

A MOULDING FOR RECEIVING A FORMER TO PRODUCE A GARMENT SUPPORT,
AND A MOULDED CLIP THEREFOR.

The present invention relates in general to supports
5 for garments which enable the garments to be presented in a
neat and attractive manner. More particularly, the
invention is directed to a moulded clip which may form part
of a moulding for receiving a former, such as a backing
card, to produce a garment support.

10 It is known to include clips on garment hangers.
However, all such clips are either complicated to
manufacture (due to the requirement that a spring has to co-
operate with a plastics moulding) or have to be manually
fixed to a hanger (i.e. cannot be moulded in position). In
15 the light of the foregoing, it would be advantageous to be
able to mould a complete clip, having a relatively firm
grip, which can be readily integrated into any garment
support or hanger.

With the foregoing in mind, the present invention
20 provides a one piece moulded clip comprising a base portion,
a gripping portion mounted on the base portion via a support
pivot, the gripping portion extending over both sides of the
support pivot, and locking means having a first portion
attached to the base portion adjacent the support pivot by
25 a flexible joint and a second, free portion for bearing
against the underside of one end of the gripping portion to
force the opposite end of the gripping portion towards the
base portion for holding a garment therebetween, in use.

The locking means may include a bearing bar which bears
30 against the underside of the one end of the gripping portion
during closing of the clip.

To facilitate opening and closing of the clip, the
locking means preferably includes a finger grip.

In one embodiment of clip according to the invention,
35 the locking means include an aperture through which the one
end of the gripping portion passes as the clip is closed.
In an alternative, more preferable embodiment, the aperture

is effectively covered by a cap moulded to the locking means to help to hide the functional part of the clip.

Preferably the gripping portion includes a ramp profile against which the locking means bears during closing of the clip, the locking means being held in contact with the gripping portion by the steep side of the ramp profile when the clip is closed. Other means for holding the clip closed can also be envisaged.

Preferably the locking means and support pivot (and perhaps the gripping portion) are resilient, thereby enabling the clip to close with a snap action. This helps a user of the clip to know when the clip is fully closed.

The base portion or the gripping portion or both preferably include resilient contact faces. By including such faces, any garment, or any other article, held between the gripping portion and base portion is not severely deformed, but is held firmly yet gently. This arrangement also enables garments of different thicknesses to be accommodated.

The resilient contact faces are preferably formed from thin webs of plastics material attached to and spaced from the base portion or gripping portion respectively. The resilient contact faces are also preferably moulded at the same time as the clip as a whole.

Preferably the clip is moulded from plastics material, such as polypropylene.

With reference to another aspect of the present invention, it is well known to utilise backing cards within a folded garment, such as a shirt, to enable the shirt to be folded in a neat and attractive manner. This is fine if the shirt has a stiff collar and is to be presented on a shelf, rather than hanging from a rail.

Furthermore, it is known for hangers having a hook, extending upwards therefrom for hanging on a rail, to include cardboard formers attached to the lower side of the hanger. This type of hanger and former must be entered within a garment so that the hook portion can extend out through the neck region of the garment. This is clearly

time consuming during assembly and results in the garment not been presented in a particularly neat and smart fashion. Also, such hangers cannot be used to display polo-necked garments, wherein the long neck is to be presented extending
5 down the front of the garment.

In the light of the foregoing, it will be appreciated that there is a distinct need for a moulding, which can be used with a hook to suspend a garment from a rail, which can accommodate garments having either normal collars or
10 polo-neck collars equally easily.

With this in mind, the present invention further provides a moulding for receiving a former to produce a garment support, the moulding comprising a body portion, a moulded clip as herein claimed and two wing portions
15 flexibly joined to the body portion, wherein each wing portion can be folded into a first or a second position in relation to the body portion to enable garments having normal collars or polo-neck collars respectively to be accommodated, and wherein the moulded clip can grip part of
20 a garment mounted on the moulding to enable the garment to be held more neatly.

Preferably, in the first position, each wing provides a support arm which, in use, extends over a collar of a garment and along a shoulder within the garment. In this
25 way, the neck and shoulder region of a shirt, which may not have a stiff collar, is held in a neat and attractive fashion.

