July 12, 1938. A. V. ROWE 2,123,259

COAT HANGER

Filed Feb. 13, 1936

2 Sheets-Sheet 1

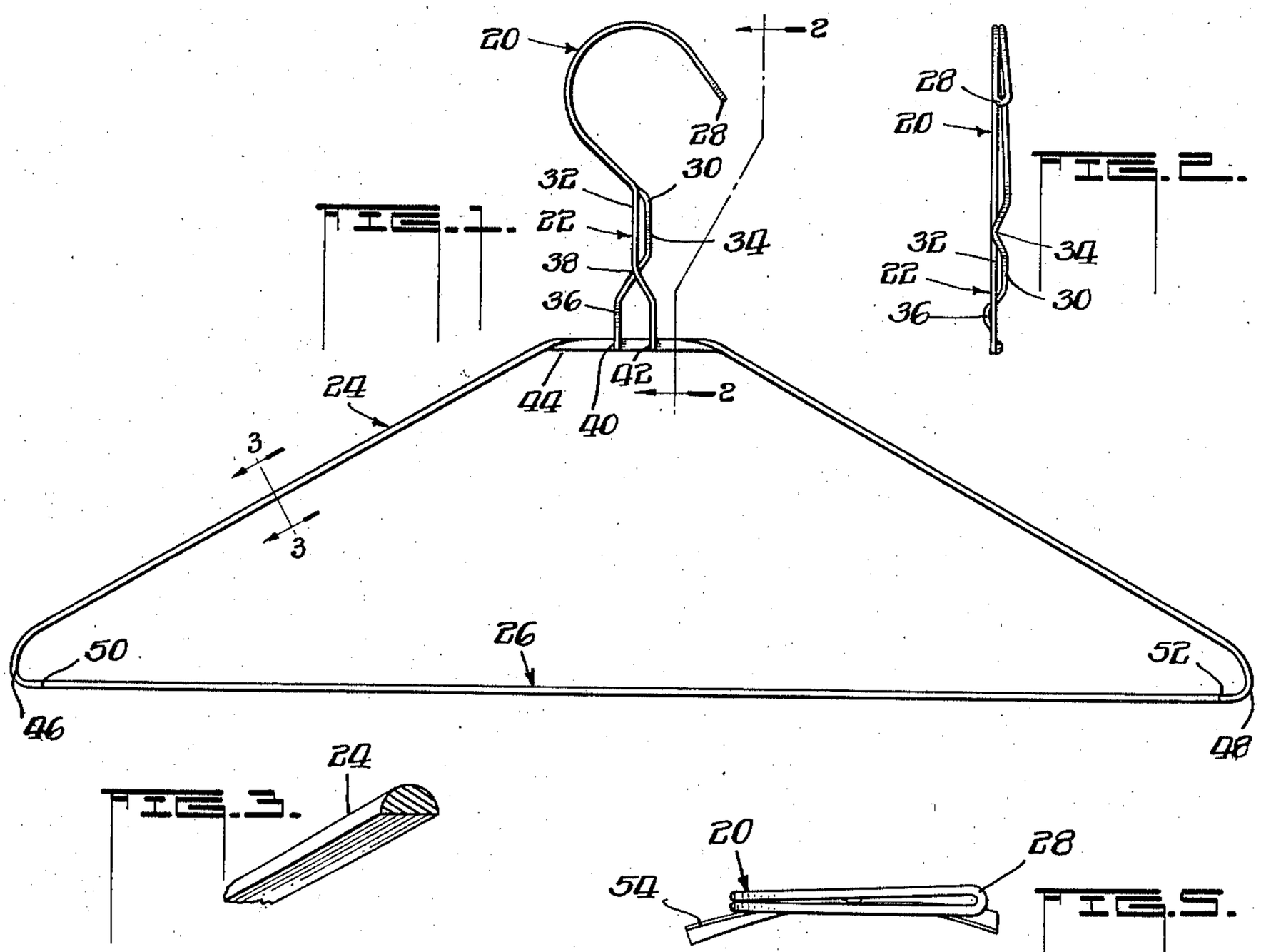

FIG. 1.

FIG. 2.

FIG. 3.

FIG. 5.

