

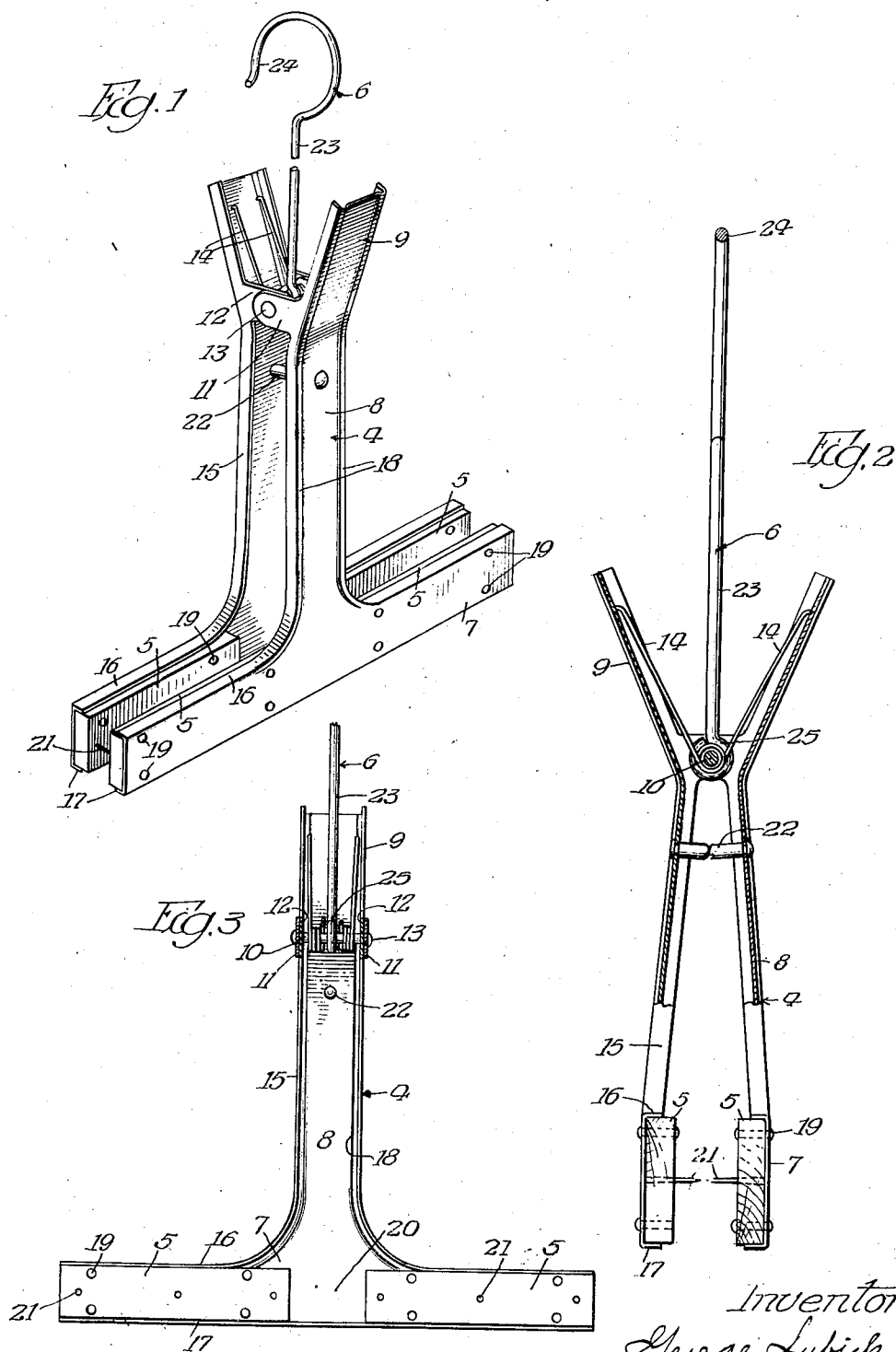
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HANGER FOR TROUSERS

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HANGER FOR TROUSERS

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The present invention relates generally to hangers for trousers. More particularly the invention relates to that type of trousers hanger which is designed to suspend the trousers in an inverted position from a rod or hook in a closet or wardrobe and at the same time to retain the legs of the trousers in a creased condition, and comprises as the main parts thereof a pair of complementary clamping elements which are disposed in opposed relation, consist of elongated horizontally extending cuff engaging members and centrally disposed upstanding members, and have a pivotal connection between the upper ends of the upstanding members whereby the horizontally extending members may be swung apart or away from one another in order to permit of disposition of the cuffs of the trousers therebetween and also have springs between the upstanding members for urging the horizontally extending members together and causing them upon release thereof yieldingly to clamp the cuffs of the trousers therebetween.

