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HOLDER FOR PAPER TOWELS IN ROLL FORM

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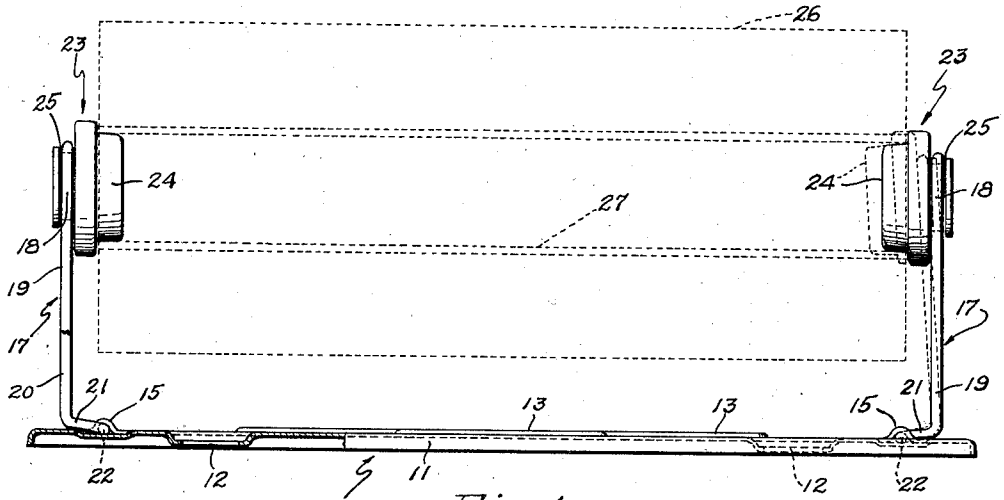


Fig. 1

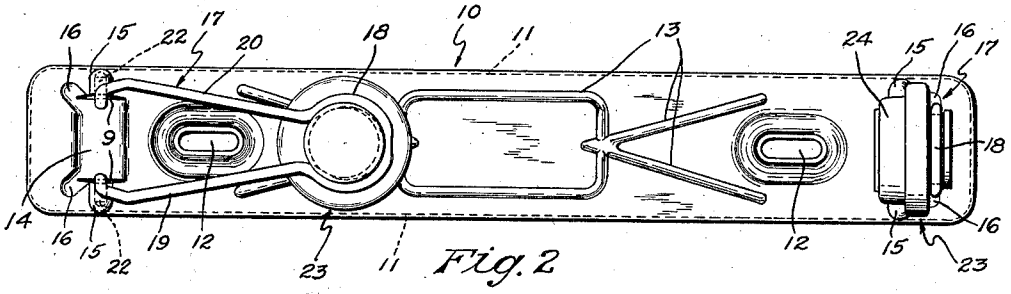


Fig. 2

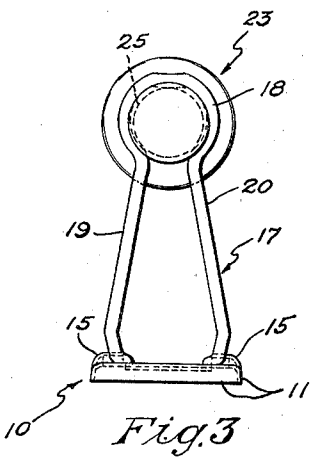


Fig. 3

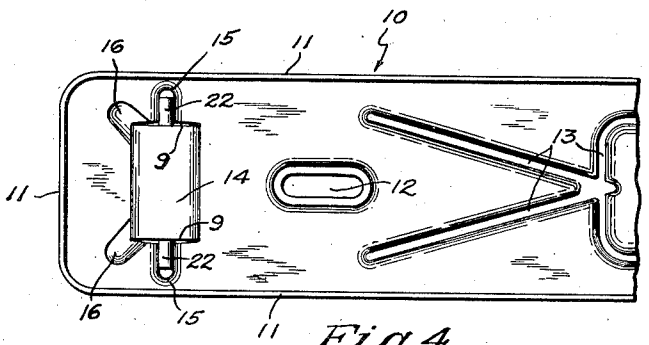


Fig. 4

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HOLDER FOR PAPER TOWELS IN ROLL FORM

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8 Claims. (Cl. 242—55.2)

This invention relates to new and useful improvements in holders or supports and has particular relation to a holder for paper towels in roll form.

