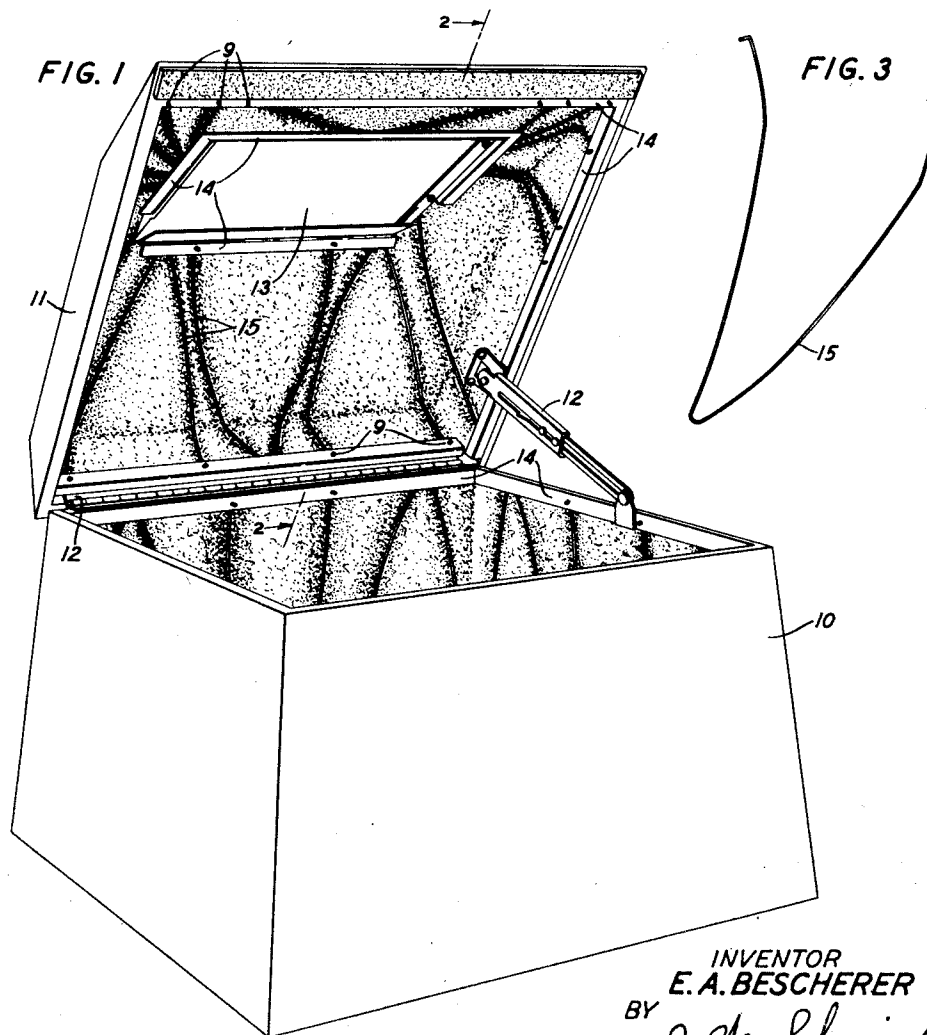
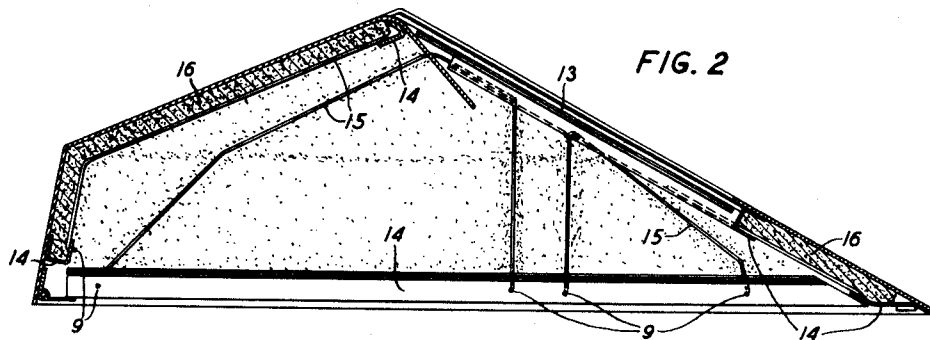


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E. A. BESCHERER
ACOUSTIC DAMPENING DEVICE

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ACOUSTIC DAMPENING DEVICE

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This invention relates to improvements in apparatus for deadening the sound waves produced by operating mechanisms, and has especial reference to covers for printing telegraph machines; its object being to provide an improved cover capable of efficiently dampening the sound waves produced therein.

In brokerage houses and other business organizations which have printers, ticker devices, and other sound producing apparatus, it has been found that the clatter caused by these machines is objectionable.

In accordance with this invention a printer cover is produced which is adapted to deaden the sound waves tending to emanate from the printer over a wide range of frequencies. A characteristic feature of the invention comprises specially designed, flexible metallic members provided to secure acoustic dampening material against the sides of the cover. These members may be adjusted to exert any required degree of pressure upon the acoustic dampening material. The members may be mounted and supported by a variety of structures.

