

Oifig Maoine Intleachtúla na hÉireann Intellectual Property Office of Ireland

Patent Application Guide



Format of a Patent Application

Before an application is made to the Intellectual Property Office of Ireland (IPOI), you must ensure that it satisfies the criteria in relation to the actual layout for a specification. There are strict rules (prescribed in law) relating to the paper size, page layout, line numbering, etc.

The Intellectual Property Office of Ireland has developed an interactive tool for preparing patent documents. This is available at <u>https://www.ipoi.gov.ie/en/types-of-ip/patents/the-application-process/interactive-tool-for-preparing-patent-documents/</u>.

If preparing the specification without the aid of this tool, please note that each particular section of the patent specification (i.e. **The Description**, **The Claims**, **The Drawings and The Abstract**) must start on



You must use good quality white paper that is 29.7 cm x 21 cm (A4 format).

The paper should be free of creases or folds.

Only one side of the A4 sheet may be used.

The text should be free from handwritten corrections or comments.





The margins of the sheet should be completely blank. The allowable margins for the Description, Claims and Abstract are: Top, Bottom, Right side – 2.0 cm Left side – 2.5 cm

The Description, Claims and Abstract of your application must be typed in black. Handwritten descriptions or those with coloured fonts will be rejected.

The text used should have a font size of 12.

The text for the Description, Claims and Abstract should be spaced **1.5 lines apart**.



The pages of the Description, Claims and Abstract should be numbered together consecutively (i.e. 1, 2, 3, 4). This numbering should be positioned at the top of the sheet, in the middle of the page, but below the allowed margins.

The lines of text should be numbered in sets of five along the left-hand side of the Description. Line numbering should start afresh on each sheet of the Description, Claims and Abstract.

Alternatively, paragraph numbering (i.e. [001], [002], [003]), positioned along the left hand side of the Description, Claims and Abstract, can be used instead of line numbering.



Drawings: The format of the drawings differs slightly from the rest of the application.

In most cases the page layout is portrait, but the drawings may be represented in landscape format instead.

The sheets of the drawings should also be numbered at the top of the sheet, in the middle of the page, but with a format of 1 of 3, 2 of 3, 3 of 3, etc. (i.e. 1/3, 2/3, 3/3).

Several drawings may be represented on one page but they must be clearly marked as Figure 1, Figure 2, etc.

Photographs will not be accepted in lieu of drawings.

REMEMBER!

DO:

- begin each section [Description, Claims, Drawings and Abstract] on a separate sheet of paper;
- type your description in black ink;
- number each sheet of paper in order, at the top of the page in the middle (below the margin);
- number the lines of the description in sets of five on the left side of the page or use paragraph numbering.

DON'T:

- use coloured or lined paper;
- submit coloured drawings or photographs.
- write over the typed text in freehand;
- write in the margins of the A4 pages;
- put explanatory text in the drawings.

Preparing the Description

The Description of your patent application must give detailed technical disclosure as to what your invention is, what it does and how it works.

There should be enough information in your application for a person to be able to manufacture a prototype. It should start off with general background information and progress to more detailed information about the invention and its parts.

Please note that improvements, modifications or any additional material **may not be added to the application after the date of filing**. You should ensure all technical features of the invention have been included on the date of filing.

The Description of an invention is usually separated into several parts to ensure full detail is given. Please note that these Description subsections do not have to be separated onto individual pages.

Title:

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The Description starts with the title of the invention. You should use the same title that is presented on the application form. This title must be sufficient to indicate the nature of the invention. Titles such as "A product" or "A method" are not acceptable. The title should not contain nicknames, brand names or trademarks.

Example:

Garden furniture assembly for use as a clothes line.

The Description will then introduce the "Field of the Invention".

Field of the invention:



The Description continues with the technical Field of the Invention. Here you will discuss the inventive area that your application is dealing with.

Example:

Field of the Invention

The present invention relates to garden and/or outdoor furniture. In particular the invention relates to a new type of gazebo.

The Description will then continue with the "Background to the Invention".

