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Heaney

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[54] **ADJUSTABLE TRACK ASSEMBLY**

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[52] **U.S. Cl.** ..... **238/10 R,** 238/281

[51] **Int. Cl.** **E01b 2/00,** E01b 23/00

[58] **Field of Search** ..... 238/10 R, 1, 122, 281, 238/282, 8, 9; 104/134, 69

[56] **References Cited**

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Attorney, Agent, or Firm—John Joseph Hall

[57] **ABSTRACT**

An adjustable track assembly providing a pair of wedges with interlocking teeth superimposed on each other within a housing and combined with removable flanged snap bead covers for supporting a track that bears carriages for files or cabinets. The position of the wedges on each other may be adjusted to keep the track perfectly level over relatively long distances.

12 Claims, 3 Drawing Figures

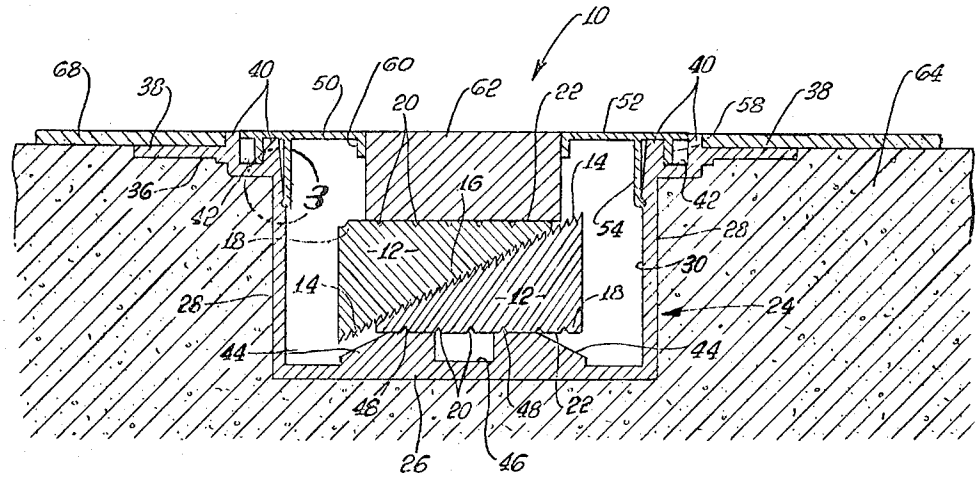


FIG. 1.