One object of the invention is to provide a trousers hanger of this type which is an improvement upon, and is more efficient in operation and may be applied and removed from trousers more easily than, previously designed trouser hangers of the same general character.

Another object of the invention is to provide a trousers hanger of the type and character under consideration in which the complementary clamping elements are formed of sheet metal stampings, and embody blocks which fit against and are secured to the inner faces of the end portions of the horizontally extending members and have inwardly extending pins for embedment in the cuffs of the trousers and preventing the trousers from slipping or being pulled from their clamped position between the clamping elements.

Another object of the invention is to provide a trousers hanger of the last mentioned character in which the pin carrying blocks are held in place or in fixed relation with respect to the end portions of the horizontally extending members by way of inwardly extending flanges on the latter and are disposed in longitudinally spaced relation in order to form pockets in the central portions of said horizontally extending members for accommodating the seams on the sides of the cuffs of the trousers.

A further object of the invention is to provide a trousers hanger of the aforementioned type and character in which the complementary oppositely disposed clamping elements are reinforced so that the hanger as a whole is extremely durable and

have stops on the upstanding members thereof for so limiting inward movement of the horizontally extending members that the pins do not embed themselves in the blocks or move into abutting relation upon release of the clamping elements and inward movement of the horizontally extending members in response to the action of the springs.

A still further object of the invention is to provide a trousers hanger which consists of but a small number of parts, may be produced at a small cost, and is efficient in operation.

Other objects of the invention and the various advantages and characteristics of the present trousers hanger will be apparent from a consideration of the following detailed description.

The invention consists in the several novel features which are hereinafter set forth and are more particularly defined by claims at the conclusion hereof.

In the drawing which accompanies and forms a part of this specification or disclosure and in which like numerals of reference denote corresponding parts throughout the several views:

Figure 1 is a perspective of a trousers hanger embodying the invention;

Figure 2 is an enlarged vertical transverse section illustrating the manner in which the stops serve so to limit inward swinging movement of the horizontally extending members that the pins cannot come into abutment with one another or embed themselves in the opposite blocks; and

Figure 3 is a vertical longitudinal section showing in detail the pivotal connection between the upper ends of the intermediate or upstanding members of the clamping elements and also illustrating the construction and arrangement of the springs which serve to urge the horizontally extending members of the elements toward one another.

The hanger which is shown in the drawing constitutes the preferred embodiment of the invention. It is designed to suspend trousers in an inverted position from a rod or hook in a clothes closet or wardrobe and consists of a pair of complementary clamping elements 4, four blocks 5, and a hook 6.

The clamp elements 4 are preferably in the form of one-piece sheet metal stampings. They are disposed in opposed relation and comprise elongated horizontally extending cuff-engaging members 7 and centrally disposed upstanding members 8. The members 7 are disposed in parallel relation and are coextensive. They carry, as hereinafter described, the blocks 5 and are

