use

Fearon's Improved Apparatus for Softening or Deadening Sound.

of any particular material, but employ that which I find most conducive to the end required, namely, a gentle but firm pressure of the padded plates on the tragus of each ear; and although I prefer effecting my object by a spring passing from beneath or near the chin up to the ears, the apparatus may be made to fit on from the back of the neck or head, or even from the top of the head, and this may be effected with very slight modification of the spring, for instance, by curving it so as to make it pass under the lobe or over the top of the ear in such manner as to bring the pads on the tragi. The spring may be of one piece, as illustrated on the Drawing, or in two or more parts hinging on one or more pivots at a common centre, and made of thin plates of steel or other metal in lieu of wire. If the spring and the back of the plates be enameled so as to imitate the color of the skin or the hair the apparatus will not readily attract observation, and when worn by men wearing whiskers or beards, or both, or by ladies wearing bonnet strings, will be almost invisible. If desired a spiral or other extraneous spring may be fixed below any pivot when the spring carrying the pads is formed in two or more pieces, and by pressure of the thumb on one side below the pivot and a finger on the other above it on the opposite side, one or other of the plates may be temporarily pressed outwards from the tragus of the ear, permitting full sound to enter. On removing the hand the pad may be made to resume its place on the tragus, so that the sound may be deadened as before.

Having now described the nature of my Invention and shewn a means by which I carry it into practical effect, I would have it distinctly understood that I do not confine myself to the precise details herein given or to the Figure shewn on the Sheet of Drawing, as modifications may be made without departing from my Invention, and I claim the exclusive use of apparatus for stopping or deadening sound by means of pressure on the "tragus" of each ear, substantially as herein described and illustrated by the Drawing.

In witness whereof, I, the said Francis Fearon, have hereunto set my hand and seal, this Tenth day of May, in the year of Our Lord One thousand eight hundred and sixty-five.

FRANCIS FEARON. (L.S.)

LONDON :

Printed by GEORGE EDWARD EYRE and WILLIAM SPOTTISWOODE,
Printers to the Queen's most Excellent Majesty. 1865.

A.D. 1864. Nov. 11. N^o 2809.
FEARON'S SPECIFICATION.

(1 SHEET.)

FIG. 1.

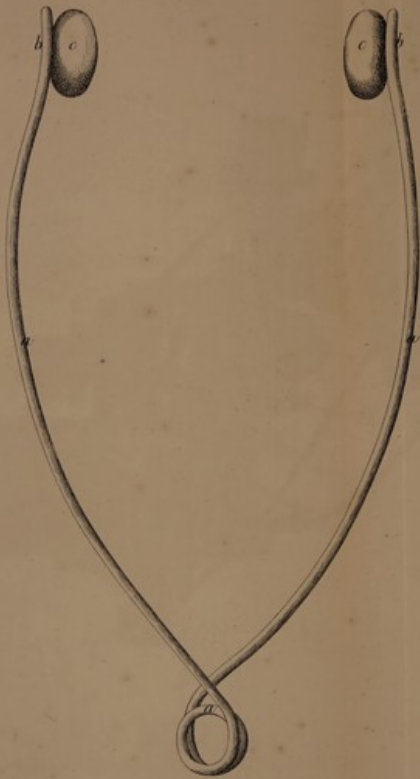
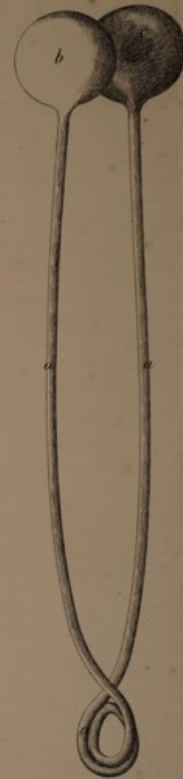


FIG. 2.



The filed drawing is not colored.

Drawn on Stone by Malby & Sons.

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