Preferably, in the second position, each wing provides a resilient clip for engaging a neck region of a polo-necked garment. More preferably, the resilient clip grips
30 a region of the garment where the neck joins the shoulders of the garment, thereby allowing the polo-neck to lie flat along the front of the garment.

In both the first and the second positions, a part of
35 each wing may overlay a part of the body portion to provide means for holding a former in position. In a preferred embodiment, each wing, when folded, engages the body portion via a releasable stud and recess (or aperture) arrangement.

If this type of arrangement is used, the former, which is preferably made of cardboard but could be made of any other suitable material, is held by the moulding because the studs pass through holes in the former before engaging in their
5 respective recesses, preferably via a snap fit.

Preferably two moulded clips are provided on separate sides of the body portion, such that a lower portion of a garment, when folded about an axis substantially parallel to the body portion, may be gripped by the moulded clips
10 from either side.

As will be appreciated, the moulding is preferably formed from plastics material, such as polypropylene. Any other suitable material could, of course, equally well be used.

15 Specific embodiments of the present invention are now described, by way of example only, with reference to the accompanying drawings, in which:

Figure 1 is a perspective view of a moulding which could be modified to accommodate a moulded clip according to
20 the present invention;

Figure 2 is a perspective view of a second embodiment of moulding with part of a former shown in position;

Figure 3 is a perspective view from the rear of a shirt having a normal collar partially folded about a moulding and
25 former in accordance with the present invention;

Figure 4 is a rear view of a shirt having a polo-neck completely folded about a moulding and former in accordance with the present invention; and

Figure 5 is a cross-sectional side view of a moulded
30 clip according to the present invention.

With reference to Figure 1 of the accompanying drawings, a moulding (1) for receiving a former, or fold board, to produce a garment support, comprises a body portion (3) and two wing portions (5) flexibly joined to the
35 body portion via fold lines (7, 9) of weakened material. The body portion (3) further comprises a recess or aperture (11) adjacent each wing portion (5) to receive a stud (13, 15) projecting from the wing portion (5). Depending upon

which way each wing portion (5) is folded, stud (13) or stud (15) enters the recess (11), preferably with a snap fit.

Each wing portion (5) includes a flap (17) which can hinge about a fold line (7) to enable stud (13) to engage
5 recess (11). Alternatively, arm (19) and clip (21), together with part of flap (17), can hinge about the other fold line (9) to enable stud (15) to engage in recess (11).

In a first embodiment of moulding, as shown in Figure 1, the body portion (3) further includes lower arms (23),
10 integral therewith, which define U-shaped sections (25). The two substantially parallel lengths of each U-section are biased towards each other during manufacture to act as clips for receiving a lower part of a garment, during use.

In a second embodiment of moulding according to the
15 present invention (as shown in Figure 2), the U-shaped sections at the ends of lower arms (23) are replaced by moulded clips (100), which are described in detail hereinafter.

If flap (17) is folded about fold line (7) and stud
20 (13) engages recess (11), the arm (19) and clip (21) are held in their positions shown in Figure 1.

Further, in practice, as the flap (17) is folded, the studs (13) are passed through holes (27) in a cardboard
former (29) before entering the recesses (11). In this way,
25 the cardboard former (29) is held in position in relation to the moulding (1).

In use, when the moulding (1) and former (29) have been attached to produce a garment support, the garment support is placed against the back of a shirt (31) having a normal
30 collar (c.f. Figure 3). Each arm (19) is entered into the shirt (31) through the open neck region so that the arm (19) supports the shoulder of the shirt (31). This arrangement is facilitated by the arm (19) being offset by a few millimetres from the plane of the remainder of the wing
35 portion (5) via a bridge (33) which, in use, passes over the collar of the shirt (31). The sides of the shirt (31) are then folded inwards about the former (29), as shown in Figure 3. The arms of the shirt may be tucked under the

lower arms (23) of the moulding (1). The lower part of the shirt (31) and the lower part (29a) of the former (29) are then folded about a line substantially parallel to the body portion (3). The lower part of the shirt (31) is then gripped by the moulded clips (100). In this way, the shirt (31) is held in a very neat and presentable form. Furthermore, if required, a hook (not shown) could be moulded or attached to the body portion (3), so that the whole package can be suspended from a rail or the like.

