CLAIMS

What is claimed is:

1. A unitary fastener for joining two elements face-to-face, comprising:

a head including a cone-shaped flange being the largest diameter of the fastener, said flange having an uninterrupted circular periphery adapted to resiliently deflect upwardly; and

a shank extending immediately downward from said head, said shank including means for engaging at least a bottom one of said two elements.

2. The fastener of claim 1 further described in that said shank engaging means are helical threads.

3. The fastener of claim 1 further described in that said shank engaging means is a undercut adapted to receive the cold flow of material from said bottom one of said two elements.

4. An assembly of parts, comprising:

a fastener according to claim 1;

a top element in face-to-face abutment with a bottom element, said top element including an aperture through which the shank of said fastener passes; and

the shank of said fastener being engaged with a cavity in said bottom element to a depth where the periphery of the fastener head flange is in forceable contact with the top element and deflected sufficiently to apply a downward resiliently biasing residual clamp load between said elements.

5. The assembly of claim 4 wherein said shank includes helical threads which engage the bottom element.

6. The assembly of claim 4 wherein said shank includes an undercut that receives the cold flow of material from said bottom element.

CLAIMS

What is claimed is:

1. A unitary fastener for joining two elements face-to-face, comprising:

a head including a cone-shaped flange being the largest diameter of the fastener, said flange having an uninterrupted circular periphery adapted to resiliently deflect upwardly; and a shank extending immediately downward from said head, said shank having attachment means including an undercut adapted to receive the cold flow of material from at least a bottom one of said two elements.

2. An assembly of parts, comprising:

a fastener according to claim 1;

a top element in face-to-face abutment with a bottom element , said top element including an aperture through which the shank: of said fastener passes; and

the shank of said fastener being attached to the bottom element by engagement with a cavity in said bottom element to a depth where the periphery of the fastener head flange is in forcible contact with the top element and deflected sufficiently to apply a downward resiliently biasing residual clamp load between said elements.

3. The assembly of claim 2 wherein said shank includes helical threads which engage the bottom element.

4. The assembly of claim 2 wherein said shank attachment means is only the undercut.

5. The assembly of claim 2 wherein the diameter of the shank is 1.0 mm.

6. The fastener of claims 1 or 2 wherein the cold flow of material is caused by a downward installation force applied to the head.

7. The fastener of claims 1 or 2 wherein the fastener is a tack pin.