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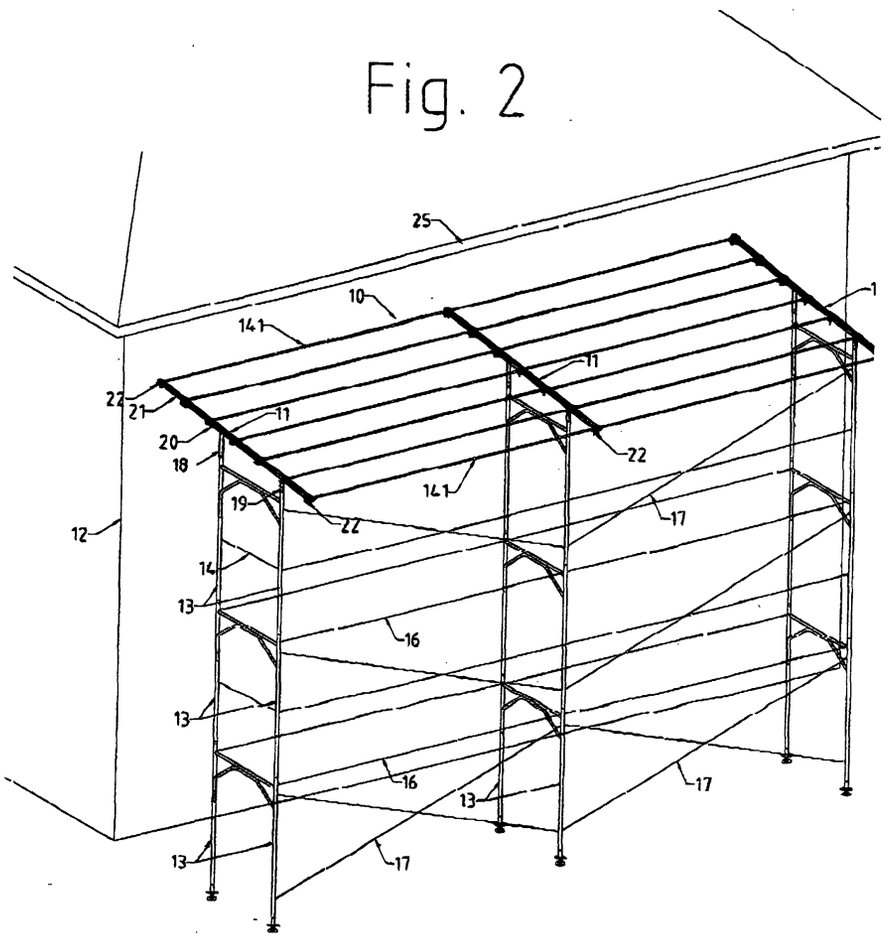
(54) Weather protection structure for mounting on a scaffolding

(57) A weather protection structure for scaffolding (10), comprising a series of shaped elements or trestles (11), which can be suitably extended based upon the distance between the facade (12) of the building being restructured and the scaffolding (10), which are inserted above the support uprights (13) and upon which are fixed connecting elements (141) consisting of the stringers (14) of the scaffolding (10). A sheet for covering the entire structure is arranged on the trestles (11) and on the connecting elements (141).

Fig. 2



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Description

[0001] The present invention refers to a protective structure for scaffolding.

[0002] At present, scaffolding generally used for the construction, maintenance or renovation of buildings does not allow to carry out works when it rains, snows or when there are other atmospheric conditions of a certain intensity.

[0003] Consequently, the loss of working days and the impossibility to operate in certain periods of the year lead to lost profits or to poorly carried out work; moreover, the rain or snow which falls on the building facade under renovation can ruin the just completed work and cause irreparable damage, with the result of having to carry out the work once again.

[0004] The purpose of the present invention, therefore, is that of realizing a protective structure for scaffolding which avoids the aforementioned drawbacks, allowing to make a more cost-effective work without the loss of working days.

[0005] Another purpose of the present invention is to point out a protective structure for scaffolding which avoids possible damage to renovations or works in general already carried out, due to rain or other atmospheric conditions.

[0006] A further purpose of the present invention is that of realizing a protective structure for scaffolding which can be constructed in a sufficiently simple and cost-effective manner with respect to the prior art.

[0007] Such purposes are achieved by a protective structure for scaffolding according to claim 1, to which we refer for the sake of brevity.

[0008] Advantageously, the costs for the manufacture of the structure according to the invention are substantially reduced, with respect to the prior art, due to the advantages achieved, since the various components of the scaffolding (uprights, trestles or other) can be realized on a chain conveyer and can be made of different materials, such as steel, aluminium, stainless steel or various alloys, whereas an upper protective sheet can be made out of plastic or polycarbonate, for example "Onduline®".

