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CROSS REFERENCE

United States
Eckel

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[45] Oct. 3, 1972

[54] AUDIOMETRIC SURVEY BOOTH

[72] Inventor: **Alan Eckel,** 10 Hildreth St., Westford, Mass. 01886

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[21] Appl. No.: **18,172**

[52] **U.S. Cl.** .....**52/36,** 52/144, 52/204, 181/33 G
[51] **Int. Cl.** **E04b 1/82**
[58] **Field of Search**.....52/64, 20, 144, 36, 204; 181/33 G, 33 GE, 33 GC, 33 K, 33 GB, 33 GD, 30

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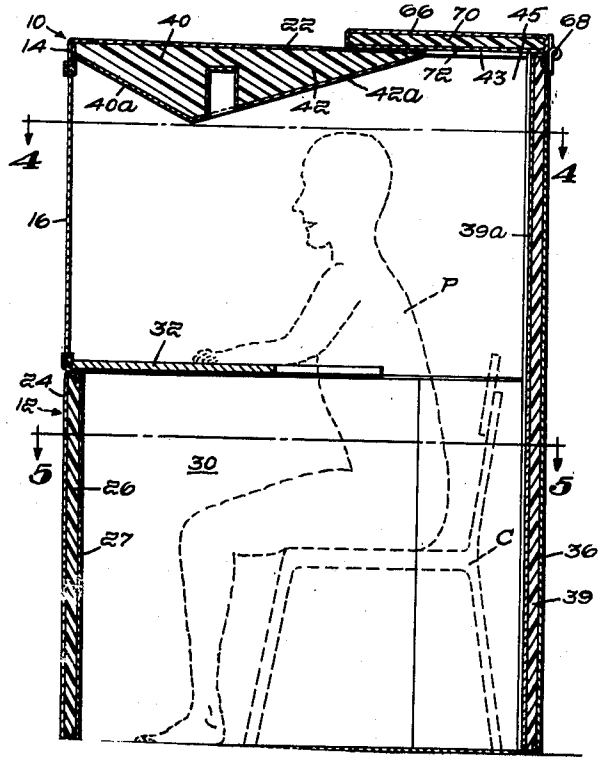
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Primary Examiner—John E. Murtagh
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[57] **ABSTRACT**

An audiometric survey booth to conduct basic hearing tests is padded interiorly with sound absorbing material at the top and sides to shut out exterior noises. At the top, portions of said material extend diagonally downward and thence diagonally upward while the material at opposite sides is non-parallel, flaring inwardly from the top in a downward direction, being so arranged that the ears of a person within my booth are particularly well shielded from outside noises.

7 Claims, 5 Drawing Figures



52-36

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SHEET 1 OF 2

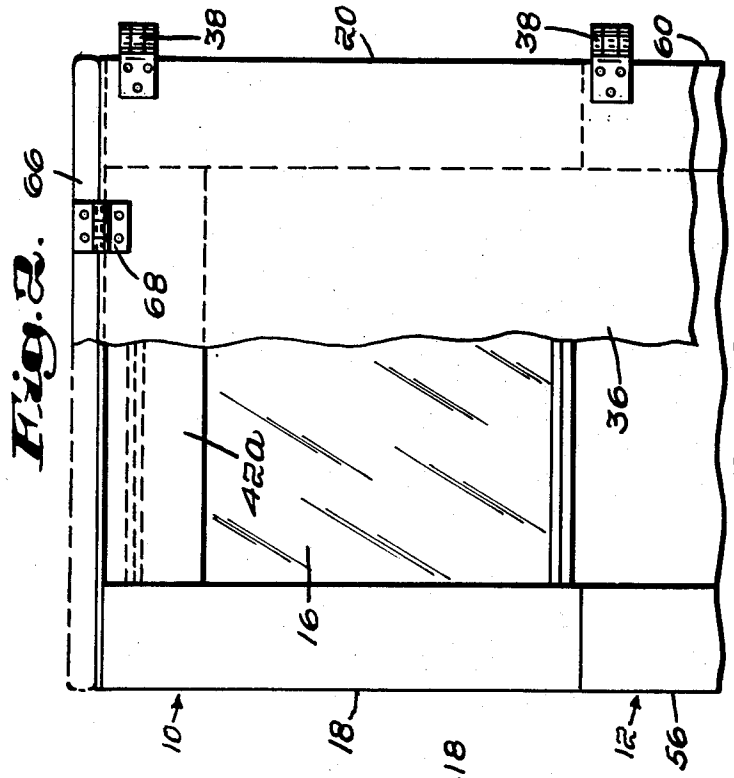


Fig. 2.

