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CA 2550737 A1 2007/12/21

(21) 2 550 737

(12) DEMANDE DE BREVET CANADIEN
CANADIAN PATENT APPLICATION

(13) A1

(22) Date de dépôt/Filing Date: 2006/06/21

(41) Mise à la disp. pub./Open to Public Insp.: 2007/12/21

(51) Cl.Int./Int.Cl. *F16B 13/08* (2006.01), *A47G 1/16* (2006.01), *F16M 13/02* (2006.01)

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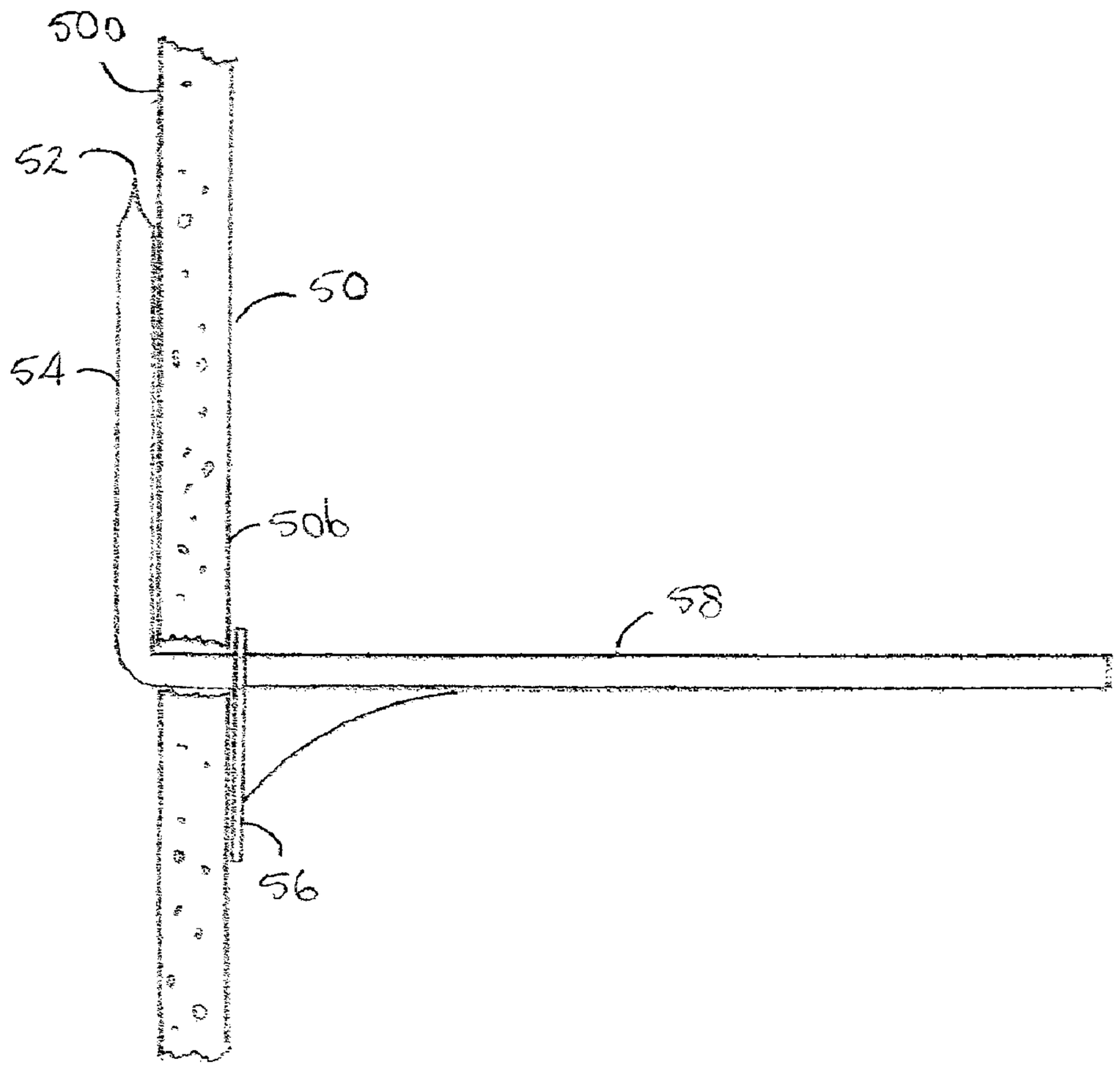
(54) Titre : SUPPORT MURAL
(54) Title: WALL BRACKET



FIELD OF THE INVENTION

This invention relates to brackets for attachment to walls and more particularly to a bracket which can be attached to a wall composed of material such as drywall simply by pressing a sharpened end of the bracket against the wall to make an opening and then by rotating the bracket until it is in position to support an object such as a picture or a shelf.