Background:

Title Field of Invention Background to the invention

The Background will discuss in detail the technical area of your invention. If your invention has come about from problems with other products, you should mention what these problems are, but do not mention brand names or trademarks of these particular products. You should then indicate how your invention overcomes the outlined problems.

Example:

Background to the invention

A gazebo is a permanent structure commonly found in parks, gardens and other public areas. Gazebos have a roof, are freestanding and are open sided. A main purpose for gazebos is to provide shade and shelter against rain.

Current gazebos have four support posts, which decrease the size of available garden space that can be used. They may require foundations to be laid or digging up of patios. Homeowners may prefer a simpler, more inexpensive option. It is also desirable that a gazebo would have a practical function also, especially for homes with a smaller garden.

Accordingly, there exists a need for a simpler gazebo that can be used in a domestic garden as well as having a practical function.

The Description will then continue with your "Summary of the Invention".

Summary of the Invention:



The Summary of the Invention is a concise list of your invention features. It basically lists the features of your invention that are needed for it to function or the minimum features needed for it to be assembled. This section can be used later to form the basis of your first 'claim'.

Example:

Summary of the Invention:

Accordingly, there is provided a gazebo comprising: a roof structure; a support assembly having a single central upright support, said support comprising four tubular bars adapted to support the roof structure, each tubular bar at one end being bent back on itself to form a triangular support; and a clothes line assembly positioned under the roof structure. You can then discuss any advantages that your application has, including any preferable, but not essential, features and/or different embodiments.

The advantages of the invention are that the support assembly allows for strong permanent construction of a gazebo as well as having a dual function of a clothes line and that the gazebo is easy to install.

In one embodiment the clothes line assembly comprises a frame having four joists positioned perpendicular to the elongated tubular support, said joists being adapted to receive at least one rope to form a clothes line.

In one embodiment a table is coupled with said support assembly.

In one embodiment the roof structure comprises felt, slate and/or shingle roof covering.

Brief description of the drawings:

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Brief description of the drawings	

At this point in the Description you should introduce any drawings which accompany the application. Remember - the actual figures and drawings will be presented separately in the Drawings Section.

Here in the Description you must state: each figure number, what the figure refers to, and whether it is a top, bottom or side view, an elevation view or an isometric (3D) view.

If there are no accompanying drawings, this section is omitted, and you can proceed onto the next section.

Example:

Brief description of the drawings

The invention will be more clearly understood from the following description of an embodiment thereof, given by way of an example only, with reference to the accompanying drawings, in which:

- Figure 1a & 1b show a side view and isometric view of the gazebo structure according to the invention;
- Figure 2 shows a side view of one part of the support assembly according to the invention;
- Figure 3a-3d illustrates a number of views of the support assembly according to the invention.

Detailed description:

2
Brief description of
the drawings
Detailed description

The rest of your Description will then go into more detail on the embodiments and drawings introduced previously. Here you must elaborate on the invention, its embodiments (with reference to the cited drawings) and particular components (and how they fit together), etc. The Description should disclose all the possible alternative versions of your invention.

Do not include physical dimensions, or specific construction materials, unless they are critical to the way your invention works as this will unnecessarily restrict your invention's scope.

As mentioned previously, this section must contain enough information for someone to reproduce your invention with all the instruction you have given.

Example:

Detailed description:

Referring now to the drawings and initially to Figures 1a & 1b, there is illustrated a gazebo comprising a support assembly (1) and a roof structure (2). The support assembly (1) comprises a single central upright support having a plurality of elongated tubular bars adapted to support the roof structure (2). Referring to Figures 2 and 3, Figure 2 shows a singular tubular bar (10) according to the invention comprising one end bent back on itself to form a triangular support such that one side of the support (11) support the roof structure (2). The opposite end of the tubular bar (10) is bent to form an anchor (12). The anchor (12) anchors the support assembly securely to the ground. Each anchor comprises a brace support (13) coupled to an elongated portion of each tubular bar (10)...(contd)....

Figure 7 illustrates a table (30) that can be positioned under the roof structure (2) and coupled with the support assembly (1). The table can be of any suitable shape and made from any material. In addition the roof shape can be a shape other than the square embodiment hereinbefore described. The roof can be covered with any suitable type of material such as felt, slate and/or shingle covering.