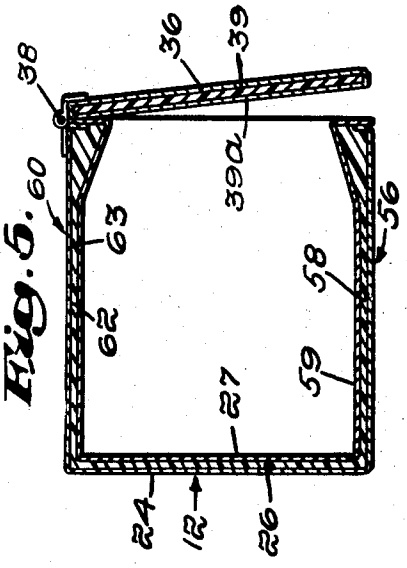


Fig. 5.

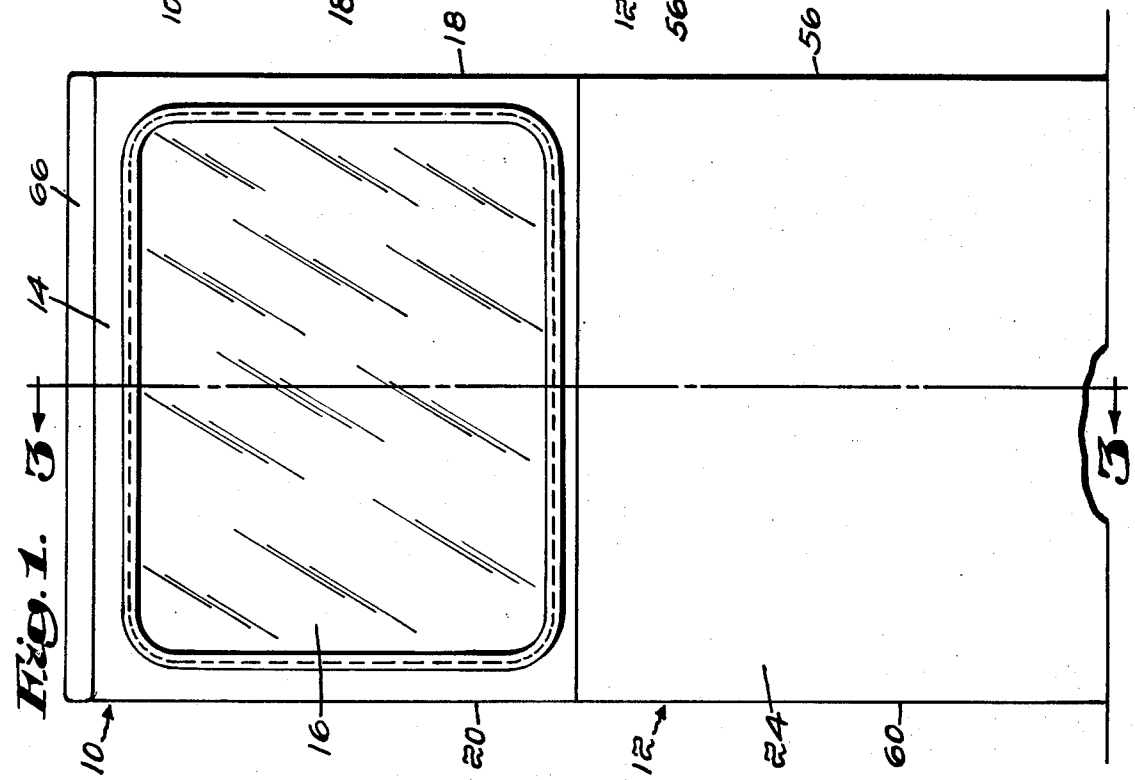


Fig. 1.

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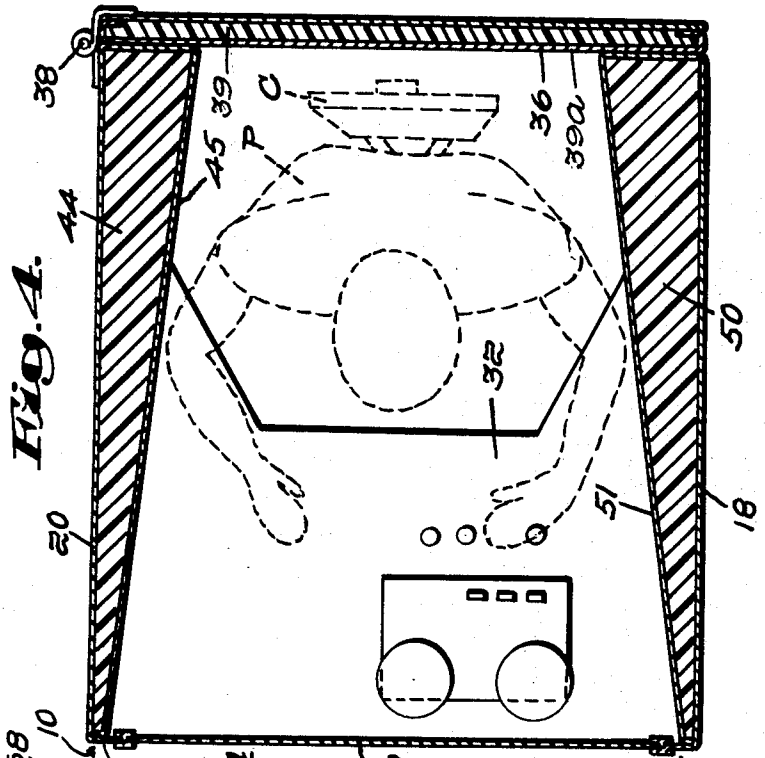