BACKGROUND OF THE INVENTION

It is conventional to attach a shelf to a wall composed of drywall by means of L-shaped brackets. One leg of the bracket is attached to the underside of the shelf by screws while the other leg is attached to the drywall also by screws. A painting is usually attached by a hook which has a threaded pin. Rotation of the hook causes the pin to enter the drywall where it remains in position. In both cases friction between the threads of the screws or pins and the plaster of the drywall holds the brackets or hooks in position. Over time, the plaster begins to crumble particularly if the brackets and hooks are frequently jarred. Once the plaster crumbles, the brackets and hooks become loose and are no longer effective to support the shelf or painting.

In order to alleviate this problem, toggle bolts and anchors are used instead of threaded screws or hooks but such bolts and anchors usually do no more than marginally prolong the time before the brackets and hooks become loose and are no longer effective to support a shelf or a painting.

SUMMARY OF THE INVENTION

I have invented a bracket which does not rely on friction between the plaster and the threads of a screw or hook to remain attached to drywall. Rather the bracket relies on the compressive strength of drywall to hold the bracket in position and to support the weight of a shelf or painting attached to the bracket. Drywall is relatively strong in compression and can support a relatively large weight which applies such a force to it than. By contrast, a conventional bracket which applies the same weight directly to the plaster of the drywall will cause the plaster to crumble and to fail as a support for the weight..

Briefly, the bracket of my invention includes a supporting member having first and second legs each having a longitudinal axis. The longitudinal axis of the first leg is oriented at a right angle relative to that of the second leg. The first leg has a sharpened edge at an outer end thereof. The bracket also includes a steadying member associated with the second leg and having a face oriented parallel to the longitudinal axis of the first leg. The face is separated from the first leg by a distance approximately equal to the thickness of the wall such that when the first leg is in contact with the inner surface of the wall, the face is in contact with the outer surface

DESCRIPTION OF THE DRAWING

The bracket of the invention is described with reference to the accompanying drawing in which:

Figure 1 is a perspective view of the bracket formed into a shape suitable for supporting a

picture;

Figure 2 is a perspective view of the bracket in the shape suitable for supporting one end of a shelf; and

Figure 3 is an elevation of the bracket of Figure 2 shown attached to a wall.

Like reference characters refer to like parts throughout the description of the drawing.

DESCRIPTION OF PREFERRED EMBODIMENT

With reference to Figure 1, the bracket, generally 10, comprises a supporting member, 12 and a steadying member 14. The supporting member has a circular cross-section and is made up of first and second legs 16, 18. The upper or outer end 20 of the first leg has a sharpened edge 22.

The second leg of the bracket has inner and outer segments 18a , 18b. The longitudinal axis 18c-18c of the inner segment is oriented at a right angle relative to the longitudinal axis 16a-16a of the first leg. The outer segment 18b is semi-circular in shape and is suitable for supporting a picture or other wall hanging.

The steadying member 14 has a circular opening 30 through which the second leg extends. The face 32 of the steadying member closest to the first leg 16 is flat. The imaginary plane in which face 32 lies is parallel to the longitudinal axis 16a-16a of that leg. The distance between the first leg and the steadying member can be adjusted by sliding the member along the second leg.

With reference to Figure 2, the illustrated bracket, generally 40 has the same structure as that of the bracket of Figure 1 except that the second leg 42 is straight throughout its length. That

leg is suitable for supporting one end of a shelf .

With reference to Figure 3, the bracket 40 of Figure 2 is shown connected to a vertical wall 50. The wall is composed of drywall, plaster or other material capable of being penetrated by the sharp edge 52 of the first leg 54 of the bracket.

