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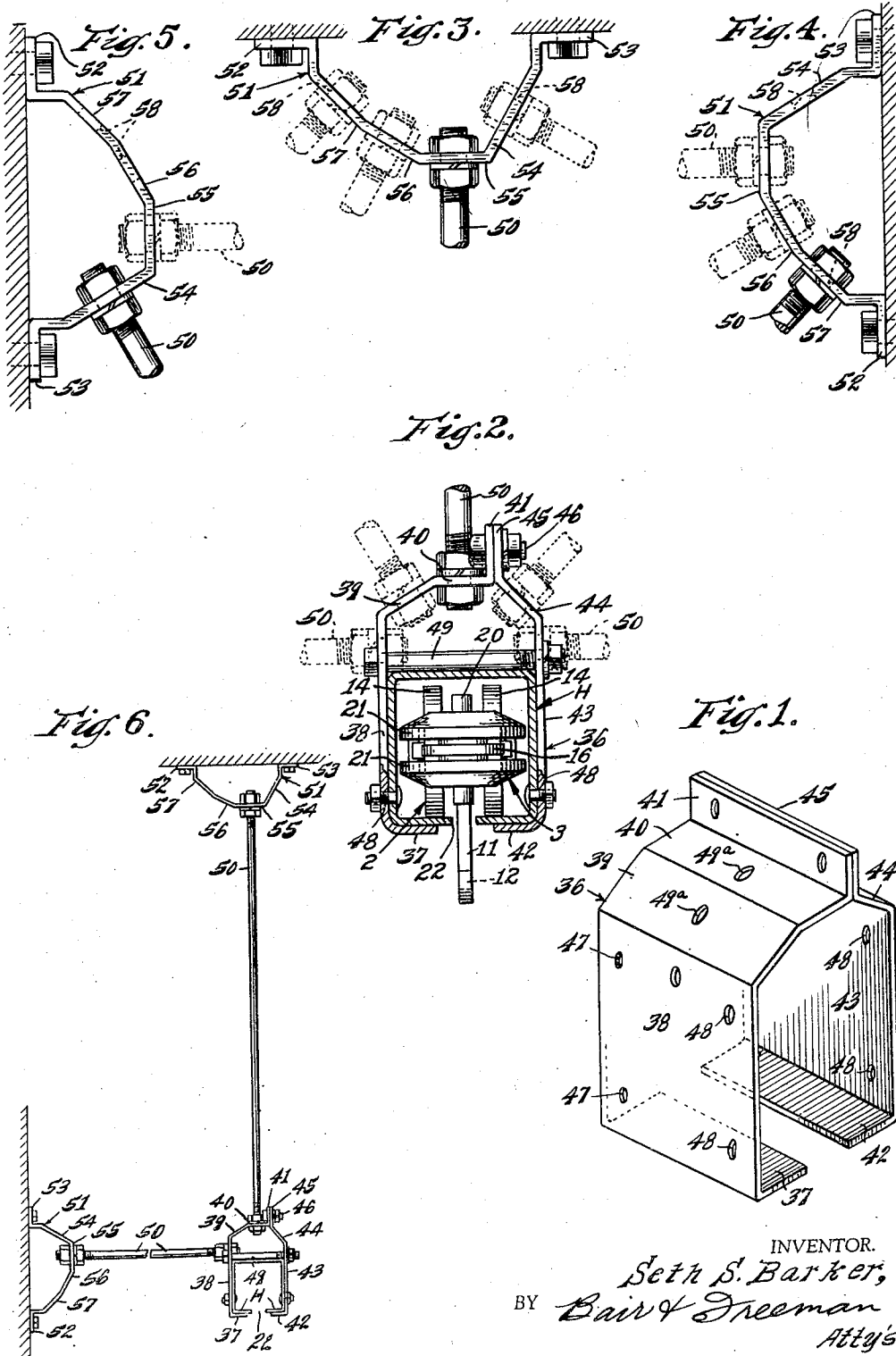
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ENCLOSED CHAIR CONVEYER HANGER