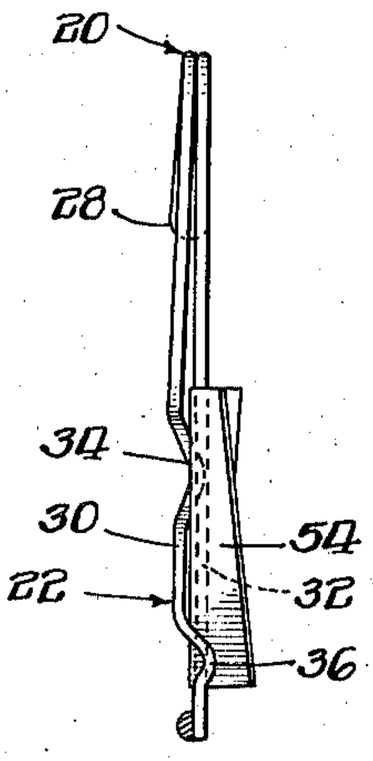

FIG. 6.

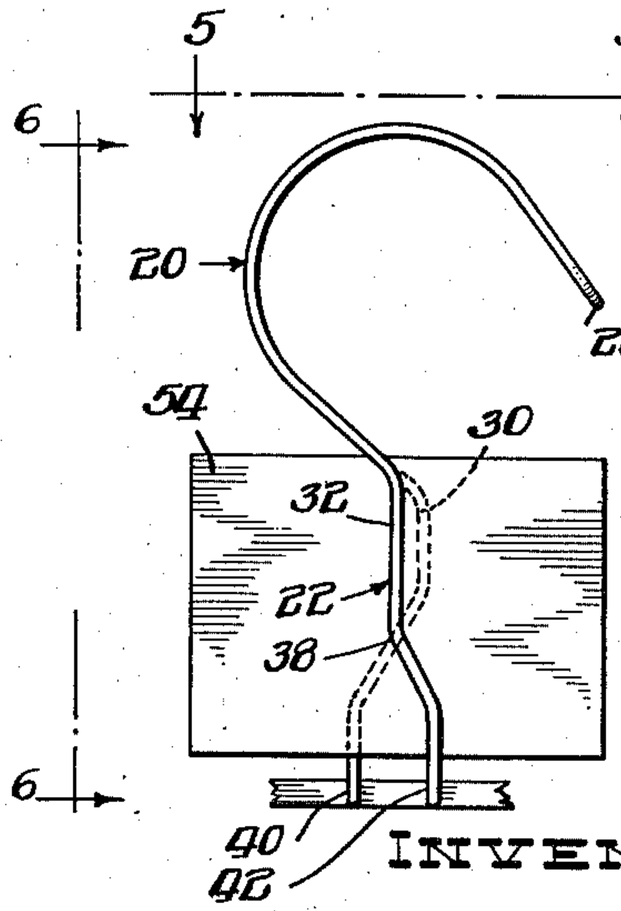

FIG. 4.