If shirts or other garments having polo-neck collars need to be displayed, the wing portions (5) are folded about fold lines (9), so that studs (15) engage recesses (11) and retain an appropriately shaped former (29) in position. (The former (29) preferably tapers from its end nearest the moulding (1) to its lower end (29a), so that, when folded, the lower end (29a) can fit between the clips (25, 100).) When the wing portions (5) have been folded, the clips (21) are exposed and the arms (19) lie out of the way, adjacent the former (29). A shirt (35) having a polo-neck collar can then be mounted on the garment support, produced by the moulding (1) and former (29), as shown in Figure 4. In this regard, as will be appreciated, the only major difference between the arrangement in Figures 3 and 4 is that the clips (21) grip a region of the shirt between the polo-neck and shoulders, rather than the arms (19) entering the shirt and supporting the shoulder regions from within. In such an arrangement, as shown in Figure 4, the long polo-neck is free to hang down the front (not shown) of the shirt, which is the preferred way of presenting polo-neck garments.

As will be appreciated, a major advantage of a moulding as described is that it can be manufactured in one piece, yet is able to support, with the aid of a former, garments having either normal collars or polo-neck collars.

Turning now to Figure 5, one embodiment of a moulded clip (100) is shown in cross-section. More particularly, the moulded clip (100) comprises a base portion (102), a gripping portion (104), mounted on the base portion (102) via a support pivot (106), and a locking means (108). Both

the base portion (102) and gripping portion (104) include ribbed regions (110, 112) to facilitate gripping of a garment therebetween. Alternatively, resilient contact faces (c.f. Figure 2) could be used, thereby preventing harm
 5 being done to the garment as it is gripped between the jaws of the clip. Such resilient contact faces are formed from thin webs of plastics material attached to and spaced from the base portion (102) or gripping portion (104) respectively. In this way, a form of padded gripping region
 10 is provided.

The locking means (108) is joined to the base portion (102) via a flexible joint (114), which is simply a line where the material has been reduced in thickness. The locking means (108) also includes a finger grip (116) to
 15 facilitate opening and closing of the moulded clip (100).

The gripping portion (104) may pivot about the top of the support pivot (106) such that the ribbed region (112) of the gripping portion (104) may be moved towards and away from the corresponding ribbed portion (110) of the base
 20 portion (102). This motion is brought about by a bearing bar (118) of the locking means (108) bearing against a ramp profile (120) on the lower side of the end of the gripping portion (104) farthest from the ribbed region (112). As the locking means (108) is rotated about flexible joint
 25 (114) in the direction of the arrow A, the bearing bar (118) contacts the ramp profile (120) and forces the gripping portion (104) to pivot about the support pivot (106). When the bearing bar (118) reaches the end of the ramp profile (120), it drops down the steep side (122) of the ramp
 30 profile (120) so that the moulded clip (100) is locked in its closed position.

Due to the resilient nature of the support pivot (106), and perhaps the locking means (108) (due to the flexible joint (114)) and (to a certain extent) the flexibility of
 35 the gripping portion (104), the moulded clip (100) can be released from its closed position simply by pulling on the finger grip (116) in the direction of the arrow B. This action forces the bearing bar (118) past the ramp profile

(120) to release the moulded clip (100) from its closed position.

As will be seen, the locking means (108) includes a window (124) through which the end of the gripping portion (104) including the ramp profile (120) passes as the moulded clip (100) is closed. In an alternative embodiment of moulded clip (100) according to this aspect of the present invention, the locking means (108) can be formed with a cover (not shown) to hide the window (124) (and hence the functional part of the moulded clip (100)) from view. Such an arrangement produces a more aesthetically pleasing version of the moulded clip.

As mentioned previously, the moulded clip (100) is made as a one-piece moulding from plastics material, such as polypropylene. From a manufacturing point of view, this is clearly desirable and results in a clip providing a relatively strong grip when in its closed position. Further, due to the snap closing of the clip, as the bearing bar (118) drops down the steep side (122) of the ramp profile (120), the user of the clip can be sure when the clip is fully closed.