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2 Sheets-Sheet 1



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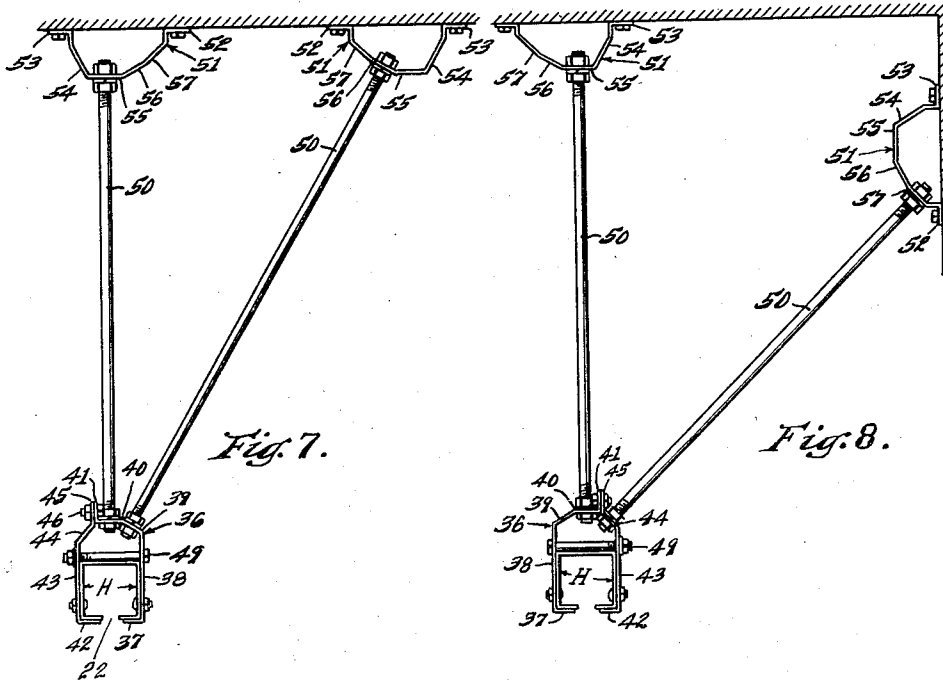
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2 Sheets-Sheet 2



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ENCLOSED CHAIN CONVEYER HANGER

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7 Claims. (Cl. 104—111)

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My invention relates to enclosed chain conveyor hanger brackets of novel and simple construction for connecting and supporting sections of a chain-enclosing housing at their joints.

One object is to provide convenient and novel wall and ceiling hanger brackets which are designed to facilitate mounting the hangers in a plurality of different ways.

With this and other objects in view, my invention consists in the construction, arrangement and combination of the various parts of my device whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claims and illustrated in the accompanying drawings, wherein:

Figure 1 is a perspective view of a hanger bracket for supporting and connecting sections of a conveyor chain housing.

Figure 2 is a vertical, sectional view through a section of track, the chain being omitted and hanger bracket being shown in elevation.

Figure 3 is an elevation of a wall and ceiling bracket shown in position to be connected to the ceiling, showing in full lines a vertical hanger rod, and in dotted lines inclined hanger rods, the inclined hanger rods being shown to illustrate various ways in which the bracket may be used.

Figure 4 is a side elevation of the same ceiling and wall bracket showing one hanger rod in full lines and other such rods in dotted lines to illustrate how the hangers and rods may be used.

Figure 5 is a side elevation of the same hanger bracket illustrating another way in which it may be used, and

Figures 6, 7 and 8 are diagrammatic views illustrating ways of hanging the housing by means of the hanger brackets and the wall and ceiling hanger brackets.

In the accompanying drawings I have used the reference numeral 2 to indicate chain conveyor links with vertical rollers, and links 3 with horizontal rollers 21.

An endless chain made up of links 2 and 3 travels in a housing H shown in section in Figure 2 and having in its bottom the continuous slot opening 22.

The housing H is made in sections, most of which are straight but some of which may be curved. Normally the rollers 14 travel on the bottom of the housing as illustrated in Figure 2. In turning curves, in a horizontal plane, the rollers 21 may engage the side wall of the housing. In traveling up curves, the rollers 14 may engage the top of the housing.