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COAT HANGER

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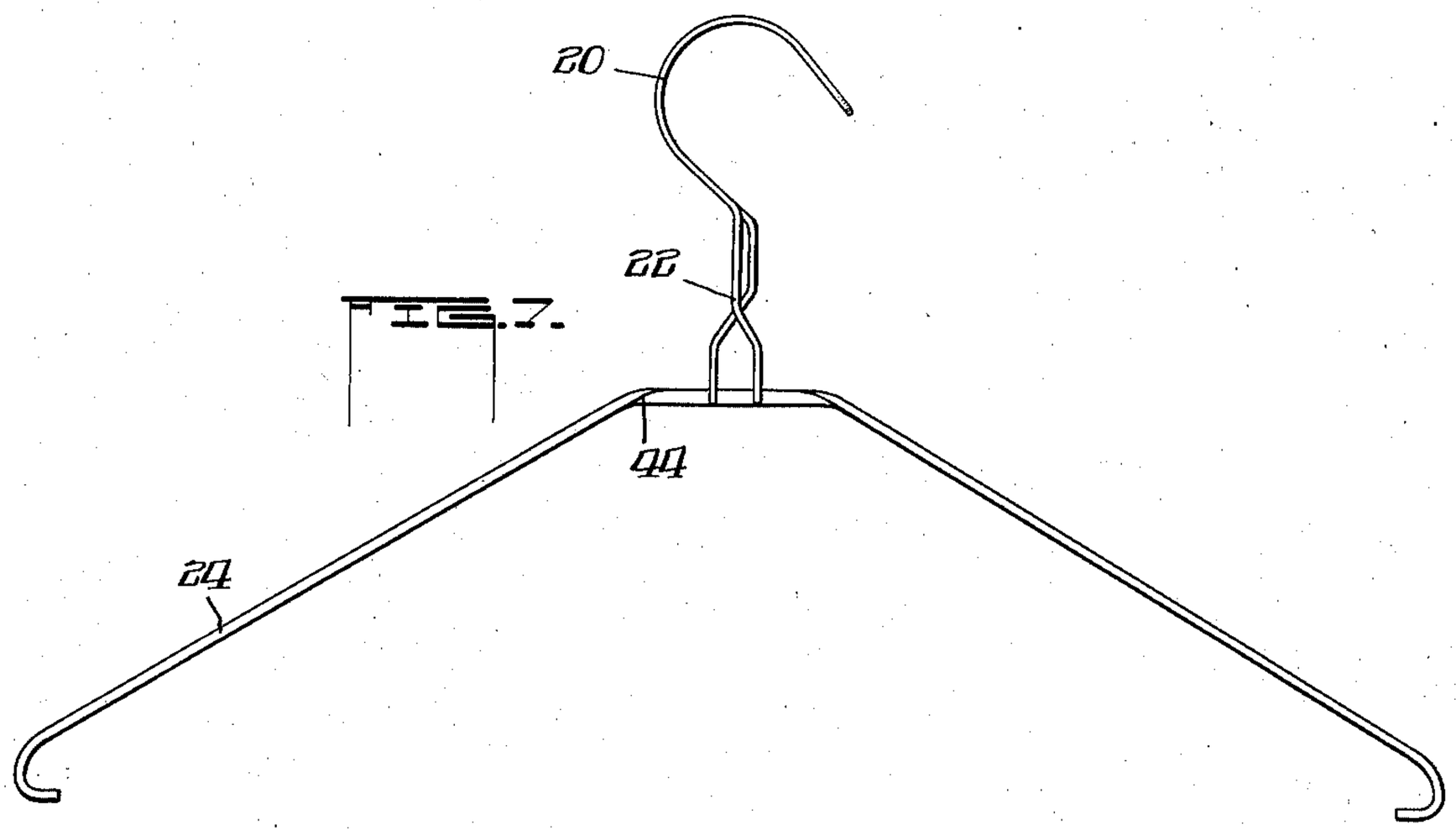

FIG. 7.

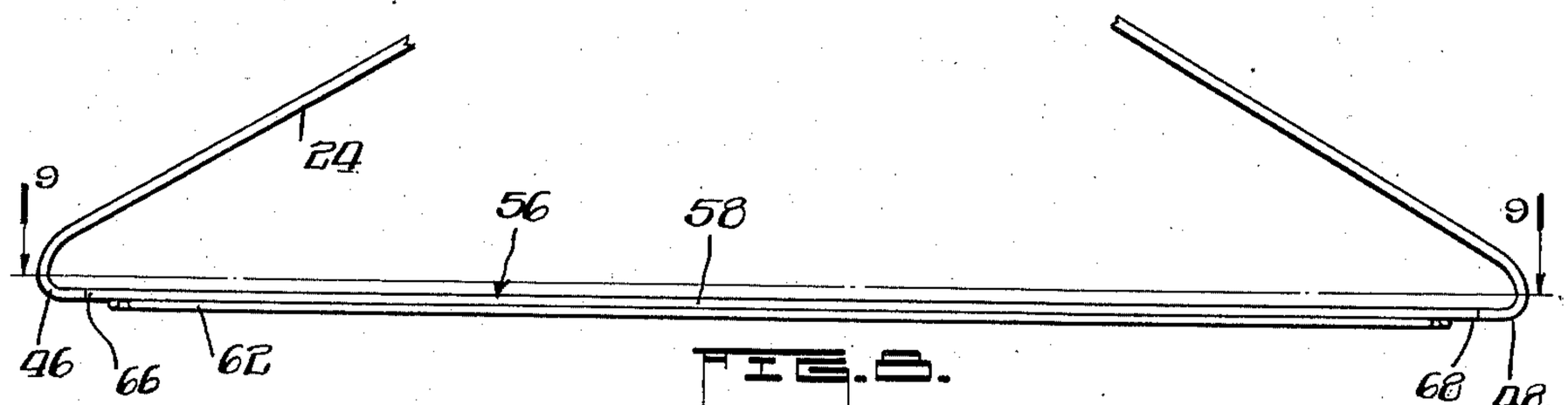

FIG. 8.

