

May 21, 1940.

G. H. BUGENHAGEN

2,201,714

FLOOR ANCHOR

Original Filed Oct. 26, 1937

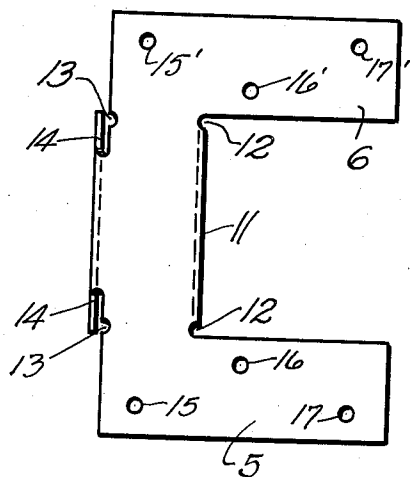


Fig. 3

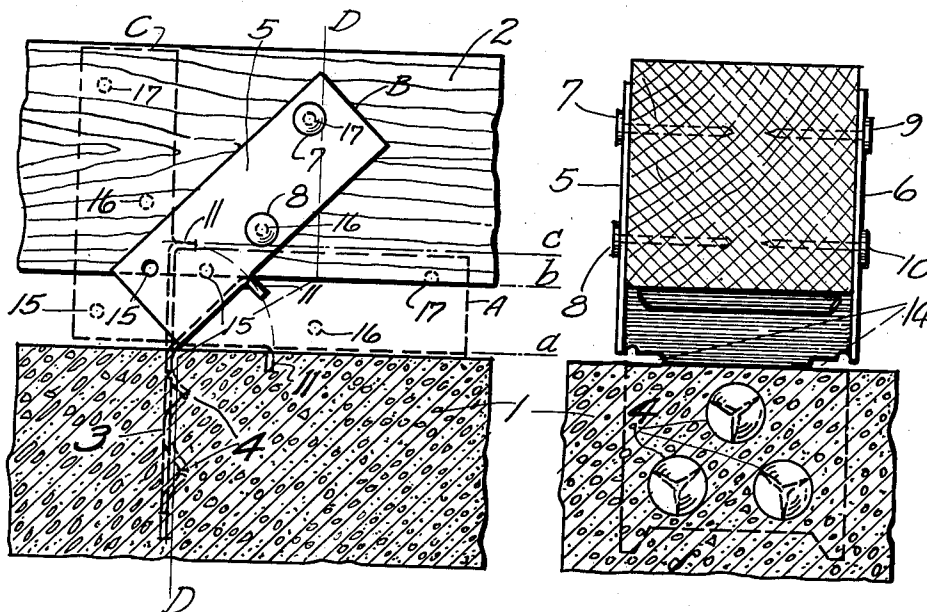


Fig. 1

Fig. 2

INVENTOR.
G. H. Bugenhagen

UNITED STATES PATENT OFFICE

2,201,714

FLOOR ANCHOR

George H. Bugenhagen, Minot, N. Dak.

Substitute for application Serial No. 171,022,
October 26, 1937. This application February 9,
1939, Serial No. 255,458

2 Claims. (Cl. 72-101)

This specification being a substitution for the application now abandoned, No. 171,022, filed October 26, 1937.

The objects of my invention are: first, to provide an anchorage for wood floors to concrete sub-floors. Second, to provide an anchor that also serves as a means for shimming up nailing strips to a given line or level without the use of wood shims as now commonly used. I attain these objects in the device described in this specification and shown in the accompanying drawing, in which:

Fig. 1 shows a side view of the device supporting a nailing strip and attached by nails to the said strip. Fig. 2 shows a cross section on line D-D showing the method of anchorage to the concrete sub-floor and nailing strip. Fig. 3 is a plan view of the device as it is set into the concrete sub-floor.

Referring to the drawing, Fig. 1 is a sectional view of a concrete sub-floor in which the anchor leg 3 is embedded; the anchor leg 3 is provided with deformations 4 to provide suitable anchorage. Above the concrete sub-floor the device is provided with a supporting ledge 11 and a pair of nailing ears 5 and 6 provided with nail holes 15-16-17 and 15'-16'-17' respectively. Near the surface of the sub-floor line, indentations 12 and 13 provide a somewhat narrowed neck between said indentations for the purpose of localizing the bending axis when the said ears are turned up into a vertical or perpendicular position. The slotted indentations 14 provide a similar narrowed neck for the purpose of localizing the bending axis of the anchor at a predetermined point near the surface of the aforesaid sub-floor line.

Referring to Figs. 1 and 2, the nailing strip 2 supported on the ledge 11 is anchored to the nailing ears 5 and 6 by nails 7-8-9 and 10, thus holding the nailing strip 2 in a firm position.

In operation, my device operates as follows: the device is set in position as shown in Fig. 3 at suitable intervals while the concrete is in a plastic state. The nailing ears 5 and 6 being laid flat on the surface of the sub-floor; after the concrete has set and the nailing strips are to be placed, the nailing ears 5 and 6 are turned up into a vertical position with a thin instrument placed under the said ears, bending the metal on a line between indentations 12 and 13. The nailing strip 2 is then laid in between the nailing ears 5 and 6 and the leveling and anchoring operation completed by swinging the said ears and the attached shimming ledge 11 upwardly

about an axis of the slots 14 and 14', rotating counter-clockwise from the starting position *a* Fig. 1, as shown by dotted lines *A* in the lowest position, until the desired elevation for the nailing strip between the limits *a* to *c* is obtained. When the nailing strip has been properly placed, the nails 7, 8, 9 and 10 are driven into holes 16-17 and 16'-17' thereby anchoring the nailing strip 2 firmly to the device. After all leveling and anchoring of the nailing strip is completed the space between the sub-floor and nailing strip is filled with a cement grout for permanent support of the nailing strip.

I am aware that metal floor anchors with ears extending up from a concrete sub-floor are in use, but not to my knowledge has an anchor with integral means for shimming up been used and therefore claim broadly as follows:

1. A combination in a floor anchor for anchoring wood floor nailing strips to concrete sub-floors, having a downwardly extended anchor into the aforesaid sub-floor, a pair of separated nailing ears attached to and extending upwardly from the aforesaid downwardly extended anchor having an adjustable shimming ledge fixed to the said separated nailing ears, the said shimming ledge supporting a suitable nailing strip positioned between the said separated nailing ears, the aforesaid nailing strip secured to the said nailing ears, the height of the aforesaid shimming ledge adjusted by changing the position of the separated nailing ears turning on an axis parallel to said shimming ledge and near the surface of the aforesaid sub-floor and transverse to the said nailing strip.

2. A combination in a floor anchor for anchoring wood floor nailing strips to concrete sub-floors, having a downwardly extended anchor into the said concrete sub-floor, a pair of separated nailing ears attached to and extending upwardly from the aforesaid downwardly extended anchor, having an adjustable shimming ledge fixed to the said separated nailing ears, the height of the aforesaid shimming ledge adjusted by the movement of the nailing ears attached thereto, said movement pivoted on an axis parallel to the said shimming ledge and adjacent to the surface of the aforesaid sub-floor, the said shimming ledge supporting a nailing strip positioned between the aforesaid nailing ears and fixed to the said nailing ears with suitable nails, and indentations localizing the bending axis of the shimming ledge and the nailing ears respectively.

GEORGE H. BUGENHAGEN.