An object of the invention is to provide a holder for the purpose specified and which is of simple and inexpensive construction.

Another object is to provide a holder of the character indicated and which may be folded into a substantially flat condition for wrapping or shipping.

Other objects are to provide a holder of the kind indicated and which may be easily set up for use, into which a new roll of paper towels may be readily introduced, and which will keep a slight pressure or friction on the roll of towels to prevent it being casually unwound.

Additional objects and advantages will become apparent from a consideration of the following detailed description taken in connection with the accompanying drawing wherein a satisfactory embodiment of the invention is shown. However, it is to be understood that the invention is not limited to the details disclosed but includes all such variations and modifications as fall within the spirit of the invention and the scope of the appended claims.

In the drawing:

Fig. 1 is a plan view showing the holder as in use, a roll of paper towels being shown in dotted lines, and a portion of the base being shown in section.

Fig. 2 is a front elevational view of the holder one arm being shown in folded position;

Fig. 3 is an end elevational view of the holder; and

Fig. 4 is an enlarged elevational view of the underside of one end portion of the mounting plate of the holder.

Referring in detail to the drawing the improved holder is shown as including a mounting plate or base 10 formed of sheet metal and provided with a bent up strengthening edge 11 and with slots or openings 12 for the passage of securing screws or the like (not shown). The plate may be stiffened and ornamented by pressing up beads or ribs 13.

Toward each end a portion of the plate is depressed as at 14, and at each side of such depressions the plate is cut or slit as shown at 9 and bearings 15 are struck or pressed up. Such bearings 15 are in pairs, a pair being disposed toward each end of the mounting plate. Grooves 16 may be formed leading into the depressions 14 from the outer corners thereof for a purpose to be described.

Mounted by the pairs of bearings at the respective end portions of the plate 10 are arms 17. Since such arms are of the same construction a description of one will it is believed be sufficient for both. Each arm comprises a length of resilient wire bent upon itself intermediate its end to provide an eye portion 18 and a pair of legs 19 and 20 extending from such eye portion.

The legs 19 and 20 are carried toward each other at the underside of the eye portion and incline outwardly or away from one another as clearly shown in Figs. 2 and 3. The free end portions of the legs are bent to provide foot portions 21 angularly related to the legs, and the forward portions of such foot portions are again bent angularly outwardly providing trunnions 22.

The bearings 15 of the respective pairs are in opposing relation, or have their open sides facing one another, and the trunnions 22 are disposed in such bearings whereby the arms 17 are hingedly mounted on the plate 10. Legs 19 and 20 of the arms are resilient or springy and tend to move outwardly away from one another. Therefore, such legs being at the inner ends of the trunnions the tendency of the legs to move apart serves to maintain the trunnions in the bearings.

Mounted in the eye portion 18 of each arm is a roll holding member 23. Such members may be of any suitable material, but are preferably made of wood as an inexpensive material, and include a boss or projection 24 to enter the opening through a roll of towels to form a bearing and an annular reduced portion or groove 25 partly receiving the eye 18. The projection 24 preferably has tapered side walls to facilitate mounting of the roll and also to frictionally hold the roll. In Fig. 1 a roll of paper towels is shown by dotted lines at 26 and the same includes a hollow core 27 on which the towels are wound. It is into this core that the projections 24 enter to mount the towels in their roll form. The projections 24 preferably have tapered side walls to facilitate mounting of the roll and also to frictionally hold the core.

In assembling the bearing members 23 on the arms the wire is bent about the members in the grooves or reduced portions 25 of these members to form the eye portions 18. Thereafter to mount the arms on the plate 10 it is but necessary to press or squeeze the legs 19 and 20 toward one another, align the trunnions with the bearings and then release the legs to let the trunnions

move into the bearings. The arms are then hingedly mounted on the plate for swinging movement from the positions of Fig. 1 where they extend outwardly from the plate to the position of the arm 17 folded against the plate in Fig. 2. Both arms may be folded against the plate for packing or wrapping or the like.