In order for the sharp edge of the first leg to penetrate the wall, sufficient force must be applied to the bracket that will cause such penetration. Wooden walls and metallic walls such as those used in modular construction normally cannot be penetrated by the sharp edge of the subject bracket without bending the bracket out of shape or marring the wall. For that reason the subject bracket is usually not suitable for attachment to such walls.

When the sharp edge has penetrated the wall, the remainder of the first leg 54 is pushed through the opening made by the sharp edge in the wall and the bracket is then rotated until the first leg is adjacent to and in contact with the inner surface 50a of the wall as illustrated in Figure 3. The steadying member 56 is then slid along the second leg 58 until it is adjacent to and in contact with the outer surface 50b of the wall. The bracket is then in position to support one end of a shelf. The other end of the shelf is supported by a second bracket which is attached to the wall in the same way.

It will be understood that modifications can be made in the structure of the subject bracket without departing from the scope and purview of the invention as defined in the appended claims.

I claim:

1. A bracket for attachment to a wall having inner and outer oppositely facing surfaces and being composed of drywall, plaster or other material capable of being penetrated by a sharp edge to which force is applied, said bracket comprising: a supporting member having first and second legs each having a longitudinal axis, the longitudinal axis of said first leg being oriented at a right angle relative to that of said second leg and having a sharpened edge at an outer end thereof; a steadying member associated with said second leg and having a face lying in an imaginary plane which is oriented parallel to the longitudinal axis of said first leg, said face being separated from said first leg by a distance approximately equal to the thickness of said wall such that when said first leg is contact with said inner surface of said wall, said face is in contact with said outer surface.