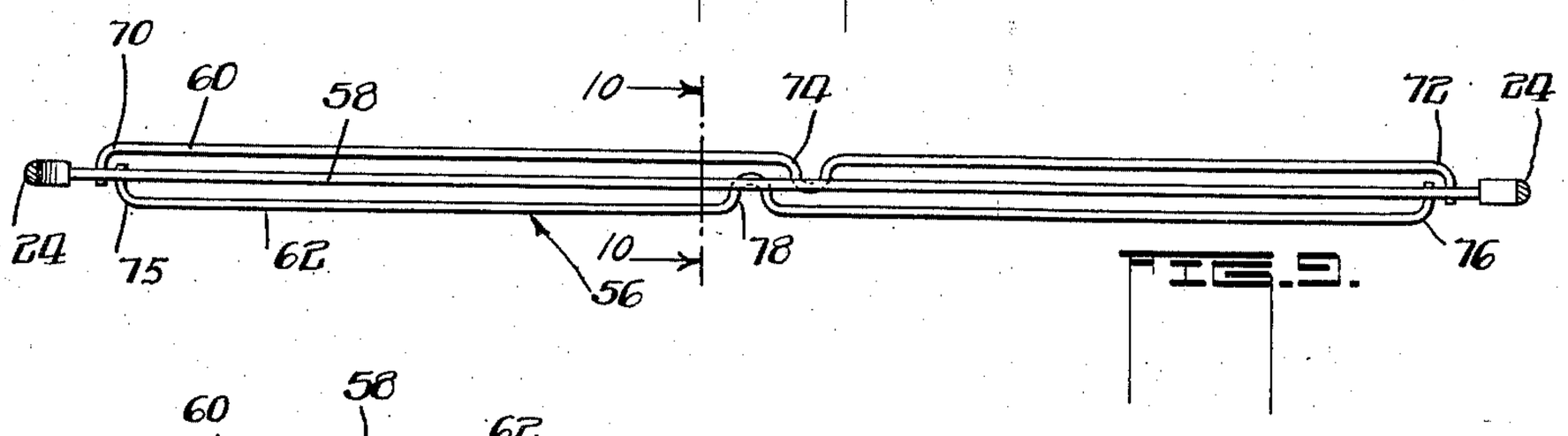

FIG. 9.

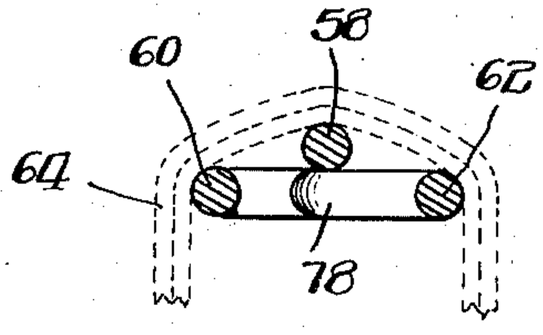

FIG. 10.

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UNITED STATES PATENT OFFICE

2,123,259

COAT HANGER

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Application February 13, 1936, Serial No. 63,701

6 Claims. (Cl. 223—88)

This invention relates to clothes hangers and concerns particularly an improved clothes hanger adapted for economical production and particularly adapted for use by cleaners and dyers.

Heretofore it has been customary to form clothes hangers out of lengths of annealed wire bent to shape and with the ends twisted together, one end being extended to form a hook. If such hangers are made of wire light enough not to be exceedingly expensive, they are objectionably flexible in use, bending readily if a heavy garment is placed upon them. The sharp ends of the wires frequently catch in the clothing and cause pulls or tears. The comparatively light wire hitherto used for economy not only lacked desirable qualities of strength and rigidity, but tended to produce creases in the clothes hung upon it where the cloth bent over the thin wire.

One object of the invention is the provision of a clothes hanger which, because of the absence of sharp projecting ends, may be used without fear of injury to the articles hung upon it.