adapted when the clamping elements 4 are shifted apart to have the cuffs of the trousers disposed or positioned therebetween. The upstanding members 8 are disposed midway between the end extremities of the horizontally extending members 7 and are spaced a comparatively small distance apart. The upper ends of the members 8 are upwardly divergent, as shown in Figures 1 and 2 of the drawing, and form finger pieces 9 which when pressed inwards, as hereinafter described, cause the horizontally extending cuff-engaging members 7 to move apart. The clamping elements 4 have a pivotal connection between the upstanding members 8 thereof whereby their horizontally extending members are adapted to swing to and from one another. This pivotal connection is disposed between the bottom or base portions of the finger pieces 9 and consists of a horizontally extending pivot rod 10, a pair of ears 11, and a pair of ears 12. The ears 11 are formed integrally with and project inwardly from the side margins of the base portion of one of the finger pieces 9 and the ears 12 are formed integrally with and project inwardly from the side margins of the base portion of the other finger piece and are disposed between, and in abutting relation with, the inner faces of, the ears 11. The pivot rod 10 extends through circular holes or apertures in the ears 11 and 12 and has enlarged heads 13 at its ends whereby it is held against axial displacement with respect to the ears. The heads 13 are preferably formed by beading or riveting the ends of the pivot rod 10. The holes or apertures in the ears are slightly larger in diameter than the pivot rod 10 and hence the clamping elements are so pivotally connected that the horizontally extending cuff-engaging members 7 are adapted to swing to and from one another. By reason of the fact that the pivotal connection is located between the base portions of the finger pieces 9 the finger pieces when swung inwards as a result of inward pressure thereon cause the horizontally extending cuff-engaging pieces 7 to swing apart. The members 7 are urged towards one another into clamped relation with the cuffs of the trousers to which the hanger is applied by means of a pair of V-shaped springs 14. These springs are formed of wire and have looped apex portions which encircle and are mounted on the pivot rod 10 of the pivotal connection between the clamping elements 4. The ends of the springs extend upwards and outwards and engage in a yielding manner and press outwardly against the upper ends of the finger pieces 9. The springs, as a result of their arrangement, urge the finger pieces outwards and hence cause the horizontally extending cuff-engaging members 7 to move inwards into clamped relation with the cuffs of the trousers. When the finger pieces 9 are pressed towards one another in order to open or shift apart the members 7 the springs 14 are compressed. Upon release of the extension pieces 9 the springs expand and cause the horizontally extending cuff-engaging members 7 to swing inwards. The centrally disposed upstanding members 8 of the clamping elements 4 are reinforced by means of longitudinally extending side flanges 15. The horizontally extending cuff-engaging members 7 are reinforced or stiffened against transverse or lateral bending by way of upper top flanges 16 and bottom flanges 17. The side flanges 15 extend inwardly from and are formed integrally with the side edges of the upstanding members 8 and the top and bottom flanges 16

and 17 extend inwardly from and are formed integrally with the top and bottom edges of the members 7 respectively. The top flanges 14 extend only along the end portions of the horizontally extending cuff-engaging member 7 and join the lower end portions of the side flanges 15 of the upstanding members 8. In order to augment the reinforcing or stiffening action of the side flanges 15 the upstanding members 8 of the clamping elements are provided with longitudinally extending ribs 18. These ribs, as shown in Figure 1, are located inwards of the side flanges 15 and extend downwards from the top edges of the finger pieces 9 to the points at which said upstanding members join the central portions of the horizontally extending cuff-engaging members 7.

The blocks 5 are formed of wood or like light material and are arranged in oppositely facing pairs along the end portions of the horizontally extending cuff-engaging members 7. They fit against the inner faces of the end portions of the members 7 and are held in place by the top and bottom flanges 16 and 17 and also by rivets 19. The rivets, as shown in the drawing, extend through aligned holes in the blocks and horizontally extending members. The inner ends of the rivets are preferably flattened to such an extent that they are substantially flush with the inner faces of the blocks and hence do not make impressions in the cuffs of the trousers. The blocks at one end of the members 7 are spaced longitudinally from the blocks at the other end of said members so as to form inwardly facing pockets 20 at the central portions of the members 7. These pockets are adapted to accommodate the seams or thickened side portions of the cuffs when the cuffs of the trousers are disposed in clamped relation between the members 7. Displacement of the cuffs from between the blocks 5 is prevented by means of a plurality of pins 21. These pins are carried by and project inwardly from the blocks 5 and are adapted to embed themselves into the cuffs of the trousers. The inner ends of the pins are pointed so that they readily penetrate into the cuffs when the latter are clamped between the members 7. The pins are comparatively short, as shown in Figure 2, and are arranged so that those which are carried by the two blocks of one of the clamping members are aligned or disposed in registry with those projecting inwardly from the other two blocks, that is the two blocks of the other clamping element. In order to prevent the pins 21 from embedding themselves in the blocks 5 or being brought into abutting relation as a result of the action of the springs 14 stops 22 are provided. These stops are two in number and are positioned in longitudinal alignment directly beneath the pivot rod 10. The outer ends of the stops are fixedly secured to the central portions of the upstanding members 8 of the clamping elements, as shown in Figure 2. The stops are adapted to have the inner ends abut against one another when the clamping members are released, and are of such length that when the inner ends thereof are in abutting relation the horizontally extending cuff-engaging members 7 are so spaced apart that the inner ends of the pins do not contact or engage one another (see Figure 2).