2. The bracket of claim 1 wherein the distance between said face and said first leg is adjustable.

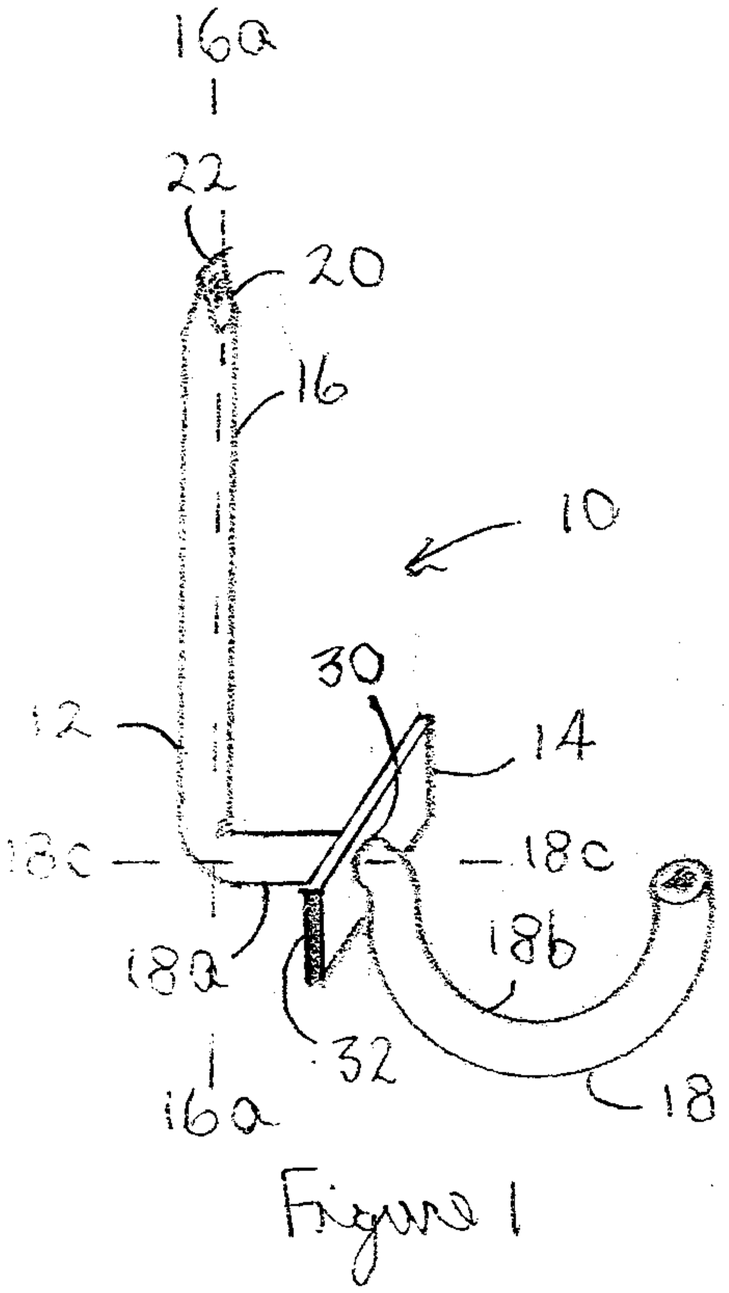


Figure 1

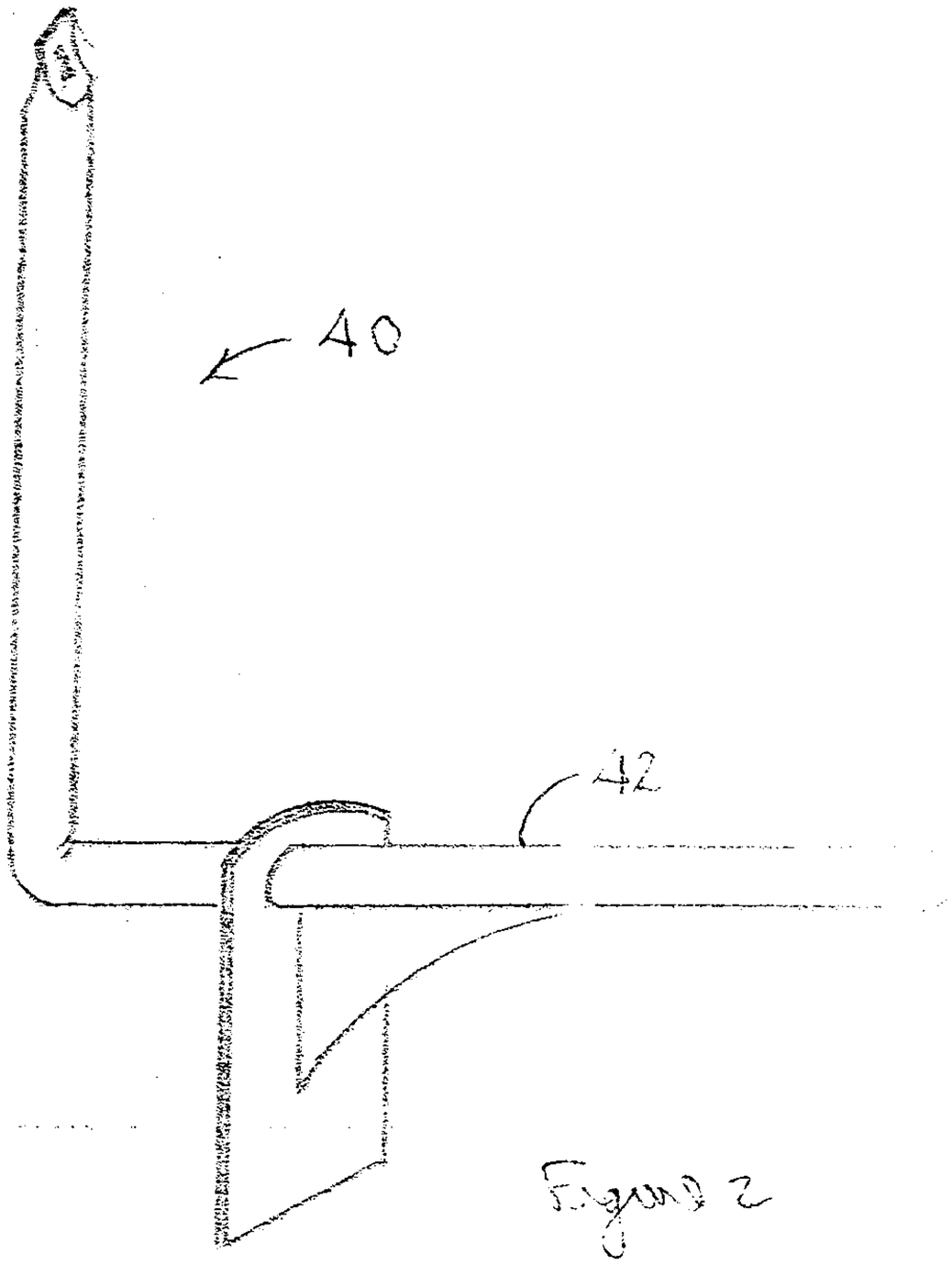


Figure 2

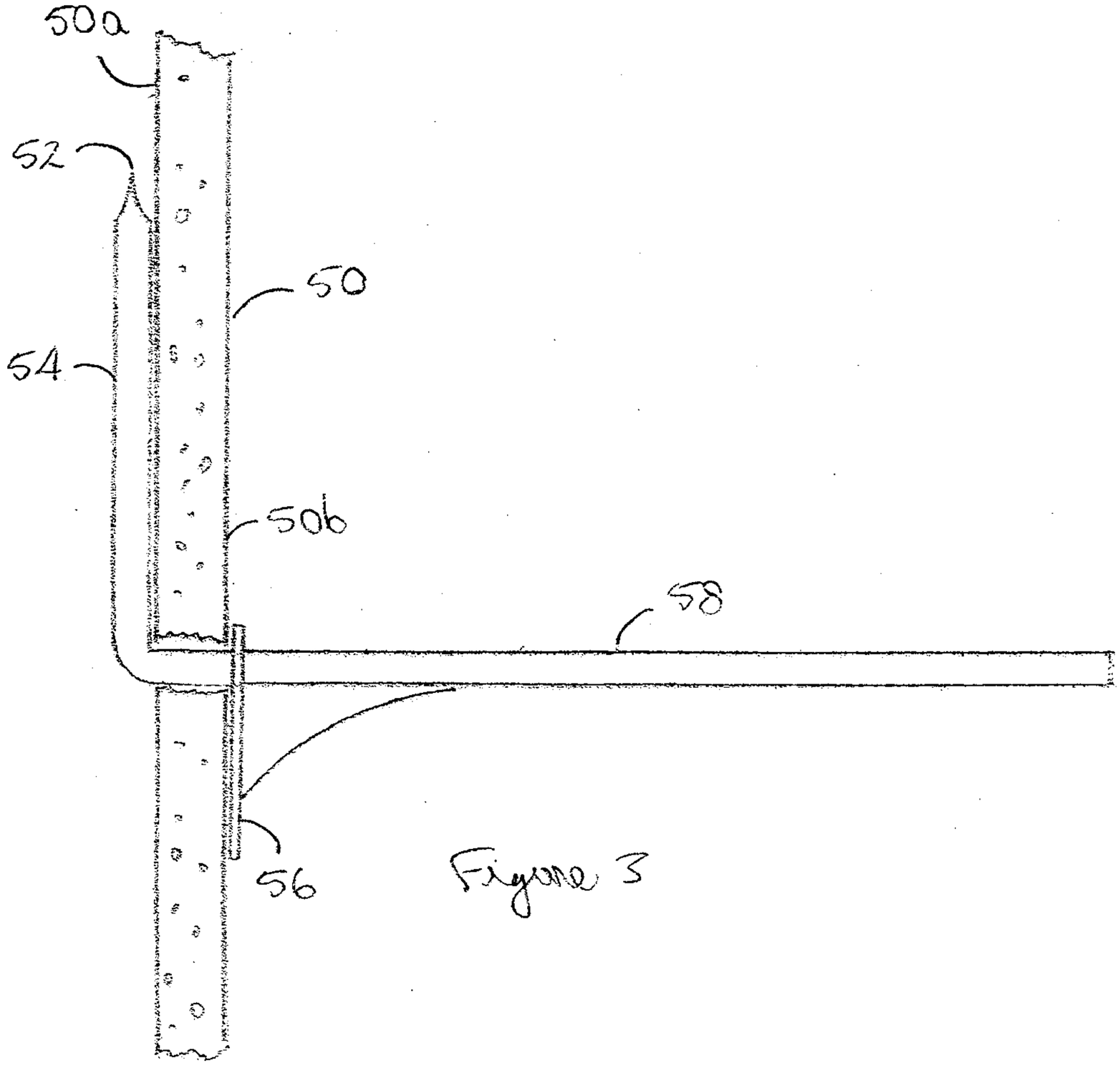
