CLAIMS:

1. A cantilever shelf or rack comprising:

an upright member formed from a sheet material, wherein the sheet material is formed with apertures or notches that are spaced apart at a predetermined pitch and layout and each aperture or notch has two downwardly inclined edges and a lateral entrance width p; and

a load support member also formed from a sheet material so that a tongue extends from an edge or corner to engage with the two downwardly inclined edges of an associated aperture or notch on the upright member, with a width of the tongue w being smaller than the entrance width p;

wherein the load support member is disposed in a substantially horizontal position when the tongue is fitted and engaged with the associated aperture or notch.

2. A cantilever shelf or rack according to claim 1, wherein the two downwardly inclined edges of the aperture or notch are V-shaped, part circular, elliptical or parts of a composite shape.

3. A cantilever shelf or rack according to claim 2, wherein an upper edge adjoining the two downwardly inclined edges of the aperture or each aperture is straight, curved or profiled.

4. A cantilever shelf or rack according to any one of the preceding claims, wherein the aperture or notch is located on a flat, right-angled, obtuse-angled or curved portion of the upright member.

5. A cantilever shelf or rack according to any one of the preceding claims, wherein the upright member is operable for free standing on a ground, hanging from an elevated structure or mounting on an external structure.

6. A cantilever shelf or rack according to claim 5, wherein the upright member further comprises a mounting flange.

7. A cantilever shelf or rack according to any one of the preceding claims, wherein the load support member is quadrilateral or sectorial in shape or profiled with a straight edge.

8. A cantilever shelf or rack according to claim 7, wherein when the load support member is quadrilateral or profiled with a straight edge, the tongue is formed to extend from a or the straight edge.

9. A cantilever shelf or rack according to claim 8, wherein the straight edge on each of two sides of the tongue is formed as a downward flange.

10. A cantilever shelf or rack according to claim 8, wherein two edges adjacent the straight edge are formed as downward side flanges.

11. A cantilever shelf or rack according to claim 8, wherein the tongue comprises two or more tongues which are spaced apart according to a horizontal pitch distance of the engaging apertures or notches.

12. A cantilever shelf or rack according to claim 7, wherein when the load support member is quadrilateral or sectorial, the tongue is formed at a corner and each of two adjoining edges is formed as a downward flange.

13. A cantilever shelf or rack according to claim any one of claims 7-12, wherein each of the tongue is formed by two opposite slots of a predetermined width s to produce a neck with a width n.

14. A cantilever shelf or rack according to claim 13, wherein the two opposite slots are in-line or inclined to each other.

15. A cantilever shelf or rack according to claim 13 or 14, wherein an inside edge of each slot is in contact with an inner face of the upright support member at the associated aperture or notch, whilst end edges or faces of the flanges contact an outside face of the upright member at the associated aperture or notch, wherein the inside edges of the slots and the end edges/ faces of the flanges are spaced apart to provide a resisting moment to support an applied load on the load support member.

16. A cantilever shelf or rack according to claim 15, wherein a horizontal distance between the inside edge of the slot and the end edges/faces of the flanges is substantially equal to a thickness t of the upright member.

17. A cantilever shelf or rack according to any one of the preceding claims, wherein a load bearing surface of the load support member is planar, formed with a depression or formed with an open or closed cutout.

18. A cantilever shelf or rack according to any one of the preceding claims, wherein the sheet material is selected from: metal, engineering plastic, formed wood laminate, fibre reinforced resin or composite.

19. A method of erecting a cantilever shelf or rack, the method comprises:

forming an upright member from a sheet material with apertures or notches, with the apertures or notches being spaced apart at a predetermined pitch in a horizontal direction and each aperture or notch has two downwardly inclined edges and an entrance width p; and

forming a load support member from a sheet material so that a tongue extends from an edge or corner to engage with the two downwardly inclined edges of an associated aperture or notch, with a width of the tongue w being smaller than the entrance width p;

wherein the load support member is in a substantially horizontal position when the tongue is fitted and engaged with the associated aperture or notch.

20. A method according to claim 19, further comprises arranging the apertures or notches in rows and aligning the apertures or notches in a vertical direction.

21. A method according to claim 19, further comprises arranging the apertures or notches in rows and staggering the apertures or notches in a vertical manner.

22. A method according to any one of claims 19-21, further forming an upper edge adjoining the two downwardly inclined edges of the aperture or each aperture with a straight, curved or profiled edge.

23. A method according to any one of claims 19-22, further forming a planar, depressed, an open cutout or a closed cutout load bearing surface on the load support member.