[0009] Further purposes and advantages of the present invention shall become clearer from the following description and from the attached drawings, supplied purely as an explanatory and non-limiting example, wherein:

- figure 1 represents a schematic side view of a trestle used in the protective structure for scaffolding, according to the present invention;

- figure 2 is a perspective view of a scaffolding comprising a protective structure, according to the present invention.

[0010] With reference to the aforementioned figures, with 10 is generally indicated a scaffolding used to carry out construction, renovation, and work in general on building facades 12, whereas with 11 is indicated one of the trestles suitable for being mounted on the top of uprights 13 of the scaffolding 10 .

[0011] Scaffolding 10 usually comprises one or more platforms 16, cross-ties 17 and stringers 14.

[0012] The trestle 11 is shaped in such a way that two of its lower appendices, respectively indicated with 18 and 19, can be inserted into the hollow support uprights 13 for the entire scaffolding 10 and is made from steel, in order to limit its production costs and total weight.

[0013] A hole is provided on each upright 13 for the insertion of a hook for holding together the entire structure, in the case of a strong wind which can blow head on or sideways at the scaffolding 10.

[0014] The trestle 11 also has a telescopic structure and is designed so as to be able to be extended, through a check stop 20 upon which acting to adjust the distance of the extensible portion 21; such extensible portion towards the building facade 12 allows to adjust the positioning of the trestle 11, basing upon the distance between the facade 12 and the uprights 13 next to it.

[0015] In this connection, the minimum distance provided between facade 12 and uprights 13 of the scaffolding 10 is preferably 15 cm, whereas the attainable distance with the portion 21 of the trestle 11 extended as far as it will go is greater than 1 meter.

[0016] The trestles 11, therefore, are mounted on the uprights 13 regularly spaced from each other and provide a series of supports 22 for connecting elements 141 between the various trestles 11, which, in practice, consist of the same stringers 14 of the scaffolding 10, so as to contain the costs of the entire structure to the greatest possible degree.

[0017] On the trestles 11 and on the connecting elements 141, an upper covering sheet 15 is placed, usually made from plastic, "Ondulux" or polycarbonate of the "Onduline®" type, and having a length variable on the clients' needs, and depends upon the number of trestles to be mounted on the scaffolding 10; the optimal width of the sheet 15 is equal to 3 meters, but greater sizes can also be made-to-order.

[0018] The sheet 15 is secured to the structure through connection bands 23, in such a way that the total height of the structure applied to the scaffolding 10 is in any case less than the height of the eave 25 of the building to be restructured, in order to avoid water falling on the sheet 15 from penetrating into the gaps between the eave 25 and the sheet 15 itself rendering worthless the main function of covering and protection from atmospheric agents.

[0019] To avoid as much as possible such drawbacks, it is possible to also apply one or more catchwaters for collecting and discharging water, arranged in suitable positions along all of the structure of the scaffolding 10.

[0020] From the description made, the characteristics of the protective structure for scaffolding, object of the

present invention, are clear, just as the advantages are also clear.

[0021] Finally, it is clear that numerous embodiments can be brought to the protective structure for scaffolding, object of the present invention, without for this reason leaving from the novelty principles inherent to the inventive idea, just as it is clear that, in the practical implementation of the invention, the functions, materials, shapes and sizes of the illustrated details could be whatever according to the requirements and they could be replaced with others technically equivalent.

Claims

1. Protective structure for scaffolding (10), of the type comprising a series of uprights (13), cross-ties (17) and stringers (14), articulated together, **characterized in that**, above each upright (13) at least one covering element or trestle (11) is provided, said trestles (11) being connected to each other through support elements (141), suitable for supporting at least one sheet (15) for the end covering of the entire structure.

2. Protective structure for scaffolding (10) according to claim 1, **characterized in that** said trestles (11) have a shaped structure, comprising at least one appendix (18, 19), suitable for being inserted into said uprights (13), a series of clamp elements (22), where said support elements (141) for the covering sheet (15) are connected and at least one extensible portion (21), the length of which can be adjusted based upon the distance between a building facade (12) and said scaffolding (10).

3. Protective structure for scaffolding (10) according to claim 2, **characterized in that** said trestle (11) has at least one means of adjustment (20) and attachment of said extensible portion (21).

4. Protective structure for scaffolding (10) according to claim 1, **characterized in that** said support elements (141) for the covering sheet (15) consist of said stringers (14) of the scaffolding (10).

5. Protective structure for scaffolding (10) according to claim 1, **characterized in that** said covering sheet (15) is secured to said trestles (11) through bands or cords (23) and is provided at a height lower than the height of the eaves (25) of buildings.