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Hanger bracket

In Figures 1 and 2 is shown a hanger bracket for connecting successive sections of the housing together and for supporting the housing by means of suitable hanger rods. The hanger bracket is indicated generally by the reference numeral 36. Each hanger bracket is made in two parts. The left hand part as viewed in Figure 1 has a horizontal bottom portion 37 and a side wall 38 and top portions 39 and 40 inclined at different angles, and a final vertical flange 41. The right hand member of the hanger 36 as shown in Figure 1 has a similar bottom part 42. These bottom parts are spaced apart a distance a little greater than the width of the slot 22.

The bottom 42 has an upstanding side wall 43 terminating in an upwardly and inwardly inclined member 44 which in turn terminates in a vertical flange 45. In use the two members of the hanger bracket 36 are brought together against the housing H to cover a joint between two sections thereof, and the flanges 41, 45 are fastened together by bolts 46 as best shown in Figure 2. The sides 38, 43 may be bolted to the housing sections for greater rigidity, if that is desired. The sides 38, 43 are provided near their upper parts with spaced holes 47, 48 to receive one or more tie bolts 49. Preferably the tie bolts 49 are extended through the pairs of holes 47, 48 nearest the edges of the hanger brackets so as to leave the middle hole to receive a hanger rod, if that is desired. The portions 39, 40 and 44 are provided with holes 49a, as shown, to receive hanger rods 50.

It will be seen that the hanger rods 50 may be connected with the hanger bracket 36 to extend horizontally from either side thereof or vertically from the top thereof or at angles from the top thereof, as illustrated in Figure 2.

Wall and ceiling brackets

In Figures 3, 4 and 5 I have shown a wall and ceiling bracket indicated generally at 51, which is made of a strip of metal heavy and strong enough for the purpose, which has a pair of feet 52, 53, adapted to rest against the ceiling or side wall, each such bracket having a series of portions 54, 55, 56 and 57 arranged at different angles, provided with suitable holes 58 shown by dotted lines in Figure 3 to receive hanger bolts 50 extending at different angles. As will be seen in Figures 3, 4 and 5, the hanger 51 may be secured to the ceiling or to either side wall in a variety of arrangements.

In Figures 6, 7 and 8 I have illustrated differ-

ent ways of supporting the housing from the ceiling and side walls, with bolts 50 and brackets 51 of the kind under consideration. Figure 6 shows the use of vertical and horizontal hanger rods which can be used for ordinary regular stretches of the chain housing, if it is desired to hold the housing on the outside of a curve. The left hand hanger rod 50 shown in Figure 6 may be arranged as there illustrated. If it is desired to hang the chain alone or from the ceiling and the housing from the ceiling and side wall, two simple arrangements are illustrated in Figures 7 and 8, respectively.

Operation and advantages

Features which make for convenience in adapting the installation to different plants, are found in the chain hangers and housing hangers and wall and ceiling hangers above described. Since both these hangers are adapted for connection with vertical and horizontal and inclined hanger rods, and since the wall and ceiling hangers can be conveniently fastened on any side wall or ceiling, it is obvious that the conveyor chain structure can be supported anywhere that may be desired in a plant and in practically any kind of a plant room. The parts are of such sturdy construction that the chains may be made of any ordinary desired length and will carry heavy loads. A conveyor of this kind has been built for use in chicken processing plants for carrying fowls, but it is obvious that the structure might be used for handling other articles.

Changes may be made in the details of the structure without departing from the spirit of the invention, and it is my purpose to cover by the claims any modifications of the structure which may be properly deemed within the scope of the invention and of the claims.

I claim as my invention:

1. Supporting means for the housing for a traveling conveyor chain, made in successive sections, comprising hangers at the joints between the housing sections, each hanger having two parts to receive the aligned ends of the housing sections and overlap the joints, each part having a vertical portion, an inclined portion and a vertical flange above the housing, said inclined portions having rod receiving openings, bolts to lock together the vertical flanges of each hanger, other bolts to lock together the vertical portions of each hanger, said other bolts being adjacent the top of the housing sections to clamp said vertical portions thereagainst, wall and ceiling hangers, each having end feet lying in the same plane, and connecting parts lying in a plurality of inclined planes and each provided with a rod receiving opening, and rods for connecting the first described hangers with the second described hangers.