Another object of the invention is the provision of a clothes hanger actually made of comparatively light wire but which has the advantages of a hanger made of heavier wire, being not only as stiff as the heavier hanger, but also protecting clothes hung upon it against the formation of undesired creases over the wire as fully as the hanger of heavier wire would give such protection.

Still another object of the invention is the provision of a clothes hanger having means for holding a card or the like, which holding means is not readily clogged by the paint or other coating material which may be applied to the hanger, is always available and convenient, and holds a card or the like securely for identifying the clothes upon the hanger, making use of the resilient properties of the card to produce the holding effect.

A further object of the invention is the provision of an improved clothes hanger which is economical to produce and yet which embodies the advantages of more expensive hangers.

A hanger embodying the present invention and showing the manner in which the present invention obtains new advantages and avoids the inconveniences and disadvantages of earlier hangers is illustrated in the accompanying two sheets of drawings hereby made a part of this specification, and in which—

Figure 1 is a side view of a coat hanger embodying the present invention;

Figure 2 is an end view of the hook and shank portion of the hanger of Figure 1 on line 2—2 of Figure 1;

Figure 3 is an enlarged view in perspective of a portion of the yoke of the hanger on line 3—3 of Figure 1, showing the cross-section of the yoke portion;

Figure 4 is an enlarged face view of the hook and shank portions of the hanger showing a card held in place;

Figure 5 is a view from above of the parts shown in Figure 4 on line 5—5 of Figure 4;

Figure 6 is a end view of the parts shown in Figure 4 on line 6—6 of Figure 4;

Figure 7 is a face view of a modified hanger using no trouser bar;

Figure 8 is a side view of the bottom part of a hanger illustrating a modified form of the trouser bar;

Figure 9 is a plan view of the modified trouser bar shown in Figure 8 on line 9—9 of Figure 8; and

Figure 10 is a cross sectional view of the modified trouser bar of Figures 8 and 9 on line 10—10 of Figure 9.

Like reference numerals are used to indicate like parts in the drawings and in the following description.

The clothes hanger of the present invention comprises a hook portion 20, a shank portion 22, a yoke 24, and a trousers bar 26. The hook 20 and shank 22 are formed of a single piece of wire bent double to provide a rounded end 28 for the hook. The two parts of the wire lie side by side in the hook.

Where the hook joins the shank, one wire 30 extends away from the other 32 and then is bent to extend at 34 partially around the other 32. The wire 32 at this point is straight and the two wires are spaced apart and not in contact. Below the bend the wire 30 crosses past the wire 32 without touching it and forms a second bend 36 in the same direction, but on the other side of the wire 32. The wire 32 about which the bends 34 and 36 extend is straight in the end view as shown in Figure 2. Below a point 38 at which the wires cross the wires spread and are bent downwardly and are welded at points 40 and 42 to the yoke portion 24 of the hanger. The hook and shank portions 20 and 22 of the hanger may be formed of No. 14 gauge basic bright hard drawn wire. With such wire the hook and shank formed as described are amply strong. The wire may readily be welded and is eminently suitable for the present improved construction in which

twisted ends are eliminated as it is much stiffer and harder than annealed wire.

The yoke **24** of the hanger is made of No. 11 gauge basic bright hard drawn wire flattened as shown in Figure 3 to provide a wire non-circular in section and wider than the original cylindrical wire from which it was formed. The width of the wire as shown in Figure 3 is approximately equivalent to the width of a wire of No. 9 gauge. The round face of the wire is upward in the yoke.

At the top of the yoke **24** where the ends of the shank **22** are welded to the yoke at points **40** and **42** the half round wire of the yoke **24** is twisted through a quarter of a turn, as indicated in Figure 1 at **44**, to provide a broad attaching surface to which the ends of the wires **30** and **32** may be welded and to increase the strength of the yoke at the point of greatest stress. The semi-cylindrical wire forming the yoke is bent downwardly at each side from near the center in order to fit inside the shoulders of a coat or the like, and the ends of the wire are turned inwardly, as at **46** and **48**, providing smooth rounded corners.

The trousers bar **26** is made of No. 13 gauge basic bright hard drawn wire, butt welded at joints **50** and **52** to the turned-in ends **46** and **48** of the yoke **24**. Such trousers bar is amply stiff to hold the weights for which it is intended.