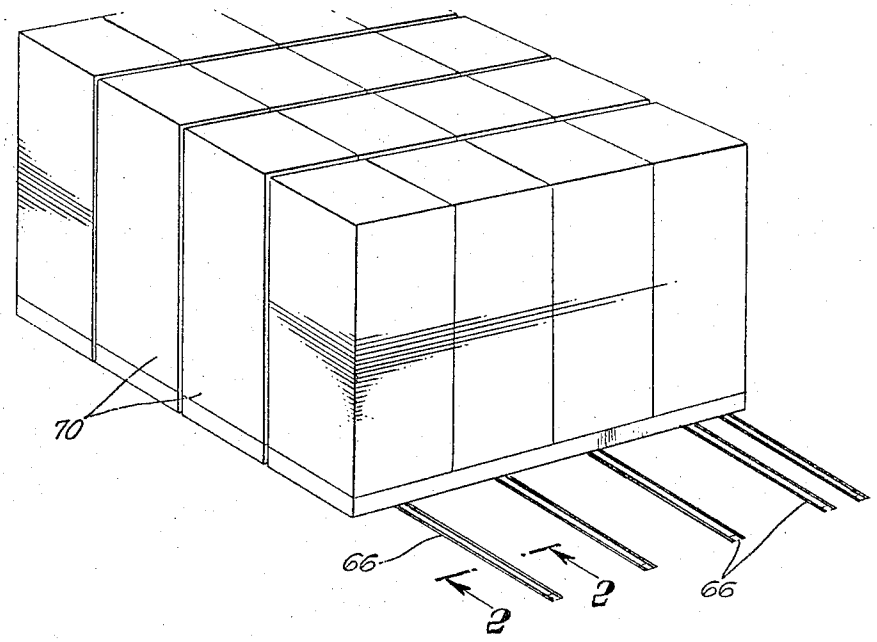
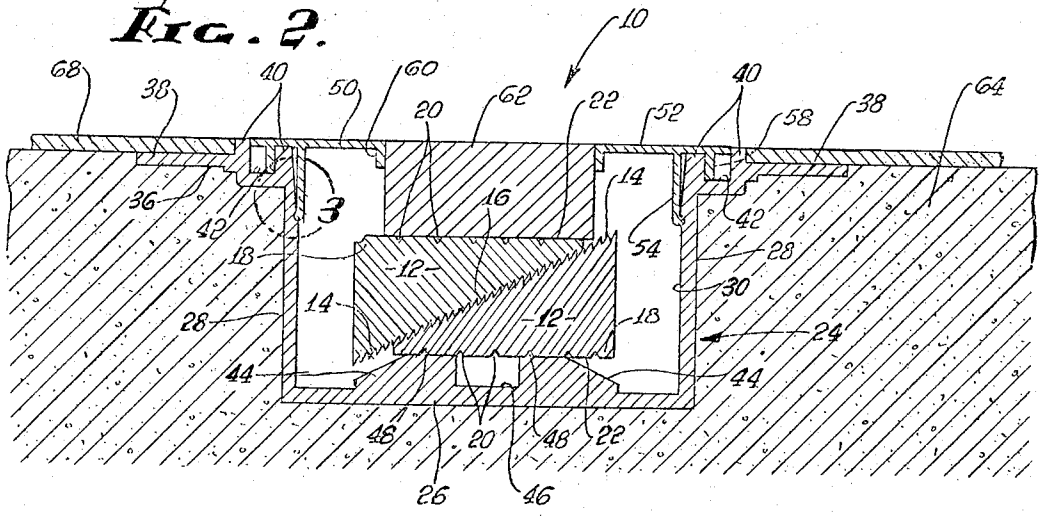


FIG. 2.



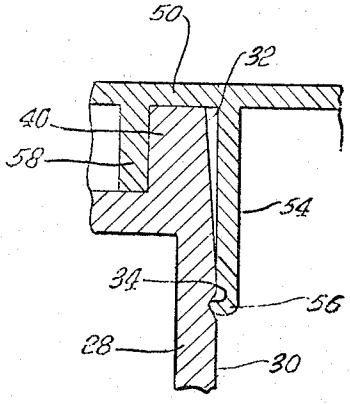


FIG. 3.

ADJUSTABLE TRACK ASSEMBLY

BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention relates to a new type of adjustable track assembly which provides interlocking wedges superimposed on each other and capable of adjustment of their height in position.

2. Prior Art

Applicant is unaware of any prior art disclosing the particular form of the wedges having interlocking teeth in conjunction with a housing having removable covers for supporting a track for file carriages which is adjustable to keep the track level.

SUMMARY OF THE INVENTION

The invention comprises an adjustable track assembly which includes a pair of wedges having interlocking teeth on their longest side, a housing having a base with rising abutments in its center and perpendicular side walls terminating in an inwardly tapered top portion of the inner walls with a longitudinal groove below the taper in each inner wall, a longitudinal groove formed on each outer wall of the top portion of the side walls, and a removable flanged snap bead cover fitting in each groove of the outer side walls of the housing. The wedges have teeth which interlock when the wedges are superimposed on one another with the longest side congruent. The wedges in their superimposed position can be adjusted laterally to increase or decrease the overall height of the wedges when placed in the interlocking position.

The adjustable track assembly can be formed in a plurality of various lengths to provide a quick and reliable means for giving level support to a track that bears a plurality of files or cabinets on a carriage.

Conventional tracks for file or cabinet carriages have no similar means for easy and rapid adjustment to maintain a track level, in the event of a displacement in height of the floor on which the track rests.

It is therefore, an object of my invention to provide an adjustable track assembly which can compensate for height displacement of the floor to maintain the track which it supports perfectly level.

Another object of my invention is to provide an adjustable track assembly which is relatively easy to assemble and place in operation.