While the invention has been described herein with reference to preferred embodiments, these have been presented by way of example only. The invention may be varied without departing from the inventive concept.

Preparing the Claims

The Claims are a very important section of your specification as the scope of the monopoly given by a patent is legally determined by the Claims, **not only** the Description. **In other** words, the actual protection that you will receive for your invention is determined by what is contained in these claims.

A 10-year patent (short term) may contain a maximum of five claims, a 20-year (full term) may contain as many as the applicant wishes. For your claims to be legally precise each claim must be one complete sentence. Full stops must only be placed at the very end of a claim.

It is written in a particular format, namely:

A [device/product/apparatus/method] for [state the purpose of the invention] comprising [list of the essential components of the invention needed for it to work]......

Claims		
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Claim 1 is the claim which must include the **essential features** of the invention.

This claim will always be an "independent claim". The claim should not be too broad; as the invention will not be seen as novel if it can be interpreted as something else.

For example, "A bicycle for transport comprising two wheels and a saddle" will not be seen as novel as a search will prove that a bicycle with two wheels and a saddle already exists.

You must include the features that differentiate it from products (or inventions) already available to the public.

Independent Claims

An independent claim is one which contains the **minimum technical features** needed for the invention to function. If the claim is for a product, then you must include all of the essential components needed for it to work. If the claim is for a process, you must include all the essential steps for the process to be completed successfully.

In one set of claims it is possible to have more than one independent claim.

For instance, you can have an independent claim for a product, an independent claim for a process of manufacture of the product and an independent claim for an apparatus designed to carry out that process of manufacture.

Dependent Claims

A dependent claim is one which contains all of the features of a preceding claim, but with **extra/differing features** that are not part of the essential technical components. The dependent claim must contain a reference to which preceding claim it is based on.

An example of an independent claim is

Claim 1: A gazebo for use as a clothes line comprising:

a roof structure;

a support assembly having a single central upright support, said central support comprising four elongated tubular bars, adapted to support said roof structure, each tubular bar at one end is bent back on itself to form a substantially triangular support such that one side of the triangular support supports said roof structure;

and

a clothes line assembly positioned under said roof structure.

An example of a dependent claim is

Claim 2: A gazebo for use as a clothes line, as claimed in claim 1,

wherein the tubular bars are positioned such that the triangular supports are offset from each other at approximately 90 degrees to support said roof structure.

REMEMBER!

The Claims must:

- be clear and concise;
- contain enough information to distinguish your invention from what is already known;
- set out all the essential technical features of your invention in claim 1;
- be consistent with the Description. If you have not discussed a particular component in the Description, it cannot be added to your claims.

The Claims must NOT:

- be statements of advantage, i.e., "the gazebo will make the clothes dry faster", or statements such as "I claim my invention is novel";
- contain a full stop in the middle of a claim;
- exceed five in number if your application is for a short-term (10 year) patent.

Preparing the Drawings

The Drawings section of your application should represent, pictorially, the detailed depiction discussed in the Description section.

- You must use good quality white paper in A4 format.
- Several drawings may be represented on one page, but they must be clearly marked as Figure 1, Figure 2, etc.
- The drawings must be done with the aid of drafting instruments (rulers, compass, computer aided design, etc.). If using CAD, please ensure all formatting such as borders, author names, dimensions, etc. are removed.
- Photographs will not be accepted in lieu of drawings.
- The drawings must not contain colour (black and white only). Any shading must not impede the clear reading of the figure or reference numbers.
- Reference numerals can only be used once to denote one component. For example: do not use the reference numeral (1) to refer to two different parts/components even if they are on different drawings.
- Any reference numeral marked in the drawings must be discussed in the Description section.
- Please ensure that no black border or edging is placed on the Drawings page.

Example:











Enlarged view showing numbering of the drawing (Fig. 1) and the reference numerals (1, 10, 11, 12, 13, 20, etc) pointing to each separate component part.

Preparing the Abstract

The abstract is a short summary (150 words or fewer) of your invention.