The hook 6 serves as a supporting medium for the clamping elements 4 and is adapted to hold the latter in a suspended position from a rod or hook within a clothes closet or wardrobe.

It is preferably formed of wire and consists of a vertically extending shank 23 and a hook part 24 at the upper end of the shank. The lower end of the shank is shaped to form an eye 25 which is loosely mounted on the pivot rod 10. The shank projects upwards between the finger pieces 9 and due to the fact that the eye is loosely mounted on the pivot rod it, together with the hook part, is free to swing laterally with respect to the clamping elements 4. The hook part 24 is formed integrally with and projects upwardly from the upper end of the shank 23. It extends towards one end of the clamping elements 4 and may be either hooked around a rod or onto a stationary hook or peg. The eye 25 of the shank of the hook 6 is positioned between the portions of the springs 14 which are wound or coiled about the pivot rod 10.

In using the hanger to hang trousers the finger pieces 9 are first pressed together in order to cause the horizontally extending cuff-engaging members 7 to separate. When the members 7 are in their open position the cuffs of the trousers are inserted therebetween. After disposition of the cuffs of the trousers between the members 7 the finger pieces 9 are released with the result that the springs 14, as hereinbefore described, operate to swing the clamping elements 4 inwards. In response to inward movement of the members 7, the pins 21 embed themselves within the cuffs and the blocks 5 place the cuffs under clamping pressure. When the cuffs are properly clamped between the horizontally extending members 7, the seams in the side portions are disposed in the pockets 20. By reason of the fact that the pins 21 embed themselves in the cuffs the trousers cannot slip or be pulled from the hanger without first shifting apart the horizontally extending members 7. To release the trousers from the hanger it is only necessary to press inwards upon the finger pieces 9 and swing the members 7 apart. When the last mentioned members are in their open position the cuffs of the trousers may be unhooked or released from the pins 21 and then dropped or pulled out of contact with hanger 7.

The herein described hanger consists of but a small number of parts and hence may be manufactured at a low and reasonable cost. It is not only efficient in operation but also extremely durable and readily able to stand constant use due to the construction of the clamping elements 4.

Whereas the hanger has been described as being adapted for use in connection with trousers it is to be understood that it may be used with other garments or articles of clothing. It is also to be understood that the invention is not to be restricted to the details set forth, since these may be modified within the scope of the appended claims, without departing from the spirit and scope of the invention.

Having thus described the invention, what I claim as new and desire to secure by Letters Patent is:

1. As a new article of manufacture, a trousers hanger comprising a pair of complementary oppositely disposed clamping elements including opposed elongated members for clamping the cuffs of the trousers therebetween and pivotally connected together so that said members may swing to and from one another into and out of clamped relation with said cuffs, spring means applied to said clamping elements for yieldingly holding the members in said clamped relation with the

cuffs, sharp-pointed pins carried by and extending inwardly from one of the members and adapted when the cuffs of the trousers are clamped between the members to embed themselves into one of the cuffs and prevent slipping of the trousers from the hanger, and stop means for preventing the members from swinging inwards to the point where said pins engage the other elongated member.

2. As a new article of manufacture, a trousers hanger comprising a pair of complementary oppositely disposed clamping elements including opposed elongated members for clamping the cuffs of the trousers therebetween and pivotally connected together so that said members may swing to and from one another into and out of clamped relation with said cuffs, spring means applied to the clamping elements so that said members are urged together into said clamped relation with the cuffs, sharp-pointed pins carried by and extending inwardly from the members and adapted when the cuffs of the trousers are clamped therebetween to embed themselves into the cuffs and prevent slipping of the trousers from the hanger, and coacting stops carried by the clamping elements and arranged so that when the members are swung together they abut against one another and prevent said members from swinging so close together that the pins of one member engage the other member.

3. As a new article of manufacture, a hanger adapted to suspend trousers in an inverted position and comprising a pair of complementary oppositely disposed clamping elements including a pair of elongated substantially horizontal members for clamping the cuffs of the trousers therebetween and pivotally connected together so that said members may swing to and from one another into and out of clamped relation with said cuffs, spring means applied to the clamping elements so that said elements are urged together into said clamped relation with the cuffs, sharp-pointed pins carried by and extending inwardly from one of the members and adapted when the cuffs of the trousers are clamped between said members to embed themselves into the adjacent cuff, sharp-pointed pins carried by the other member so that they are aligned with the pins of said one member and are adapted when the cuffs of the trousers are clamped between the members to embed themselves into the other cuff, and stop means between the two clamping elements whereby inward swinging movement of the members is so limited or restricted that the pins cannot be brought into contacting or abutting relation.

