Oct. 17, 1961 B. D. LANE 3,004,740

HANGER FOR FLUE PIPES

Filed Oct. 11, 1957

Fig. 1

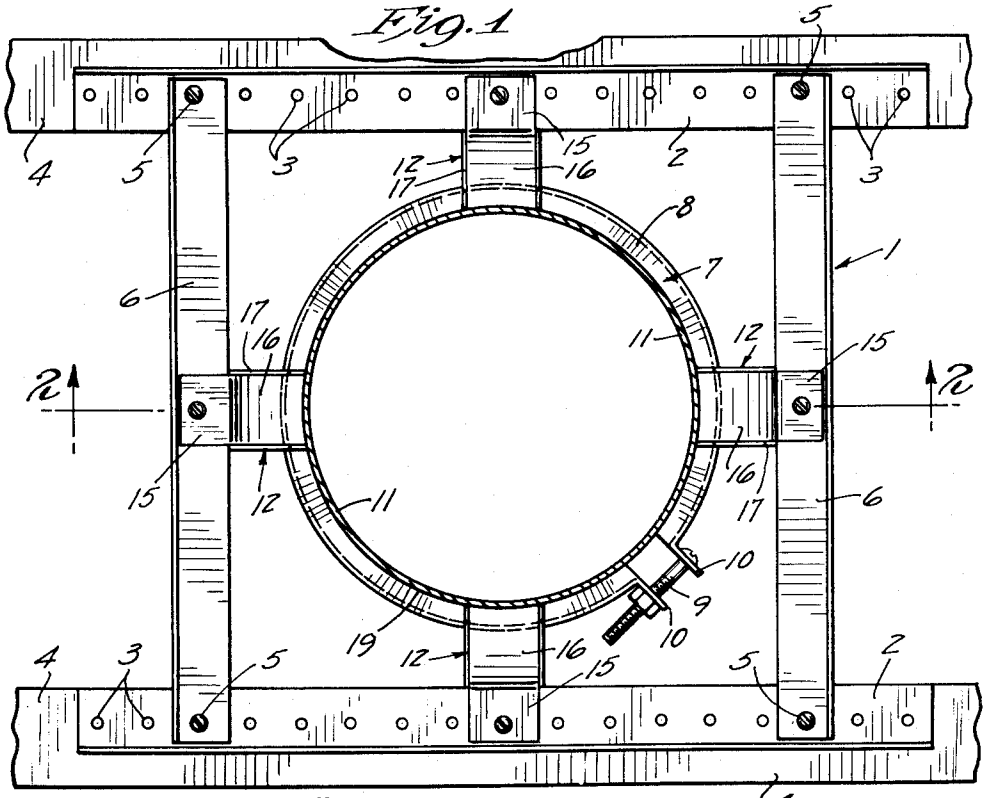


Fig. 2

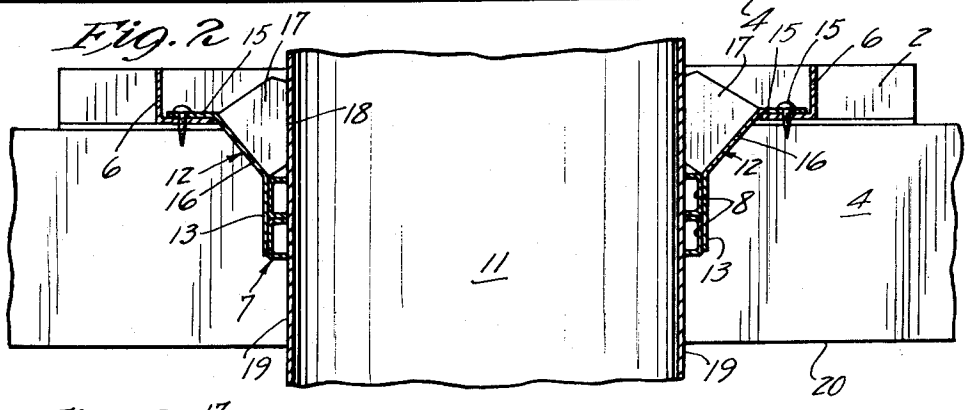
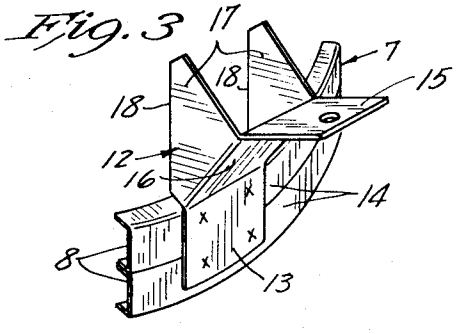


Fig. 3



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HANGER FOR FLUE PIPES

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My invention relates to hanger brackets for flue pipes.

Building ordinances and regulations generally require that a flue pipe be held in a specified spaced relationship to any combustible material such as the wooden beams and joists which are used in home construction.

The primary object of my invention is the provision of a prefabricated device of the class above described which is simple and inexpensive to manufacture and which is rugged and durable in use.

A further object of my invention is the provision of a device of the class above described which will facilitate the installation of flue pipes, which will effect a considerable saving in time and money, and which will positively and permanently effect a desired spacing of the flue pipe with respect to adjacent beams between which such flue pipes pass.