Finally, due to its simple but effective design, a moulded clip (100) as herein described can be readily

included in any garment support or hanger during manufacture.

It will of course be understood that the present invention has been described above purely by way of example, 5 and that modifications of detail can be made within the scope of the invention.

CLAIMS

1. A one piece moulded clip comprising a base portion, a gripping portion mounted on the base portion via a support
5 pivot, the gripping portion extending over both sides of the support pivot, and locking means having a first portion attached to the base portion adjacent the support pivot by a flexible joint and a second, free portion for bearing against the underside of one end of the gripping portion to
10 force the opposite end of the gripping portion towards the base portion for holding a garment therebetween, in use.
2. A moulded clip as claimed in Claim 1, wherein the locking means include a bearing bar which bears against the
15 underside of the one end of the gripping portion during closing of the clip.
3. A moulded clip as claimed in any preceding claim, wherein the locking means includes a finger grip to
20 facilitate opening and closing of the clip.
4. A moulded clip as claimed in any preceding claim, wherein the locking means include an aperture through which the one end of the gripping portion passes as the clip is
25 closed.
5. A moulded clip as claimed in Claim 4, wherein the aperture is covered by a cap moulded to the locking means.
- 30 6. A moulded clip as claimed in any preceding claim, wherein the gripping portion includes a ramp profile against which the locking means bears during closing of the clip, the locking means being held in contact with the gripping portion by the steep side of the ramp profile when the clip
35 is closed.
7. A moulded clip as claimed in any preceding claim, wherein the locking means and support pivot are resilient,



thereby enabling the clip to close with a snap action.

8. A moulded clip as claimed in any preceding claim,
wherein the base portion or the gripping portion or both
5 include resilient contact faces.

9. A moulded clip as claimed in Claim 8, wherein the
resilient contact faces are formed from thin webs of
plastics material attached to and extending from the base
10 portion or gripping portion respectively.

10. A moulded clip as claimed in any preceding claim,
wherein the base portion includes means for attaching the
clip to a garment hanger or the like.

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11. A moulded clip as claimed in any preceding claim, which
is made from polypropylene.

12. A moulded clip substantially as hereinbefore described
20 with reference to and as shown in Figures 2, 3 and 4 or
Figure 5 of the accompanying drawings.

13. A moulding for receiving a former to produce a garment
support, the moulding comprising a body portion, a moulded
25 clip as claimed in any preceding claim and two wing portions
flexibly joined to the body portion, wherein each wing
portion can be folded into a first or a second position in
relation to the body portion to enable garments having
normal collars or polo neck collars respectively to be
30 accommodated, and wherein the moulded clip can grip part of
a garment mounted on the moulding to enable the garment to
be held more neatly.

14. A moulding as claimed in Claim 13, wherein two moulded
35 clips are provided on opposite sides of the body portion
such that a lower portion of a garment, when folded about an
axis substantially parallel to the body portion, can be
gripped by the moulded clips from either side.



15. A moulding as claimed in Claim 13 or Claim 14, wherein in the first position each wing provides a support arm which, in use, extends over a collar of a garment and along
5 a shoulder within the garment.

16. A moulding as claimed in any one of Claims 13-15, wherein in the second position each wing provides a resilient clip for engaging a neck region of a polo necked
10 garment.

17. A moulding as claimed in any one of Claims 13-16, wherein in both the first and the second positions a part of each wing overlays a part of the body portion to provide
15 means for holding a former in position.

18. A moulding as claimed in Claim 17, wherein each wing, when folded, engages the body portion via a releasable stud and recess (or aperture) arrangement.

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19. A moulding as claimed in any one of Claims 13-18, which is formed from plastics material.

20. A moulding as claimed in Claim 19, wherein the plastics
25 material is polypropylene.

21. A moulding for receiving a former to produce a garment support substantially as hereinbefore described with reference to and as shown in Figures 2-4 of the accompanying
30 drawings.

22. A moulding according to any one of Claims 13-21 in combination with a former.

35 23. The combination of a moulding and former as claimed in Claim 22, wherein the former is made of cardboard.



24. The combination of a moulding and former as claimed in Claim 22 or Claim 23, wherein the former tapers from its end attached to the moulding to its distal end.