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### (54) Clotheshorse with telescopic wings

(57) The present invention relates to a clotheshorse with telescopic wings, wherein each wing comprises a plurality of strings (12). Each string is slidingly engaged on a line (2) for laying and consists of a single piece body longitudinally elongated, provided with a longitudinal cut

passing from one end to the other end of the string. The elongated body has two jointed flat portions so as to make an abutment for the limit advanced telescopic wing.

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### **Description**

**[0001]** The present invention relates to a clotheshorse of the type comprising a top for laying consisting of a plurality of lines.

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**[0002]** As known, a traditional clotheshorse comprises a pair of legs, usually crossed, that support a central rectangular frame inside which, parallel to the long side, there are arranged the lines for laying, connected at the ends thereof with the short sides of the frame.

**[0003]** To increase the available top for laying, such clotheshorses comprise a pair of side wings, also provided with lines for laying, hinged to the rectangular frame to be closed when the clotheshorse is not used.

**[0004]** Another known embodiment, generally called "telescopic clotheshorse", on the other hand, is provided with side telescopic wings, which shift parallel to the lines of the rectangular frame.

[0005] An example of embodiment is described in European patent EP-B1-882834, by the Applicant.

**[0006]** These latter clotheshorses have the advantage of using the lines of the central frame also when the side wings are closed, that is, in retracted position. This allows reducing the overall dimensions of the clotheshorse when the clothes to lay are few.

**[0007]** However, the construction of a telescopic clotheshorse requires more time than that required to make a traditional clotheshorse.

**[0008]** As is understood, in a field characterised by a high number of parts produced, as is that of the clotheshorses, an improvement of the construction methods that would make the production of a part even a little economically more advantageous implies a considerable competitive advantage.

**[0009]** An object of the present invention is to provide a clotheshorse of the telescopic type which should be constructively easier to make than the clotheshorses of the same type currently known.

**[0010]** Such object is achieved by a clotheshorse made according to the following claim 1. The dependent claims describe embodiment variations.

**[0011]** The features and advantages of the clotheshorse according to the present invention will appear more clearly from the following description, made by way of an indicative and non-limiting example with reference to the annexed figures, wherein:

**[0012]** - figure 1 shows a perspective view of a clotheshorse according to the present invention, in an embodiment variation;

**[0013]** - figure 2 shows an exploded diagram of a portion of the clotheshorse of figure 1;

[0014] - figure 3 shows a section view of a portion of the clotheshorse of figure 1, in a closed configuration; and [0015] - figure 4 shows a section view of a portion of the clotheshorse of figure 1, in an open configuration.

**[0016]** With reference to the annexed figures, reference numeral 1 globally denotes a clotheshorse of the type provided with telescopic wings.

**[0017]** Clotheshorse 1 comprises a top for laying consisting of a plurality of lines 2 arranged parallel to one another along a longitudinal direction and transversally spaced.

[0018] For example, lines 2 are made of metal, for example steel, or of plastic or metal coated with plastic material.

**[0019]** Preferably, clotheshorse 1 comprises a pair of cross lines 4, longitudinally spaced, to which lines 2 are welded.

**[0020]** Moreover, clotheshorse 1 comprises a pair of connecting crosspieces 6, having mainly cross extension and arranged longitudinally spaced. For example, said connecting crosspieces are made of a plastic material.

**[0021]** Lines 2 of the top for laying are attached at the ends thereof to the connecting crosspiece 6.

**[0022]** For example, the connecting crosspiece 6 has a cross groove 8, wherein said cross line 4 is seated.

[0023] Moreover, clotheshorse 1 comprises at least one telescopic wing 10 comprising a plurality of strings 12.

**[0024]** Each string 12 is slidingly engaged on a respective line 2 of said plurality of lines of the top for laying, for shifting between a limit retracted position, wherein said string is mainly overlapped to said respective line (figure 3), and a limit advanced position, wherein said string 12 is longitudinally protruding from the top for laying (figure 2).

**[0025]** Said string 12 consists of a single piece body longitudinally elongated, provided with a longitudinal cut passing from one end to the other end of the string. The body comprises a projection suitable for making an abutment for the telescopic wing 10 in the limit advanced position against the connecting crosspiece 6.

**[0026]** The longitudinal cut is suitable for allowing the snap-wise engagement of string 12 on the respective line 2.

[0027] In particular, string 12 comprises a first longitudinally flat portion 14 and a second longitudinally flat portion 16. The connecting portion between the first portion 14 and the second portion 16 form said abutment for the telescopic wing 10.

[0028] Preferably, moreover, wing 10 comprises an abutment crosspiece 20 having mainly cross extension.

Strings 12 are attached to an end thereof to said abutment crosspiece 20.

**[0029]** The abutment crosspiece 20 makes an abutment for the telescopic wing 10 in the limit retracted position against the connecting crosspiece 6.

**[0030]** According to a preferred embodiment, moreover, clotheshorse 1 comprises a closing crosspiece 30 overlapping the connecting crosspiece 6.