CLAIMS:

1. A cantilever shelf or rack comprising:

an upright member formed from a sheet material, wherein the sheet material is formed with apertures or notches that are spaced apart at a predetermined pitch and layout and each aperture or notch has two downwardly inclined edges and a lateral entrance width p; and

a load support member also formed from a sheet material so that a tongue extends from an edge or corner to engage with the two downwardly inclined edges of an associated aperture or notch on the upright member, with a width of the tongue w being smaller than the entrance width p;

wherein the edge on each of two sides of the tongue is formed as a downward flange or two edges adjacent the edge or corner are formed as downward side flanges, so that the downward flanges or downward side flanges provide a resisting moment to keep the load support member in a substantially horizontal position when the tongue is fitted and engaged with the associated aperture or notch.

2. A cantilever shelf or rack according to claim 1, wherein the two downwardly inclined edges of the aperture or notch are V-shaped, part circular, elliptical or parts of a composite shape.

3. A cantilever shelf or rack according to claim 2, wherein an upper edge adjoining the two downwardly inclined edges of the aperture or each aperture is straight, curved or profiled.

4. A cantilever shelf or rack according to any one of the preceding claims, wherein the aperture or notch is located on a flat, right-angled, obtuse-angled or curved portion of the upright member.

5. A cantilever shelf or rack according to any one of the preceding claims, wherein the upright member is operable for free standing on a ground, hanging from an elevated structure or mounting on an external structure.

6. A cantilever shelf or rack according to claim 5, wherein the upright member further comprises a mounting flange.

7. A cantilever shelf or rack according to any one of the preceding claims, wherein the load support member is quadrilateral or sectorial in shape or profiled with a straight edge.

8. A cantilever shelf or rack according to claim 7, wherein when the load support member is quadrilateral or profiled with a straight edge, the tongue is formed to extend from a or the straight edge.

9. A cantilever shelf or rack according to claim 8, wherein the tongue comprises two or more tongues which are spaced apart according to a horizontal pitch distance of the engaging apertures or notches.

10. A cantilever shelf or rack according to claim 7, wherein when the load support member is quadrilateral or sectorial, the tongue is formed at a or the corner.

11. A cantilever shelf or rack according to claim 7-10, wherein each of the tongue is formed by two opposite slots of a predetermined width s to produce a neck with a width n.

12. A cantilever shelf or rack according to claim 11, wherein the two opposite slots are in-line or inclined to each other.

13. A cantilever shelf or rack according to claim 11 or 12, wherein an inside edge of each slot is in contact with an inner face of the upright support member at the associated aperture or notch, whilst end edges of the downward side flanges or faces of the downward flanges contact an outside face of the upright member at the associated aperture or notch.

14. A cantilever shelf or rack according to claim 13, wherein a horizontal distance between the inside edge of the slot and the end edges/faces of the flanges is substantially equal to a thickness t of the upright member.

15. A cantilever shelf or rack according to any one of the preceding claims, wherein a load bearing surface of the load support member is planar, formed with a depression or formed with an open or closed cutout.

16. A cantilever shelf or rack according to any one of the preceding claims, wherein the sheet material is selected from: metal, engineering plastic, formed wood laminate, fibre reinforced resin or composite.

17. A kit for configuring a cantilever shelf or rack comprising:

an upright member formed from a sheet material, wherein the sheet material is formed with apertures or notches that are spaced apart at a predetermined pitch and layout and each aperture or notch has two downwardly inclined edges and a lateral entrance width p; and

a load support member also formed from a sheet material so that a tongue extends from an edge or corner to engage with the two downwardly inclined edges of an associated aperture or notch on the upright member, with a width of the tongue w being smaller than the aperture or notch entrance width p; wherein the edge on each of two sides of the tongue is formed as a downward flange or two edges adjacent the edge or corner are formed as downward side flanges, so that the downward flanges or downward side flanges provide a resisting moment to keep the load support member in a substantially horizontal position when the tongue is fitted and engaged with the associated aperture or notch.

18. A method of erecting a cantilever shelf or rack, the method comprises:

forming an upright member from a sheet material with apertures or notches, with the apertures or notches being spaced apart at a predetermined pitch in a horizontal direction and each aperture or notch has two downwardly inclined edges and an entrance width p; and

forming a load support member from a sheet material so that a tongue extends from an edge or corner to engage with the two downwardly inclined edges of an associated aperture or notch, with a width of the tongue w being smaller than the entrance width p;

wherein the edge on each of two sides of the tongue is formed as a downward flange or two edges adjacent the edge or corner are formed as downward side flanges, so that the downward flanges or downward side flanges provide a resisting moment to keep the load support member in a substantially horizontal position when the tongue is fitted and engaged with the associated aperture or notch.

19. A method according to claim 18, further comprises arranging the apertures or notches in rows and aligning the apertures or notches in a vertical direction.

20. A method according to claim 18 further comprises arranging the apertures or notches in rows and staggering the apertures or notches in a vertical manner.

21. A method according to any one of claims 18-20, further forming an upper edge adjoining the two downwardly inclined edges of the aperture or each aperture with a straight, curved or profiled edge.

22. A method according to any one of claims 18-21, further forming a planar, depressed, an open cutout or a closed cutout load bearing surface on the load support member.