Fig. 4.

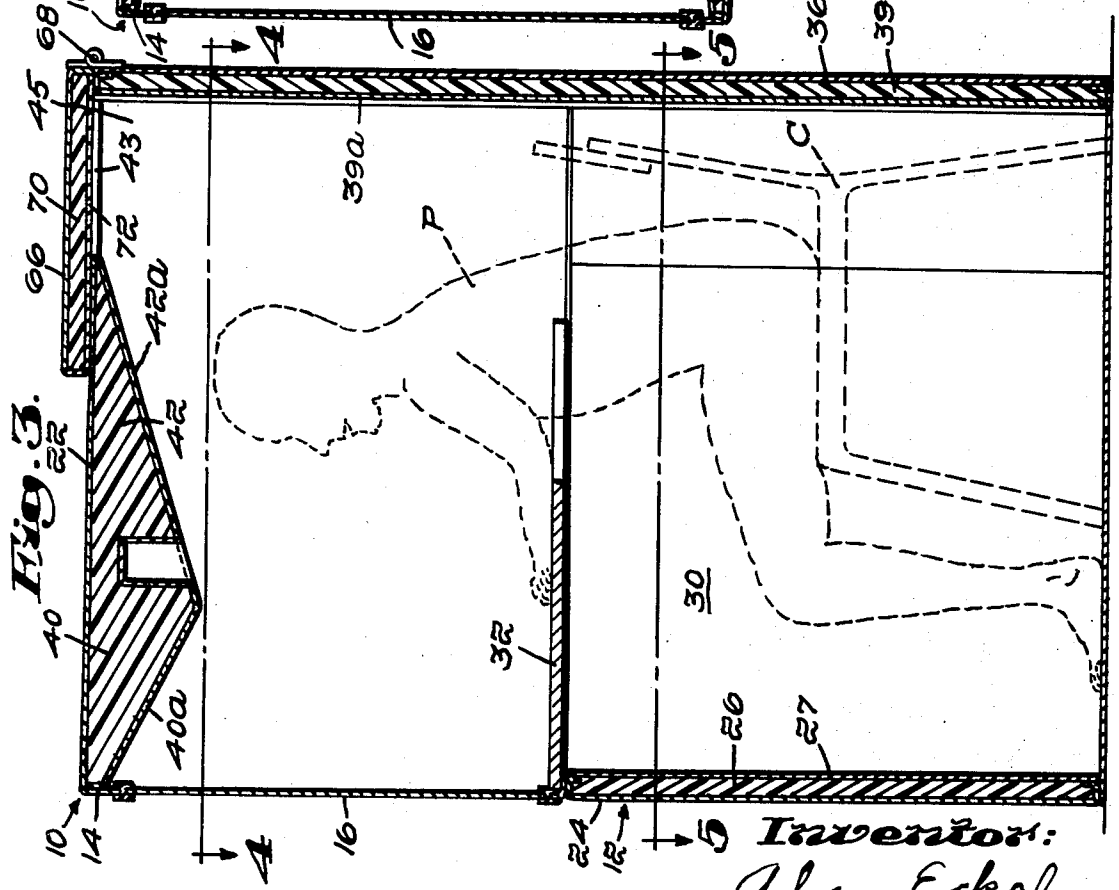


Fig. 5.

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AUDIOMETRIC SURVEY BOOTH

The principal object of my invention is to provide a portable booth with sound absorbing material so placed that it effectively protects the person within from outside noises; yet avoids making the booth bulky or too costly.

The foregoing and other objects which will appear as the nature of the invention is better understood, may be u accomplished by a construction, combination and arrangement of parts such as is disclosed by the drawing. The nature of the invention is such as to render it susceptible to various changes and modifications, and therefore, I am not to be limited to the construction disclosed by the drawing, nor to the particular parts described in the specification; but an entitled to all such changes therefrom as fall within the scope of my invention.

In the drawing:

FIG. 1 is a front elevational view of my booth.