This is primarily used for search purposes. The searcher should be able to get a sense of the nature of the invention relatively quickly. The Abstract should describe your invention and how it can be used but should not go into the technical detail. This detail will be seen in the Description and Claims section.

9 Title
Abstract
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As mentioned in the "Format of an Application" section,

- Page numbering should be used; positioned in the top and middle of the page.
- White A4 paper should be used.
- The abstract must be typed in black with 1.5 line spacing
- No handwritten correction or overwriting is allowed.
- The title "Abstract" must be placed on the page to indicate the relevant section.

If the patent application contains drawings, the applicant shall indicate the figure of the drawing they would like to accompany the abstract when it is published. The figure number should be written directly under the abstract.

Example:

Garden Furniture assembly for use as a clothes line.

Abstract:

The present invention relates to multifunction garden furniture. In particular the invention provides a gazebo comprising a roof structure; a support assembly having a single central support, said central support comprising four straight tubular bars adapted to support said roof structure and a clothes line assembly positioned under said roof structure. The advantage of the invention is that the support assembly allows for a strong permanent construction of a gazebo as well as having a dual function of a clothes line. [Figure 2].

Contact Details

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For Office opening hours please check the "Contact Us" webpage.

Sample Specification

Title

Garden Furniture Assembly for Use as a Clothes Line

5 Field of the Invention

The present invention relates to garden and/or outdoor furniture. In particular the invention relates to a new type of gazebo.

10 Background to the Invention

A gazebo is a permanent structure commonly found in parks, gardens and other spacious public areas, but they can also be found in homes as part of an outdoor living area. Gazebos have a roof, are freestanding and are open-sided. A main

15 purpose for gazebos is to provide shade, shelter against rain, and rest. Sometimes, if a gazebo is big enough, music groups can play in them, and gazebos found in public parks are often used as a visual focal point to make such parks more visually enjoyable.

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When gazebos are used in a private home setting, a gazebo can be incorporated into a garden, or it can be incorporated into other outdoor living areas, such as freestanding barbeque islands, bar areas, pool areas, and the like.

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Gazebos can be custom designed for permanent construction and may be made of wood and laid on cement foundations. However, such construction and customization comes at a price, and many homeowners prefer a simple more inexpensive

30 construction, especially if cost is a major concern. For such a construction to be effective in a mass market, the design must be relatively standardized and mass produced. In addition, the construction must be rigid enough to withstand all weather conditions when assembled. Usually four support posts or legs are used to support each corner of a substantially square sized roof, however this increases costs for construction. Another problem, for example is if

- 5 the gazebo is built on grass it is difficult to cut the grass around the four posts. Additionally, if the gazebo is built on a stone patio or wooden decking makes the construction more difficult.
- 10 Another problem with gazebos is that its function is for leisure/ornamental purposes only. It is desirable that a gazebo would have a practical function for a domestic household or private home setting, especially for homes with relatively small gardens.
- 15 Accordingly, there exists a need for a simpler gazebo design that offer some of the advantages of more expensive, customized gazebo that can be used in a domestic or private garden as well as having a practical function.

20 Summary of the Invention

According to the invention there is provided, as set out in the appended claims, a gazebo comprising:

a roof structure;

a support assembly having a single central upright support, said central support comprising four elongated tubular bars adapted to support said roof structure, each tubular bar at one end is bent back on itself to form a substantially triangular support such that one side of the triangular support supports said roof structure; and

a clothes line assembly positioned under said roof structure.

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The advantage of the invention is that the support assembly allow for a strong permanent construction of a gazebo as well as having a dual function of a clothes line. The unique

5 single support assembly comprising four bars provides a sturdy design to withstand all weather condition and is also easy to install. The innovative gazebo design acts as a very effective clothesline and encourages use of a domestic garden for both leisure and practical use.

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In one embodiment the tubular bars are positioned such that the triangular supports are offset from each other at approximately 90 degrees to support said roof structure.

- 15 In one embodiment the opposite end of each tubular bar is bent outwardly, in the same direction as the other end, at an angle of substantially 90 degrees to said elongated portion to form an anchor.
- 20 In one embodiment the anchor of each elongated tubular bar anchors the support assembly securely to the ground, and each anchor is offset from each other at approximately 90 degrees to provide maximum support.