4. As a new article of manufacture, a trousers hanger comprising a pair of complementary oppositely disposed clamping elements formed of metal stampings and including opposed substantially horizontally extending elongated members adapted to clamp the cuffs of the trousers therebetween and having inwardly and longitudinally extending top and bottom flanges, means for pivotally connecting the elements together so that the members may swing to and from one another into and out of clamping relation with said cuffs, means applied to the clamping members for holding the elements in said clamped relation with the cuffs, and cuff-engaging blocks fitting against the inner faces of the outer portions of the elongated members and confined between said top and bottom flanges.

5. As a new article of manufacture, a trousers hanger comprising a pair of complementary op-

positely disposed clamping elements formed of metal stampings and including opposed substantially horizontally extending elongated members adapted to clamp the cuffs of the trousers therebetween and having inwardly and longitudinally extending top and bottom flanges, means for pivotally connecting the elements together so that the members may swing to and from one another into and out of clamping relation with said cuffs, means applied to the clamping members for holding the elements in said clamped relation with the cuffs, and pin-equipped blocks against the inner faces of the end portions of the elongated members confined between said top and bottom flanges and adapted when the cuffs of the trousers are clamped between the members to engage the cuffs and have the pins thereof embed themselves in the cuffs in order to hold the trousers against slipping from the hanger.

6. As a new article of manufacture, a trousers hanger comprising a pair of complementary oppositely disposed clamping elements formed of metal stampings and including opposed substantially horizontally extending elongated members adapted to clamp the cuffs of the trousers therebetween and having inwardly and longitudinally extending top and bottom flanges, means for pivotally connecting the elements together so that the members may swing to and from one another into and out of clamping relation with said cuffs, means applied to the clamping members for holding the elements in said clamped relation with the cuffs, pin-equipped blocks against the inner faces of the end portions of the elongated members confined between said top and bottom flanges and adapted when the cuffs of the trousers are clamped between the members to engage the cuffs and have the pins thereof embed themselves in the cuffs in order to hold the trousers against slipping from the hanger, and coacting stops carried by the clamping elements and arranged so that when the members are swung together they abut against one another and prevent said members from swinging so close together that the pins of one member engage the other member.

7. As a new article of manufacture, a trousers hanger comprising a pair of complementary oppositely disposed clamping elements formed of sheet metal stampings and consisting of elongated substantially horizontal members for clamping the cuffs of the trousers therebetween and centrally disposed upstanding members with a pivotal con-

nection between the upper ends thereof whereby the elongated members may be swung to and from one another into and out of clamped relation with said cuffs, spring means applied to the clamping elements so that said elongated members are urged toward one another into clamped relation with the cuffs, pins carried by and extending inwardly from one of the elongated members and adapted when the cuffs of the trousers are between said elongated members to embed themselves into one of the cuffs and prevent slipping of the trousers from the hanger, and coacting stops carried by said upstanding members directly beneath the pivotal connections and arranged so that when said elongated members are swung together they abut against one another and prevent said last mentioned members from swinging so close together that the pins engage the other elongated member.

8. As a new article of manufacture, a hanger adapted primarily to suspend trousers in an inverted position and formed of sheet metal stampings and consisting of elongated substantially horizontal members for clamping the cuffs of the trousers therebetween and centrally disposed upstanding members with upwardly divergent ends and pairs of inwardly extending ears positioned beneath said upper ends and arranged one pair in lapped relation with the other, a pivot rod extending through said ears and forming with the latter a pivotal connection whereby the elongated members may swing to and from one another, a spring extending between said upwardly divergent upper ends of the upstanding members for urging said upper ends outwards and causing said elongated members to swing inwards into clamped relation with the cuffs of the trousers, pin equipped blocks fixed to the end portions of said elongated members and adapted when the cuffs of the trousers are clamped between said elongated members to engage the cuffs and have the pins thereof embed themselves into the cuffs in order to prevent the trousers from slipping from the hanger, and aligned coacting stops carried by the upstanding members beneath the ears and arranged so that they are adapted to abut against one another and so limit inward swinging of the elongated members that the pins on the blocks connected to one elongated member cannot embed themselves into the blocks connected to the other elongated member.

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