FIG. 2 is a rear elevational view of said booth, the rear door being shown partly broken away.

FIG. 3 is a sectional view taken on the line 3—3 oF FIG. 1.

FIG. 4 is a sectional view taken on the line 4—4 of FIG. 3.

FIG. 5 is a sectional view, greatly reduced, taken on the line 5—5 of Fig. 3.

As illustrated, my audiometric survey booth is preferably made with an upper section **10** and a lower section **12** thereon. The upper section has a front **14** provided with a window **16**, two sides **18** and **20**, and a top **22**. The lower section **12** has a front **24** padded inwardly with sound absorbing material **26** which may be two inches thick, and retained by a sheet of metal **17**.

There preferably is a counter **32** at the bottom of said upper section, which extends from said window **16** rearwardly. The booth may be closed at the rear by a door **36**, as shown, hingedly connected as at **38** to said side **20**, or a curtain, not shown, may be used to close my booth. This door has said material at the inside as at **39**, about two inches thick, retained by a sheet of metal **39***a*.

Said top **22** is padded with portions of sound absorbing material such as fiber glass, one portion **40** extending from said front **14** diagonally downward from which another portion **42** extends diagonally upward and rearwardly along said top, being retained by metal sheets **40***a* and **42***a* respectively. Said other top portion **42** is preferably spaced as at **43** from the rear or door **36** and is later referred to. This space **43** provides an opening for the head of a person P, as when he stands up in the booth.

A side portion **44** of sound absorbing material extends inwardly from said side **20** and which material is retained by a metal sheet **45**. Said side portion **44** metal sheet **45** terminate at the bottom portion of said upper section **10**.

The opposite side **18** has a portion **50** of said sound absorbing material extending inwardly, being retained by a metal sheet **51**, and which terminates at the lower portion of said upper section **10**. Both of said portions **44** and **50** flare outwardly and downwardly, being relatively thin at the top, such as **2** inches, and gradually thickening or widening until they terminate in a thickness 5½ inches. It will be seen from the direction of the metal sheets **45** and **51** that said portions **44** and **50** are non-parallel which arrangement is effective to break up sound waves and reduce noise.

At the lower section **12** a side **56** is directly below said side **18**, being in effect a continuation thereof. Sound absorbent material **58** extends the full height thereof, being uniformly about 2 inches thick, as shown, and being retained by sheet metal **59**.

Opposite to said side **56** is a side **60** directly below said side **20**, being in effect a continuation thereof. Sound absorbent material **62** extends the full height thereof, being uniformly about 2 inches thick and being retained by sheet metal **63**.

In order to close said space **43** at the top I provide a hinged closure cap **66** that is hinged as at **68** to said door. Said cap **66** is padded with said material **70** retained by a metal sheet **72**.

In said FIG. 1 the position normally taken by a person P sitting on a chair C inside my booth in shown. His head and ears are at the rear half portion of my booth. He is protected from outside noise by said sound absorbing material.

What I claim is:

1. An audiometric survey booth comprising a front, a top, and two oppositely disposed sides extending from said front rearwardly, said top having sound absorbing material extending irregularly inward whereby the thickness of said material in a downward direction varies, said two sides having sound absorbing material extending inwardly, the lines defining the inner extremities of said material of said two sides being non-parallel, said top sound absorbing material having a first portion extending from said top diagonally downwards towards the rear of said booth and having another portion extending diagonally upward towards the rear of said booth, said other portion extending from said first portion rearwardly and upwardly a greater distance than said first portion extends.

2. An audiometric survey booth as set forth in claim **1**, said two portions of said sides extending downwardly and flaring inwardly whereby their thickness varies from the upper part of said booth in a downward direction.

3. An audiometric survey booth as set forth in claim **1**, said two portions of said sides extending downwardly and flaring inwardly whereby their thickness varies from the upper part of said booth in a downward direction, said top portion nearer the rear of said booth being spaced from said side portions thereby providing an opening for head space.

4. An audiometric survey booth as set forth in claim **1** and having an upper section and a lower section, said sides extending downwardly from said top and flaring inwardly until said lower section is reached where they terminate and whereby their thickness varies from the said top of said booth downwardly.

5. An audiometric survey booth as set forth in claim **1**, said booth having an upper section and a lower section extending from the latter, and a counter in said upper section extending laterally and rearwardly from a point adjacent said front, and sound absorbing material extending downwardly from said counter at the front of said lower section.

6. An audiometric survey booth as set forth in claim **5**, said upper section having a window at the front thereof, said counter being below said window, and a door at the rear movably attached to a said side.

7. An audiometric survey booth as set forth in claim 3, and a door at the rear movably attached to a said side, and a cap movably supported by said door and covering said top opening when in closed position, said top being adapted to be moved to open position when said door is in closed position.

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