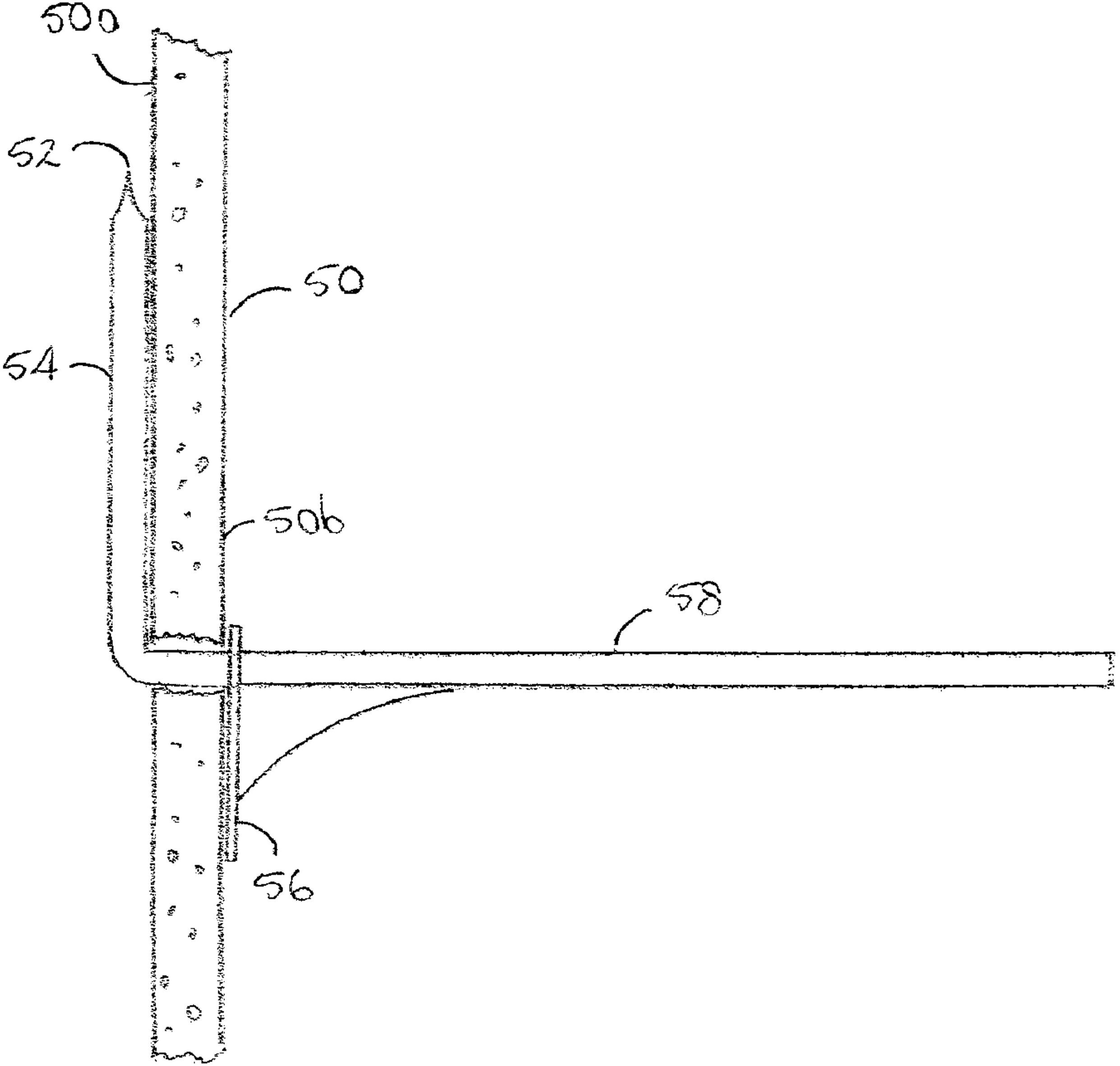


Figure 3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