6. Protective structure for scaffolding (10) according to claim 1, **characterized in that** said trestle (11) is made of steel or aluminium or stainless steel or various alloys.

7. Protective structure for scaffolding (10) according to claim 2, **characterized in that** said extensible portion (21) allows said trestle (11) to be extended by a minimum of 15 cm up to over 1 meter.

8. Protective structure for scaffolding (10) according to claim 1, **characterized in that** said covering sheet (15) for the entire structure is made from plastic or polycarbonate, for example "Ondulux®" or "Onduline®".

9. Protective structure for scaffolding (10) according to claim 1, **characterized in that** each upright (13) has at least one hole for the insertion of a means for clamping the structure against the wind or other atmospheric agents.

10. Protective structure for scaffolding (10) according to claim 1, **characterized in that** at least one catchwater for discharging water is provided.

11. Protective structure for scaffolding (10) according to claim 1, **characterized in that** said covering sheet (15) has a variable length based upon the client's needs and upon the number of trestles (11) present on said scaffolding (10), whereas the optimal width is about 3 meters.

12. Protective structure for scaffolding (10) as is substantially described and illustrated in the attached drawings.

Fig. 1

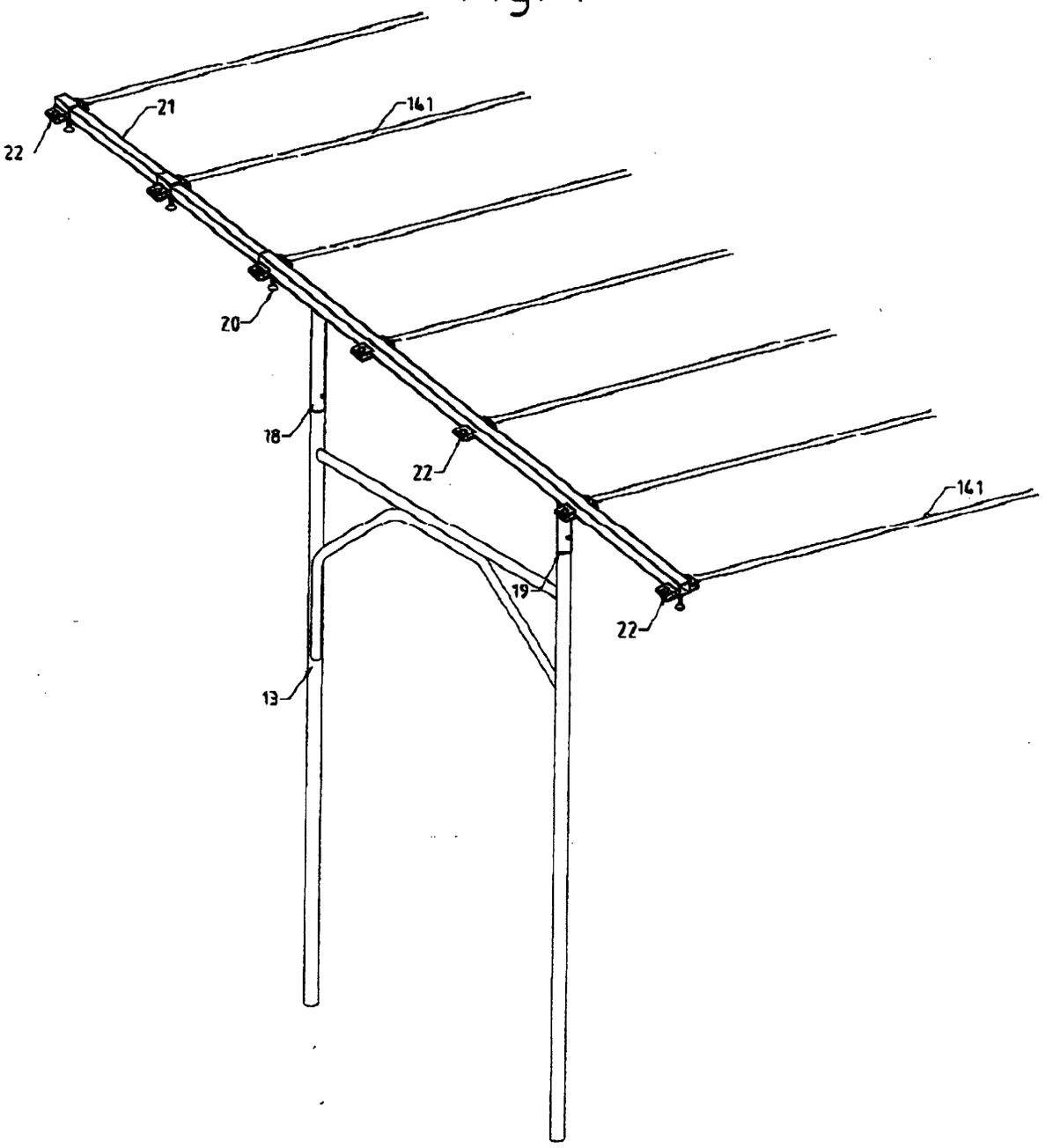
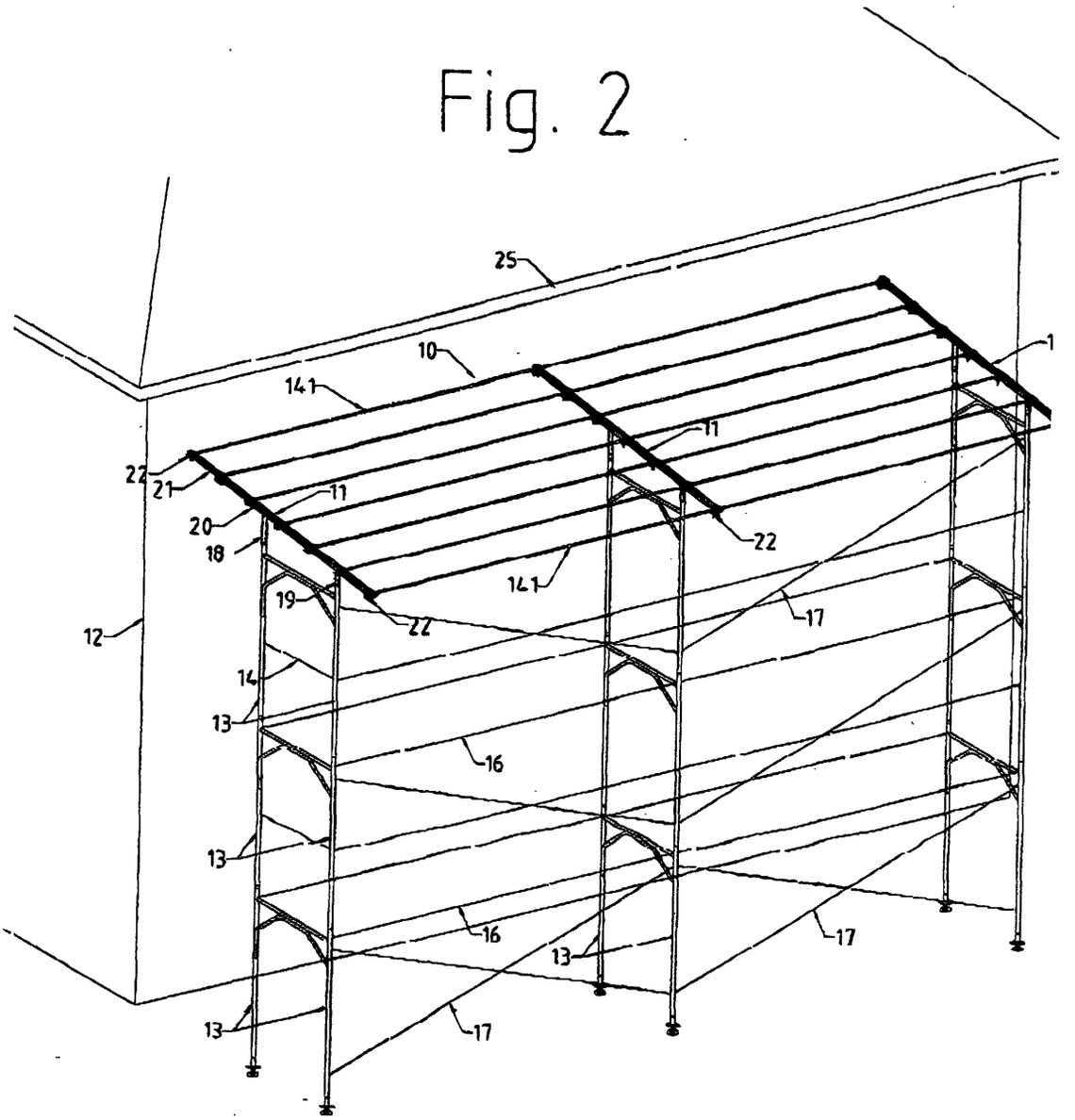


Fig. 2



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EUROPEAN SEARCH REPORT

Application Number
EP 02 02 1580

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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
MUNICH	27 February 2003	Bouyssy, V

CATEGORY OF CITED DOCUMENTS

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