A further object of my invention is the provision of a device of the class immediately above described which comprises a generally rectangular frame structure adapted to span a pair of spaced beams and to be secured thereto, a horizontally disposed clamping ring adapted to receive and hold a vertically disposed flue pipe against axial movements, and a plurality of spacing brackets interposed between said clamping ring and said frame structure, said brackets including vertical ears secured to said clamping ring, horizontal ears detachably secured to said frame structure, and angular body portions, said body portions defining radially inwardly projecting elements which are adapted to engage circumferentially spaced portions of a flue pipe in axially spaced relation to said clamping ring, whereby to hold said flue pipe against angular movements with respect to said clamping ring while spacing same with respect to said beams.

A still further object of my invention is the provision of a device of the class immediately above described in which each of said brackets is formed from a single piece of sheet metal, and in which said radially inwardly projecting elements are in the nature of generally parallel wings extending radially inwardly from opposite sides of said body portions.

The above and still further objects of my invention will become apparent from the following detailed specification, appended claims, and attached drawings.

Referring to the drawings wherein like characters indicate like parts throughout the several views:

FIG. 1 is a view in top plan of my novel structure, showing same secured to the upper surface of spaced beams, the flue pipe held therein being shown in horizontal section;

FIG. 2 is a view in vertical section taken on the line 2—2 of FIG. 1, some parts being broken away; and

FIG. 3 is a fragmentary view in perspective of my novel structure.

Referring with greater particularity to the drawings, the numeral 1 indicates in its entirety a frame structure comprising a pair of laterally spaced elongated mounting bars 2 which are adapted to be secured by any suitable means such as nails or screws, not shown, but extending

through longitudinally spaced openings 3 to beams or joists 4 in a residential building or the like. Extending transversely between the mounting bars 2 and secured thereto at their opposite ends, as indicated by the numeral 5, are a pair of cross arms 6 which, with the members 2, form a generally rectangular frame. For the purpose of rigidity, the members 2 and 6 are transversely angular, as shown particularly in FIG. 2.

A split clamping ring 7 is positioned within the opening defined by the frame 1, in spaced relationship to the members 2 and 6. Preferably and as shown, the clamping ring 7 is formed from sheet metal to provide one or more channels 8 for the purpose of imparting strength thereto. A nut-equipped clamping bolt 9 fits loosely through openings, not shown, in clamping lugs 10 on opposite ends of the clamping ring 7 for purposes of drawing same up tightly against a flue pipe, identified by the numeral 11.

A plurality of identical spacing brackets 12 are interposed between the clamping ring 7 and the frame 1. These brackets 12 are each formed from a single piece of sheet metal to provide vertical ears 13 (which are welded or otherwise rigidly secured to the flat outer peripheral surface 14 of the clamping ring 7 at circumferentially spaced points), horizontally disposed ears 15 detachably secured to the intermediate portions of the members 2, 6, and angular body portions 16 which connect the ears 13 and 15. As shown, the body portions 16 are formed to provide radially inwardly projecting elements in the nature of spaced parallel wings 17. As shown particularly in FIG. 2, the wing elements 17 have vertical edges 18 which engage the outer peripheral surface 19 of the flue pipe 11, in axial relationship to the clamping ring 7, whereby to hold the flue pipe against angular movements with respect to the axis of said clamping ring 7.

In practice, one would use two or more of the flue pipe spacing devices above described, depending upon the number of horizontal partitions through which the flue pipe passes; and while I have shown the frame 1 as being secured to the upper surfaces of a pair of spaced beams 4, it should be equally clear that a second such identical spacing device could be secured to the undersurfaces 20 of such spaced beams 4, merely by inverting the same in its entirety, or alternatively by inverting just the frame 1 with respect to the spacing brackets 12.

My invention has been thoroughly tested and found to be completely satisfactory for the accomplishment of the above objects, and while I have shown a preferred embodiment thereof, it should be understood that same is capable of modification without departure from the scope and spirit of the appended claims.

What I claim is:

1. A hanger for flue pipes comprising, a generally rectangular frame structure adapted to span a pair of spaced beams and to be secured thereto, a horizontally disposed clamping ring adapted to receive and hold a vertically disposed flue pipe against axial movements, and a plurality of circumferentially spaced centering brackets interposed between said clamping ring and said frame structure, said brackets including vertical ears secured to said clamping ring, horizontal ears detachably secured to said frame structure, and angular body portions, said body portions defining radially inwardly projecting elements which are adapted to engage circumferentially spaced portions of a flue pipe in axially spaced relation to said clamping

ring, whereby to hold said flue against angular movements with respect to the axis of said clamping ring.

2. The structure defined in claim 1 in which each of said brackets is formed from a single piece of sheet metal, and in which said radially inwardly projecting elements are in the nature of generally parallel wings extending radially inwardly from opposite sides of said body portions.

3. In a vent pipe holder, the combination which comprises a clamping band, means for drawing the ends of the band together around a pipe, and pipe engaging brackets mounted on said band, each bracket including a plate portion with triangular-shaped flanges on the sides thereof, and flanges extended from the outer ends of said plate portion and provided with openings therethrough.

References Cited in the file of this patent

UNITED STATES PATENTS

2,362,557	Jahns	Nov. 14, 1944
2,662,714	Jenne	Dec. 15, 1953
2,713,301	McKann	July 19, 1955
2,816,726	White	Dec. 17, 1957