25 In one embodiment each anchor comprises a brace support coupled to the elongated portion of each bar and outwardly bent portion to increase the rigidity of said anchor. Advantageously the brace provides additional support to the support assembly to withstand most weather conditions.

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In one embodiment the clothes line assembly comprises a frame having four joists positioned perpendicular to the elongated

tubular support, said joists are adapted to receive at least one rope to form said clothes line assembly. As the clothes line assembly is positioned under the roof structure the clothes remain dry during rainy condition. In addition, the clothes are protected from fading in the sunshine.

In one embodiment the roof is substantially square in area and the joists are arranged offset from each other at approximately 90 degrees to support the four corners of the

- 10 roof. The innovative clothes line assembly is designed to provide maximum rope area to hand out as large amount of clothes as possible. For example, a roof structure of area 2.3 meters X 2.3 meters can provide 40 meters of clothes line.
- 15 In one embodiment the tubular bars are made of steel.

In one embodiment a table is coupled with said support assembly.

In one embodiment the support assembly and/or roof structure comprises a wooden cladding.

20 In one embodiment the roof structure comprises felt, slate and/or shingle roof covering.

Brief Description of the Drawings

The invention will be more clearly understood from the following description of an embodiment thereof, given by way of example only, with reference to the accompanying drawings, in which: -

Figure 1a & 1b is a side view and 3D isometric view of the gazebo structure according to the invention;

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	Figure 2 is a side view of one part of the support
	assembly according to the invention;
	Figure 3a-3d illustrates a number of views of the
	support assembly according to the invention;
5	Figure 4 illustrates a 3D perspective view of the
	gazebo according to the invention;
	Figure 5 is a view of a joist making up part of the
	clothes line assembly;
	Figure 6 illustrates an alternative embodiment of the
10	present invention; and
	Figure 7 is a 3D perspective view of Figure 6.

Detailed Description of the Drawings

Referring now to the drawings and initially Figures la & 1b,

- 15 there is illustrated a gazebo according to the present invention comprising a support assembly 1 and a roof structure 2. The support assembly 1 comprises a single central upright support having a plurality of elongated tubular bars adapted to support the roof structure 2.
- 20 Referring to Figures 2 and 3, Figure 2 shows a single tubular bar 10 according to the invention comprising one end bent back on its self to form a substantially triangular support such that one side 11 of the triangular support supports the roof structure 2. The opposite end of each tubular bar 10
- 25 is bent outwardly, in the same direction as the other end, at an angle of substantially 90 degrees to said elongated portion 10 to form an anchor 12. The anchor 12 of each elongated tubular bar anchors the support assembly securely to ground, and each anchor 12 is offset from each other at
- 30 approximately 90 degrees to provide maximum support. Each anchor 12 comprises a brace support 13 coupled to the elongated portion 10 of each bar and the outwardly bent

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portion 13 to increase the rigidity of the anchor 13, thereby substantially increasing the stability of the gazebo structure. The single support assembly makes the gazebo easier to install in the ground.

- 5 Figure 3a-3d shows four elongated tubular bars 10 making up the support assembly 1 according to the invention. Each tubular bar is adapted to support the roof structure (not shown). Figure 3d shows the tubular 10 bars are positioned such that the triangular supports are offset from each other
- 10 at approximately 90 degrees to support said roof structure. Each of the four bars provides a support 11 for the roof structure 2. When assembling the gazebo, the support assembly 1 can be set in a concrete foundation to increase the stability of the gazebo. The support bar assembly 1 can be
- 15 bolted together using a number of bolts (not shown). It will be appreciated that each anchor 12 can be bolted to the concrete using one or more bolts and each triangular support 11 can be bolted to the roof structure using one or more bolts (not shown).
- 20 An important aspect of the invention is shown in Figure 4 showing a 3D underside perspective view of the gazebo comprising a clothes line assembly 20 positioned under the roof structure 2. The clothes line assembly comprises a frame having four joists 20 positioned perpendicular to the
- 25 elongated tubular support 10. The joists 20 are adapted to receive at least one rope (not shown) to form the clothes line assembly. Ideally, the roof structure 2 is substantially square in area and the joists 20 are arranged offset from each other at approximately 90 degrees to support
- 30 the four corners of the roof structure 2. Figure 5 shows a single joist 20 having a plurality of predrilled openings

for receiving a rope, or rope like material, to form the clothes line assembly according to the invention.