**[0031]** The closing crosspiece 30 has a plurality of recesses 32 transversally spaced from each other. Recesses 32 are longitudinally through.

**[0032]** Recesses 32 are such as to allow the sliding of strings 12 between the limit retracted position and the limit advanced position.

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**[0033]** In particular, said recesses 32 allow sliding therethrough only of the first flat portion 14 of string 12, whereas the second flat portion 12 is such as to not cross the recess, so that the telescopic wing stops in the limit advanced position.

**[0034]** According to a preferred embodiment, clotheshorse 1 comprises support means suitable for supporting the top for laying in a position suitable for laying.

**[0035]** For example, said support means comprise a pair of legs 40 closing on the laying top, for example crossed and hinged to each other, for conveniently storing the clotheshorse in a limited space when it is not used.

[0036] Innovatively, the clotheshorse according to the present invention is constructively very simple but at the same time it allows making a telescopic clotheshorse.

**[0037]** Advantageously, moreover, the clotheshorse assembly is very quick.

**[0038]** In particular, once the top for laying has been set with lines 2 welded to the cross line 4, this is inserted in groove 8 of the connecting crosspiece 6.

**[0039]** The telescopic wing, consisting of the strings already mounted on the abutment crosspiece 20, is engaged snap-wise on lines 2.

**[0040]** Lastly, the closing crosspiece 30 is fixed to the connecting crosspiece 6, for example snap-wise or by screws or rivets, closing strings 12 and the cross line 4 as a pack.

**[0041]** Advantageously, moreover, the telescopic wings have a considerable capacity of supporting the weight of the laid clothes.

**[0042]** In fact, string 12 is made in a single piece and engaged above lines 2 of the top for laying.

**[0043]** Laying the clothes on the telescopic wings, these tend to bend downwards, under the action of the weight of the clothes themselves. Such weight is partly transmitted to lines 2, which would tend to bend upwards. Laying further clothes on lines 2, the weight of such further clothes balances that of the clothes laid on the wings, so the bending of lines 2 and of strings 12 is balanced and virtually null.

**[0044]** It is clear that a man skilled in the art can make several changes and variations to the clotheshorse described above in order to meet specific and incidental needs.

**[0045]** For example, according to an embodiment variation, the clotheshorse comprises means for supporting the laying top suitable for connecting said laying top to a wall.

**[0046]** Also such variations are to be deemed as comprised in the scope of protection as defined by the following claims.

### Claims

- 1. Clotheshorse (1) comprising:
  - a top for laying consisting of a plurality of lines

- (2) arranged parallel to one another along a longitudinal direction;
- a pair of connecting crosspieces (6) having mainly cross extension and arranged longitudinally spaced, said lines being attached at the longitudinal ends thereof to said connecting crosspieces;
- at least one telescopic wing (10) comprising a plurality of strings (12), each string being slidingly engaged on a respective line of said plurality of lines for shifting between a limit retracted position, wherein said string is mainly overlapped to said respective line, and a limit advanced position, wherein said string is longitudinally protruding from said top for laying;

wherein said string consists of a single piece body longitudinally elongated, provided with a longitudinal cut passing from one end to the other end of the string, said body comprising a projection suitable for making an abutment of the telescopic wing against said connecting crosspiece in said limit advanced position.

- 2. Clotheshorse according to claim 1, wherein said string has a first longitudinally flat portion (14) and a second longitudinally flat portion (16), the connecting portion between said first portion and said second portion forming said abutment.
- **3.** Clotheshorse according to claim 1 or 2, wherein said telescopic wing comprises an abutment crosspiece (20) having mainly cross extension, said strings being fixed at an end thereof to said abutment crosspiece.
- **4.** Clotheshorse according to claim 3, wherein said abutment crosspiece makes an abutment for said telescopic wing in the limit retracted position against said connecting crosspiece.
- **5.** Clotheshorse according to any one of the previous claims, comprising a closing crosspiece (30) overlapping said connecting crosspiece, said closing crosspiece having a plurality of recesses (32) transversally spaced, said recesses being such as to allow the sliding of the strings between said limit retracted position and said limit advanced position.
- **5.** Clotheshorse according to any one of the previous claims, wherein said longitudinal cut is suitable for allowing the snap-wise engagement of each string on the respective line.
- **6.** Clotheshorse according to any one of the previous claims, comprising a cross line (4), and wherein said connecting crosspiece has a cross groove (8), said lines being welded to said cross line and said cross

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line being seated in said cross groove of the connecting crosspiece.

- 7. Clotheshorse according to any one of the previous claims, comprising support means suitable for supporting said top for laying in a position suitable for laying.
- **8.** Clotheshorse according to claim 7, wherein said support means comprise a pair of legs (40) closing on the top for laying.
- **9.** Clotheshorse according to claim 8, wherein said legs are crossed and hinged to each other.



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# ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

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### REFERENCES CITED IN THE DESCRIPTION

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