A further object of my invention is to provide an adjustable track assembly which can be readily adjusted after its installation in a floor, to maintain the track level which it bears, in the event of a change in floor height.

These and other objects will be more readily understood by reference to the following description and claims, taken in conjunction with the drawing, in which

FIG. 1 is a perspective view of an embodiment of my invention in position supporting tracks which bear a plurality of files or cabinets on carriages.

FIG. 2 is a view taken along line 2—2 of FIG. 1.

FIG. 3 is a detailed section of a portion of FIG. 2 showing flanged snap bead covers in place.

The adjustable track assembly **10** has a pair of wedges **12** each having a series of rows of teeth **14** formed on the surface of the wedge side **16** opposite the right angle **18** of the wedges **12.** The rows of teeth **14** are preferably equally spaced and of uniform size.

The teeth **14** of wedges **12** interlock when the sides **16** are superimposed. Wedges **12** are preferably formed in such a way as to have a cross section in the form of a 30°–60° right triangle, although the cross section of the wedges **12** may be varied to include embodiments ranging from the cross section of a 30°–60° right triangle to that of a 45° right triangle.

The wedges **12** have a series of parallel grooves **20** on the longer straight side **22.**

The length of wedges **12** may vary from one inch to three feet without detracting from the level adjusting capability of the adjustable track assembly **10,** although I have found that about one foot in length is a preferable length for the wedges **12.**

The wedges **12** are supported by a housing **24** having a base **26** and side walls **28** forming right angles with base **26.** The inside surfaces **30** of side walls **28** have a slight inner taper **32** at their upper ends beginning just above longitudinal grooves **34** cut in the inner surface of side walls **28.**

The top portion of the outer walls **36** of housing **24** are formed in horizontal fins **38** with vertical flanges **40** and longitudinal grooves **42** between the flanges **40.**

The base **26** of housing **24** has abutments **44** rising up from the bottom base **26** and separated by a longitudinal groove **46.** The abutments **44** have flat top surfaces. Each abutment **44** has a longitudinal rib **48** on its top surface, which fits into one of the grooves **20** of wedges **12.** The ribs **48** are located so that each of the ribs **48** simultaneously fits into one of grooves **20** of wedges **12.**

The adjustable track assembly **10** is provided with two removable flanged snap bead covers **50,** one for each of grooves **42** of the housing **24.**

The flanged snap bead covers **50** are identical in construction, and have a flat top **52.** The covers **50** are each provided with a middle flange **54** perpendicular to top **52** and terminating in a longitudinal bead **56** that snap fits into groove **34** of the side wall **28** of housing **24.** Outer longitudinal flange **58** of cover **50** is also perpendicular to top **52** and is spaced sufficiently away from middle flange **54** to fit closely into groove **42,** thereby maintaining cover **50** in position in conjunction with middle flange **54.** The inner edge of top **52** is formed into a longitudinal lip **60** which is perpendicular to the top **52.** The tops **52** of covers **50** are formed in a width sufficient to permit lips **60** to be in close alignment with longitudinal track **62** when it is in position on the top of interlocking wedges **12.**

The fins **38** are used when the adjustable track assembly is used for a tile or carpet application. Otherwise, the fins **38** may be dispensed with, without affecting the operation of the adjustable track assembly **10.**

The various parts of the adjustable track assembly **10** can be formed from any suitable material for sustaining the stresses resulting from the use of the invention without becoming deforemd. I have found that solid aluminum metal is satisfactory.

In operation, the adjustable assembly track assembly **10** is placed in position as shown in FIG. **2.** The housing **24** is set in concrete **64** as indicated in FIG. **2.** Various conventional means (not shown) may be used to fix and maintain the adjustable track assembly **10** in position. Groove **42** is formed to accept a conventional size hex nut.