Figures 4, 5 and 6 show a card **54** in place between the wires of the shank **22**. The card is held below the hook, in a position where it is out of the way and yet readily visible. As is clearly indicated in Figure 2 the bends **34** and **36** extend about the wire **32** so that when the card **54** is inserted between the wires **30** and **32** it is caused to bend, assuming the shape shown in Figures 5 and 6. The wires of the shank are at no point in contact with each other so that the card may readily be slid between them, the resilience of the card rather than the resilience of the wires serving to hold the card securely in place. Such resilience of the card causes it to resist the deforming forces of the bends **34** and **36** in the shank and, by pressing against the wire **30** at bends **34** and **36**, and against wire **32** between the bends, to hold itself in place.

Inasmuch as the wires of the shank portion **22** are nowhere in contact with each other, the hanger may be dipped in paint or other coating medium without danger of the medium sealing the space between the wires and preventing the insertion of the card **54**.

In Figure 7 a modified hanger is shown in which the trousers bar is omitted. The hook **20**, shank **22**, and yoke **24** are identical with those of the hanger shown in Figure 1. The same card holding means is used as shown in the preceding figures and the attachment of the shank to the yoke is the same.

In Figures 8 and 9 a modified trousers bar for the hanger is shown. The yoke **24** is the same as in the previously illustrated forms of the hanger. In place of the single trousers bar **26** however a modified trousers bar **56** is provided in which a center rod or wire **58** and side bars **60** and **62** provide a broad support over which trousers can hang without danger of formation of an undesired crease. Such broad support for the trousers is illustrated in Figure 10, which shows the broad bend formed in a pair of trousers **64** or the like when hung over the three wire bar. The center bar or wire **58** is butt welded at joints **66** and **68** to the inturned ends **46** and **48** of the yoke **24** and extends from one end of the yoke to the other. The side bar **60** is spaced from the center bar **58** and is bent toward the center bar at its ends **70** and **72**, and there welded to the center bar. A portion **74** near the center of the side bar **60** is likewise bent toward the center bar and welded to the center bar to provide a center joint. The side bar **62** is similar to the bar **60**, being spaced from the center bar **58** and having its ends **75** and **76** bent toward the center bar **58** inside of the ends of the bar **60** and welded to the bar **58**. A portion **78** similar to portion **74** of bar **60** is bent towards the bar **58** at the center and there welded beside the joint of the portion **74** to the bar **58**. As shown in Figures 8 and 10 the bars **60** and **62** are on a level immediately below the level of the center bar **58** so that the trousers **64**, or other clothes hanging across the composite bar **56** curve gently over the bar rather than making a sharp bend.

Nowhere in the structure herein provided is there a sharp end of a wire to catch on clothing. The wide half round wire forming the yoke **24** provides a broad rest for clothes upon the hanger, avoiding the formation of undesirable creases. The No. 11 gauge wire of which the yoke is made is normally .1205 inch in diameter. A No. 9 gauge wire is normally .1483 inch in diameter. When the No. 11 gauge wire forming the yoke of the present hanger is made half round as shown in Figure 3 it is spread so that its largest diameter is approximately the same as that of a No. 9 gauge wire. One pound of No. 11 gauge wire contains 25.82 feet. One pound of No. 9 gauge wire contains 17.05 feet. It is thus apparent that by the construction described and illustrated a hanger providing the benefits of one made of No. 9 gauge wire may be made according to the present disclosure and will weigh less than two-thirds as much as one made of No. 9 gauge wire. The costs of materials are accordingly reduced.

The No. 14 gauge wire used in the shank and hook contains approximately 58 feet to the pound. By using such lighter wire doubled and shaped as described and made of the basic bright hard drawn wire a hook is produced equal in strength to the hook of heavier wire, providing advantages impossible to obtain in the previous constructions, and allowing substantial savings as compared with the costs of production of other hangers. The weight of the hook and shank portions is less than if one wire of No. 11 gauge had been used, one pound of the latter containing 25.82 feet, as compared with the 58 feet in the pound of No. 14 gauge wire.

As previously stated the single trousers bar **26** is made of No. 13 gauge wire. The composite trousers bar shown in Figures 8, 9 and 10 may be made of No. 14 or 14½ gauge wire. By combining the three sizes of wire as described in connection with the single trousers bar construction, Fig. 1, and using them in the manner stated it is possible to manufacture as stiff and strong a hanger as when heavier materials are used, and yet containing between a fifth to a quarter less raw material. A saving of over 20% has been experienced. As a result better and lighter hangers having added advantages can be supplied to cleaners, dyers, and the like for a cost less than that of the hangers heretofore available.