In one aspect the invention comprises a particular structure for holding acoustic dampening material against the sides of a cover by means of slip-on springs arranged to fit into grooves on opposite sides of the material.

An advantage of this invention is that this material may be attached to the printer cover in a very simple and convenient manner.

Referring to the drawing, Fig. 1 is a perspective view of a printer cover with the lid raised to illustrate the manner in which the sound dampening material is secured to the cover;

Fig. 2 is a cross-sectional view of the lid of the printer cover of Fig. 1 along the line 2—2; and

Fig. 3 shows the flexible, metallic spring members which hold the material in place on the sides of the cover.

In Fig. 1 is shown a cover for a printing telegraph set comprising a truncated base portion 10 and a lid 11 hinged to the base

at 12. This lid is arranged to be raised or lowered to provide access to the contents of the cover. If desired, the lid may be held in an elevated position by catch 12 which is of a type well known in the art and forms no part of this invention.

Lid 11 has a rectangular shaped aperture 13 through which the printed paper of the machine passes. Secured to the inside edges of the lid 11 and base portion 10 are horizontally disposed metallic strips or ledges 14 which provide slit-like channels or rabbets about one-half inch wide between the sides of the cover and the strips. These metallic strips 14 are adapted to receive the end parts of the flexible and resilient spring members 15 which are V shaped and arranged to be easily bent to any desired form. The strips 14 are typical of arrangements in accordance with the invention for supporting the members 15. The free ends of members 15 are slightly hooked, note Fig. 3, and are adapted to be inserted into holes 9 in the metallic strips 14. These members can be removed from the cover with ease by disengaging the hook end from the holes 9 and pulling on the rounded end of 15.

Placed between the spring members 15 and the sides of the cover is an acoustic dampening material 16 which may consist of felt, fabric, cotton, wool or any other suitable material.

The material 16 is secured to the cover by first placing the felt or cotton next to the inner surface of the cover with the material extending into the channels formed by the strips 14 and the sides of the cover, then inserting a hooked end of one of the springs 15 into a hole in one of the strips 14 adjacent the material and arranging the spring so that the rounded portion thereof fits over the material and into the channel formed by another strip 14 oppositely disposed to the first mentioned strip and also adjacent the material. The material 16 will then be firmly secured between the two strips 14 and located underneath one leg of spring 15. By swinging the other leg of the spring 15 into the channel formed by the first mentioned strip and inserting the hooked por-

tion thereof into another hole 9 in the same strip, the material 16 will be tightly held in place against the inside of the cover.

Spring member 15 may be tensioned to secure the acoustic material to the cover with any desired degree of firmness. It has been found that the tensioning of the spring members affects to a small extent the range of the frequencies within which the material 16 is effective to deaden the sound waves.

It will be apparent from the foregoing description that numerous modifications may be made in this invention without departing from the scope thereof. For example, the flexible V-shaped members may be replaced by straight, flexible, metallic bands. In such case, the bands would slip underneath the strips to hold the material in place. If desired, the horizontally disposed strips may be replaced by hooks attached to the cover at definite predetermined intervals.

Although the present invention has been described with special reference to covers for printing telegraph apparatus, it is to be understood that the principles thereof are not limited in application to such covers alone, but it may be applied to the design of acoustic dampening devices of all sorts without departing from the spirit and scope of the appended claims.

What is claimed is:

1. A cover for printing telegraph machines of the type which is adapted to dampen sound waves produced within said cover, characterized in this, that the acoustic dampening material is secured to said cover by flexible V shaped metallic members adapted to extend over said material and to be attached to said cover by strip supports.

2. Means for securing a layer of acoustic dampening material to a cover, said means comprising ledges along the lateral borders of said cover and layer, and at least one flexible, metallic member adapted to extend over the material and to be firmly attached to said ledges.

3. In combination, an enclosure or casing, a sheet of acoustic dampening material, attaching strips fastened to said casing along the lateral borders of said material, and pliable, metallic members adapted to extend in a substantial transverse direction between said strips for securing said material to said casing.

4. In combination, acoustic dampening material, horizontally disposed strips arranged on both sides of said material and provided with apertures, flexible members having hooked ends adapted for engagement with said apertures said members being arranged to extend between oppositely disposed strips for securing said material between said strips.

5. A cover for a printing telegraph ma-

chine including means for deadening the sound waves tending to emanate from within said cover, said means comprising acoustic dampening material such as wool, cotton, felt or other suitable material, a plurality of V shaped flexible, metallic members for securing said material to the inside of said cover, and a plurality of strips forming channels between said cover and said strips for engagement with said V shaped members.

6. In a cover for a printing telegraph apparatus, said cover having substantially the form of a partly truncated pyramid, means for dampening sound waves produced by said apparatus comprising at least one layer of acoustic dampening material, such as felt, cotton or other suitable sound absorbing material placed adjacent the inner sides of the cover, attaching strips forming channels between the cover and the strips arranged on opposite borders of said material and resilient, metallic members for holding said material in contact with the inner sides of said cover, said members extending in a substantial transverse direction between said strips.

In witness whereof, I hereunto subscribe my name this 13th day of July, 1931.

EDWIN A. BESCHERER.

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