A plurality of adjustable track assemblies **10,** each about one foot long and about two inches apart, is placed in each track line **66** designated in FIG. **1.** Each

pair of wedges **12** is then adjusted with respect to their interlocking teeth **14** in place to provide a perfectly level support for the track **62** for each of track line **66,** thereby compensating for any difference in level of the floor **68.** After the wedges **12** have been properly adjusted in height, the track **62** is placed on the wedges **12** within each line **66** and the flanged snap bead covers **50** are snapped in position, providing a perfectly level surface as shown in FIG. **2** for movement of files or cabinets **70.**

In the event that any settling or other displacement of any part of the floor **68** should occur so that any of the tracks **62** is no longer level, the flanged snap bead covers **50** in the particular area of the floor **68** can be readily removed and the wedges **12** easily adjusted in height to compensate for any such settling or displacement of the floor **68,** so that each of the tracks **62** will be maintained in its original level position.

The invention can also be used to support and keep tracks level that are used to mount equipment on, such as for a machine shop, or for various types of storage equipment.

Although I have described a preferred embodiment of my invention, it is understood that numerous changes in the construction and arrangement of parts may be made without departing from the spirit and scope of the invention as claimed hereinafter.

I claim:

1. A track assembly for supporting a track bearing a carriage for files and cabinets, comprising:

a housing with a base having an abutment formed in its center portion with a longitudinal rib on its top surface and with two opposite side walls each having a longitudinal groove and an inward taper at the top portion of their inner surfaces and having a longitudinal groove formed at the top portion of each of their outer walls; and

a pair of wedge members each having a series of rows of teeth formed on the surfaces of their longest sides, said teeth interlocking with each other when said longest sides of said wedge members are superimposed, each of said wedge members having a groove formed in one of their remaining sides to receive said longitudinal rib of said abutment of said housing;

whereby said track assembly can be adjusted to maintain said track in a level position.

2. A track assembly according to claim **1** in which the wedges members have the cross section of a 30°–60° right triangle.

3. A track assembly according to claim **1** in which the wedge members have the cross section of a 45° right triangle.

4. A track assembly according to claim **1** in which the two opposite side walls are perpendicular to the plane of the base of the housing.

5. A track assembly for supporting a track bearing a carriage for files and cabinets, comprising:

a housing with a base having an abutment formed in its center portion with a longitudinal rib on its top surface, and with two opposite side walls each having a longitudinal groove and an inward taper at the top portion of their inner surfaces and having a longitudinal groove formed at the top portion of each of their outer walls;

a pair of wedge members each having a series of rows of teeth formed on the surfaces of their longest sides, said teeth interlocking with each other when said longest sides of said wedge members are superimposed, each of said wedge members having a groove formed in one of their remaining sides to receive said longitudinal rib of said abutment of said housing; and

at least one removable snap bead cover member having a middle flanged portion with a longitudinal bead at its outer end, said bead snap fitting into said longitudinal groove of said inner surface of said side walls of said housing,

whereby said track assembly can be adjusted to maintain said track in a level position.

6. A track assembly according to claim **5** in which the wedge members have the cross section of a 30°–60° right triangle.

7. A track assembly according to claim **5** in which the wedge members have the cross section of a 45° right triangle.

8. A track assembly according to claim **5** in which the two opposite side walls are perpendicular to the plane of the base of the housing.

9. A track assembly for supporting a track bearing a carriage for files and cabinets, comprising:

a housing with a base having an abutment formed in its center portion with two longitudinal ribs on its top surface, and with two opposite side walls each having a longitudinal groove and an inward taper at the top portion of their inner surfaces and having a longitudinal groove formed at the top portion of each of their outer walls;

a pair of wedge members each having a series of rows of teeth formed on the surfaces of their longest sides, said teeth interlocking with each other when said longest sides of said wedge members are superimposed, each of said wedge members having a groove formed in one of their remaining sides to receive said longitudinal ribs of said abutment of said housing; and

two removable snap bead cover members each having a middle flanged portion with a longitudinal bead at their outer ends, said beads each snap fitting into said longitudinal groove of said inner surface of said side walls of said housing;

whereby said track assembly can be adjusted to maintain said track in a level position.

10. A track assembly according to claim **9** in which the wedge members have the cross section of a 30°–60° right triangle.

11. A track assembly according to claim **9** in which the wedge members have the cross section of a 45° right triangle.

12. A track assembly according to claim **9** in which the wedge members have the cross section of a right triangle whose remaining angles range from 30° to 60° to 45° and 45° respectively.

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