It will be appreciated that the tubular bars can be made of steel, alternatively other suitable materials such as hard

5 plastic can be used.

Referring to Figures 6 and 7, there is illustrated a table 30 that can be positioned under the roof structure 2 and coupled with the support assembly 1. The table 30 can be of any suitable shape, for example circular or square, and made

- 10 from any type of material. In addition, the roof structure can be any shape other than the square shape hereinbefore described. For example, the roof shape can be substantially circular in shape and/or covered with any suitable type of material.
- 15 It will be appreciated that the support assembly and/or roof structure comprises a wooden cladding.

The roof structure, described herein, can be covered with felt, slate and/or shingle roof covering.

20 Steel Main frame

The mainframe for the clothesline is comprised of four identical tubular bars. Each tubular bar is rolled and shaped to support the roof and for high stability of the clothesline as shown in Figure 4.

25 The design consists of four bars in total and is connected together as shown in Figure 4. When assembled it is supported in a concrete base beneath the grounds surface. Also, the design of the frame ensures reinforcement in concrete. The design from the eave of the roof to the ground allows the roof section to flex in high win, which greatly increases the durability of the product, while maintaining a lighter package to sell. The arrangement of the support

5 assembly also enables the wooden roof to easily maintain an aerodynamic position no matter how hard the wind blows.

Wooden roof section

This roof is comprised of four identical pre-made and pre-

10 felted timber roof sections that are fixed to the main steel frame. Even in extremely high wind the roof section flutters and sways ever so slightly due to the aerodynamic position maintained by the innovative steel leg arrangement. This arrangement provides flexibility and strength to withstand 15 the worst types of weather.

The horizontal wooden joists are pre-drilled to carry the ropes to hang the clothes but they are also an integral part of the support for the roof extremities.

While the invention has been described herein with reference

- 20 to several especially preferred embodiments, these embodiments have been presented by way of example only, and not to limit the scope of the invention. Additional embodiments thereof will be obvious to those skilled in the art having the benefit of this detailed description, 25 especially to meet specific requirements or conditions.
- Further modifications are also possible in alternative embodiments without departing from the inventive concept.

The invention is not limited to the embodiments hereinbefore described but may be varied in both construction and detail.

Claims

1. A gazebo comprising:

a roof structure;

a support assembly having a single central upright support, said central support comprising four elongated tubular bars adapted to support said roof structure, each tubular bar at one end is bent back on its self to form a substantially triangular support such that one side of the triangular support supports said roof structure;

and a clothes line assembly positioned under said roof structure.

- The gazebo of claim 1 comprising wherein the tubular bars are positioned such that the triangular supports are offset from each other at approximately 90 degrees to support said roof structure.
- 3. The gazebo of any preceding claim wherein the opposite end of each tubular bar is bent outwardly, in the same direction as the other end, at an angle of substantially 90 degrees to said elongated portion to form an anchor.
- 4. The gazebo of any preceding claim wherein the clothes line assembly comprises a frame having four joists positioned perpendicular to the elongated tubular support, said joists are adapted to receive at least one rope to form said clothes line assembly.
- The gazebo of any preceding claims wherein the tubular bars are made of steel.

Garden Furniture Assembly for Use as a Clothes Line

Abstract

The present invention relates to multifunction garden furniture. In particular the invention provides a gazebo comprising a roof structure; a support assembly having a single central support, said central support comprising four straight tubular bars adapted to support said roof structure, each tubular bar at one end is bent back on its self to form a substantially triangular shape such that one side of the triangle supports said roof structure; and a clothes line assembly positioned under said roof structure. The advantage of the invention is that the support assembly allow for a strong permanent construction of a gazebo as well as having a dual function of a clothes line. The innovative gazebo design is designed to withstand all weather conditions and encourages use of a domestic garden for both leisure and practical use.

Figure 4.

