When the arms are swung outwardly their foot portions 21 tend to enter the groove 16 whereby the legs are spread apart as the arms are forced outwardly. Thus the foot portions engaging the plate limit outward movement of the arms and when such movement is forced there is a further tendency to move the trunnions into the bearings. Purposely the arrangement is such that the foot portions engage the plate before the arms are at right angles to the plate so that without springing the arms 17 they move only to the position shown by the dotted lines at the right of Fig. 1.

Any movement of the arms beyond that point results in the arms being sprung or flexed and they will have a constant tendency to return to the dotted line position. When arm 17 is in the dotted line position the distance between the members 23 is less than that required for the insertion of the roll of paper towels 26. Therefore when a roll of towels is in the holder the arms 17 are sprung or tensioned and are exerting a pressure or friction against the roll of towels serving to prevent casual unrolling of the same.

From the foregoing it will be apparent that the holder of the invention is of simple and inexpensive construction comprising only the pressed up metal plate 10, the arms 17 each formed of a length of wire and the members 23. The bearings are pressed up from the plate and the arms are assembled on the plate simply by squeezing the arms together, positioning them and then letting them expand to carry the trunnions 22 into the bearings.

Having thus set forth the nature of our invention, what we claim is:

1. In a holder for paper towels in roll form, a mounting plate having bearings toward each end, a pair of arms each comprising a length of wire bent intermediate its ends to provide an eye portion and a pair of legs extending from said eye portion and angularly disposed trunnions at the free ends of said legs, said trunnions being located in said bearings and mounting the arms on the plate, and a roll holding member mounted by the eye portion of each of said arms.

2. In a holder for paper towels in roll form, a mounting plate having bearings toward each end, a pair of arms each comprising wire legs and angularly disposed trunnions at the free ends of said legs, said trunnions being disposed in said bearings whereby the arms are hingedly mounted, and a roll mounting member carried by each of said arms.

3. In a holder for paper towels in roll form, a mounting plate having bearings toward each end, a pair of arms each comprising a length of wire bent intermediate its ends to provide an eye portion and a pair of legs extending from said eye portion and angularly disposed trunnions at the free ends of said legs, said trunnions being located in the bearings and mounting the arms on the plate, and a pair of roll holding members each provided with an annular groove disposed in an eye portion of an arm.

4. In a holder for paper towels in roll form, a sheet metal mounting plate having bearings formed therefrom toward each of its ends, a pair of arms each comprising wire legs and angularly disposed trunnions at the free ends of said legs, said trunnions being disposed in said bearings whereby the arms are hingedly mounted, and a roll mounting member carried by each of said arms.

5. In a holder for paper towels in roll form, a mounting plate having bearings toward each end, a pair of arms each comprising a length of wire bent to provide a pair of legs, a foot portion at the inner end of each leg and a trunnion angularly disposed with respect to said foot portion, said trunnions being disposed in said bearings whereby the arms are hingedly mounted, a roll mounting member at the inner side of each arm, and said foot portions of one of said arms engaging the plate as said arm is swung to a position extending outwardly from the plate whereby said arm must be slightly sprung when inserting a roll on said members and the member carried by said arm will be held against the roll with a spring pressure.

6. In a holder for paper towels in roll form, a mounting plate having bearings toward each end, a pair of arms each comprising a length of wire bent to provide a pair of legs, a foot portion at the inner end of each leg and a trunnion angularly disposed with respect to said foot portion, said trunnions being disposed in said bearings whereby the arms are hingedly mounted, a roll mounting member at the inner side of each arm, and said foot portions engaging the plate when the arms are extending outwardly therefrom whereby to limit swinging movement of the arms relative to the plate.

7. In a holder of the character described, a mounting plate having a pair of bearings toward each of its ends, the bearings of each pair being arranged opposite each other, a pair of arms each comprising a length of wire bent to provide a pair of spring legs and an outwardly directed trunnion at the free end of each leg, said trunnions being disposed in said bearings, said legs tending to move apart whereby the trunnions are maintained in the bearings, and a roll mounting member at the inner side of each of said arms.

8. In a holder of the character described, a mounting plate having bearings toward each of its ends, a pair of arms each comprising a pair of legs and a trunnion at the inner end of each leg, said trunnions disposed in said bearings whereby the arms are mounted, said legs being resilient and constantly tending to move in directions maintaining the trunnions in the bearings, and a roll mounting member carried by each of said arms.

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