2. The combination of a housing to receive a conveyor chain for travel, said housing being made of sections with adjacent ends, and hangers between the joints of the housing sections, each hanger having two parts to receive the aligned ends of the housing sections and overlap the joints, each part having a perforated inclined part above the housing terminating in an upright flange, said flanges being bolted together and located off-center relative to said hanger, one of said parts having a horizontal flange adjacent said upright flanges, said horizontal flange being perforated at the center of the hanger for receiving a support rod and the perforations in

said inclined parts being adapted to receive brace rods.

3. The combination of a housing to receive a conveyor chain, and a hanger for said housing comprising two parts to receive the aligned ends of the housing, each part having an inclined portion above the housing terminating in an upright flange, means to bolt said flanges together, and tie bolts through said hanger parts above said housing, each of said inclined portions being perforated to selectively receive brace rods.

4. A hanger for a housing for a traveling conveyor chain comprising a housing hanger, a supporting hanger, and a rod connecting said hangers together, said hangers having perforated portions lying in different inclined planes with respect to the housing and with respect to a supporting surface respectively, and adapted to selectively receive the ends of said rod.

5. In a hanger assembly of the character disclosed, for supporting a conveyor housing made up of sections disposed in end-to-end abutting relation, the combination comprising, a housing hanger made up of a pair of opposite parts adapted to receive the aligned ends of adjacent sections of the housing at the joint therebetween in overlapping relation to the ends, each of said opposite parts having a vertical portion adapted to engage the housing, means for securing the parts to the housing, said parts extending above the housing and having inclined portions extending over the top of the housing terminating in vertical flanges in engagement with each other, one of said parts having a hole therein for reception and securement of a support rod, means for securing said flanges together, said inclined portions having holes therein for reception and securement of a rod, and a supporting hanger having portions lying in a common plane for securement to a wall, or ceiling, said supporting hanger having a plurality of surfaces disposed at an angle to each other and each having a hole for reception of a rod, a plurality of said supporting hangers associated with each housing hanger adapted for securement to a ceiling and wall, the holes in said supporting hangers and housing hanger being adapted for reception and securement of respective ends of support and brace rods, whereby said supporting hangers can be mounted in various portions for accommodating supporting and brace rods extending at diverging angles from said housing hanger.

6. In a hanger assembly of the character disclosed, for supporting a conveyor housing made up of sections disposed in end-to-end abutting relation, the combination comprising, a housing hanger made up of a pair of opposite parts adapted to receive the aligned ends of adjacent sections of the housing at the point therebetween in overlapping relation to the ends, each of said opposite parts having a vertical portion adapted to engage the housing, means for securing the parts to the housing, said parts having vertical portions with holes therein extending above the housing and having inclined portions extending over the top of the housing terminating in vertical flanges in engagement with each other, means for securing said flanges together, one of said parts having a horizontal portion with a hole therein for reception and securement of a supporting rod, said inclined portions having holes therein for reception and securement of a rod, and a supporting hanger having portions lying in a common plane for securement to a wall or ceiling, said supporting hanger having a plurality of

surfaces disposed at an angle to each other and each having a hole for reception of a rod, one of the surfaces of said supporting hanger being parallel with said plane; a plurality of said supporting hangings associated with each housing hanger adapted for securement to a ceiling and wall, the holes in said supporting hangers and housing hanger being adapted for reception and securement of respective ends of support and brace rods, whereby said supporting hangers can be mounted in various positions for accommodating supporting and brace rods extending at diverging angles from said housing hanger.

7. A supporting hanger for a conveyor housing, having a pair of feet disposed in a common plane adapted for securement to a wall or ceiling, and a plurality of surfaces disposed at different angles relative to one another, said surfaces having holes for reception and securement of supporting rods.

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