Heretofore users of wire hangers have found it necessary, when it was desired to increase the

width of the trousers bar, to employ some auxiliary device. For example, in some instances, cleaners and dyers apply a section of cardboard to the trousers bar for the purpose of providing a less abrupt rest for the clothes. Obviously this entails additional expense and presents a decided inconvenience both to the cleaner and the customer. In instances where the user requires such a construction the arrangement which I have disclosed in Figures 8 to 10 inclusive will fill the need much more satisfactorily than the above mentioned attached cardboard. In other words, the increased width of the trousers bar presented by the plurality of wires arranged in spaced relation not only precludes the forming of creases in clothes hung thereon, but forms a unitary part of the hanger as distinguished from the loosely mounted cardboard. When the cost of manufacturing and subsequently applying the auxiliary rest or cardboard to the conventional hanger is considered it will be found that my improved arrangement can be manufactured and sold at no greater cost to the user. It will be apparent, therefore, from the foregoing, that the user of my improved hangers may keep in stock hangers equipped with both types of trousers bars and thus use them as the occasion demands.

From the foregoing it will also be apparent that my invention contemplates the provision of at least three different forms of hangers, namely the type shown in Figure 1 wherein a single trousers bar is provided, the type shown in Figure 7 wherein the trousers bar is eliminated and which probably finds its most extensive application for women's apparel, and the third type shown in Figures 8 to 10 inclusive wherein the trousers bar of increased width is shown. The arrangement disclosed in Figure 1 undoubtedly satisfies most requirements whereas the other modifications meet special requirements in the field.

Obviously the term "card", as used in the specification and claims includes any sheet of material which is adapted to be inserted and deformed by the bends **34** and **36**. In other words, sheet material adapted to be held against said bends by its own resiliency.

The invention and its advantages will be understood from the foregoing description, and it is obvious that numerous changes may be made in the form, construction and arrangement of the several parts without departing from the invention, which is not to be considered as limited to the specific embodiments described but only by the claims hereto appended.

What is claimed as new and is desired to be secured by Letters Patent of the United States is:

1. A trousers bar for a hanger, comprising a plurality of wires spaced from each other to provide a broad non-crease forming support, portions of one wire being bent toward the other and welded thereto to join the wires into a unit.

2. A hanger comprising a section of wire of non-circular cross-section having a relatively broad horizontal surface, a portion of said wire being twisted to bring said broad surface thereon into a plane angularly disposed from the horizontal, and a hanger supporting portion welded to the broad surface at the twisted portion of said wire section.

3. A hanger comprising a yoke section of wire of non-circular cross-section having a relatively broad horizontal surface, a portion of said wire being twisted at the top of the yoke to bring said broad surface thereon into a substantially vertical plane, and a hanger supporting section welded to said broad surface at the twisted portion at the top of the yoke.

4. A hanger comprising a yoke section of wire of non-circular cross-section having a relatively broad curved supporting surface and a relatively flat surface, a portion of said wire being twisted at the top of the yoke to bring said flat surface into a plane angularly disposed from the horizontal, and a hanger supporting portion welded to the flat surface at the said twisted portion of the wire section.

5. In a hanger comprising a yoke and a garment supporting rest supported by the yoke, a combined hook and card holder comprising a reversely bent piece of wire formed into a hook at the bent end and having two coextensive portions of wire projected downwardly therefrom, one portion being bent past the line of the other on each side of the other and unsecured to each other, said wires being spaced apart at all points and being integral continuations of the hook, the ends of said portions being attached at spaced points to the yoke and forming attaching means between the hook and the yoke.

6. A hanger comprising a hook, a shank extending from the hook, said hook and shank being formed of a single piece of relatively small gauge wire doubled upon itself to provide a rounded point for the hook, the free ends of the wire extending downwardly in spaced, substantially vertical relationship and unsecured to each other, and a yoke of relatively heavy gauge wire having a single, integral, transversely extending bar and supporting a trousers bar extending between and secured to the ends of the yoke, said free ends of the wire being welded to the yoke bar at spaced points adjacent the central portion of the bar.

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