

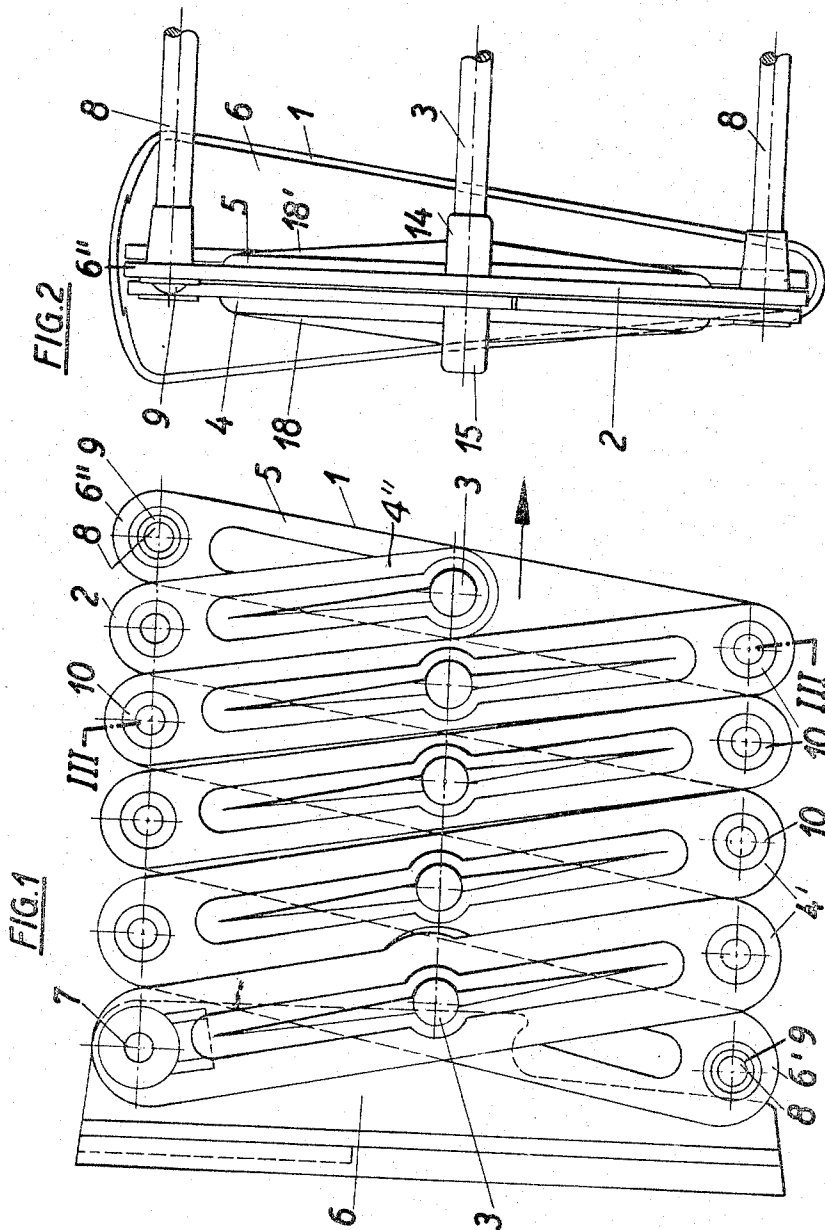
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CLOTHES DRIER

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CLOTHES DRIER

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This invention relates to a clothes drier, which comprises an extensible and collapsible frame, which is articulatedly connected to a mounting plate and has two spaced apart side frame members in the form of lazy tongs, which are interconnected by horizontal carrying rods for supporting the clothes, each lazy tongs having an outer tong bar which is disposed next to and pivoted to the mounting plate, those inner tong bars of both lazy tongs which are next to the mounting plate and those inner tong bars which are remote from the mounting plate having free ends connected by end carrying rods.

The most widely used clothes driers of this type consist entirely of metal parts and are secured, e.g., to a wall by means of a baseplate which is adapted to be screw-connected to such wall. These clothes driers have the disadvantage that the assembling of the individual parts, particularly the mounting of the carrying rods is too complicated and time-consuming, bearing in mind that the ends of the carrying rods must be bored and then be connected to the tong bars by rivets or screws. Another disadvantage of these known clothes driers resides in that the surface of the metal parts is attacked and marred in the course of time by the residual washing agent left in the clothes to be dried.

It is an object of the invention to provide a clothes drier which avoids the above-mentioned disadvantages and which is simple and inexpensive in manufacture and not attacked by residual washing agent.

This is accomplished according to the invention in that each of the bars consists of or is covered with plastics material and is provided at least on one side with a sleeve, which directly communicates with the central bore of the tong bar and is integral with the latter, each inner tong bar is provided on the side which is remote from the outer tong bar with a sleeve-like extension and each outer tong bar is provided on the side remote from the inner tong bar with a sleeve, which consists of a protective cap, which extends through the associated free end of the carrying rod extending through the two adjacent inner and outer tong bars, said carrying rods are provided with a covering of plastics material at least in the range of the inner tong bar, and the inside diameter of the sleeves conforms to the outside diameter of the associated portion of the carrying rod.

According to a feature of the invention, each inner tong bar may be provided with a sleeve-like extension also on that side which in the assembled clothes drier faces an outer tong bar and this extension may extend into a conforming aperture in the outer tong bar.

According to another feature of the invention, the sleeve-like extension of the inner tong bar on the side which is remote from the outer tong bar may be supported by stiffening ribs, which adjoin said outer tong bar and extend longitudinally toward the ends of the tong bar, and the protective cap provided on the outer tong bar may be supported by stiffening ribs, which adjoin said cap and extend longitudinally toward the ends of the outer tong bar.

The invention will be explained more fully hereinafter with reference to an illustrative embodiment which is shown on the accompanying drawing, in which—

FIG. 1 is a side elevation showing a collapsed clothes drier, which is mounted on a wall.

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FIG. 2 is a front elevation showing a front view of this clothes drier with part of the carrying rods.

FIG. 3 is a longitudinal sectional view taken on line III—III of FIG. 1 and showing part of a pivotal joint connecting an inner tong bar and an outer one to one end of a carrying rod.

FIG. 4 is an elevation showing the ribbed side face of the outer tong bar.

FIG. 5 is an elevation showing the opposite side of this tong bar, and

FIG. 6 is an elevation showing the ribbed side face of the inner tong bar.

The clothes drier shown in FIGS. 1 and 2 comprises a frame 1, which comprises two spaced apart side frames 2 in the form of lazy tongs, which are interconnected by carrying rods 3 for supporting the clothes to be dried. The two lazy tongs consist in known manner of outer tong bars 4 and inner tong bars 5, which are articulatedly connected. Each of the tongs 2 is connected to a mounting plate 6. The free end of that outer tong bar 4 which is disposed next to the mounting plate 6 is pivoted at 7 to the associated mounting plate 6. The free ends 4' of the tong bars 4 next to the mounting plate 6 and the free end 6'' of those inner tong bars 5 which are remote from the mounting plate 6 are connected by end carrying rods 8 with the aid of corrosion-resisting impact-notched rivets 9, which are inserted in the bored ends of these rods 8. The remaining inner and outer tong bars 5, 4 forming the respective lazy tongs are articulatedly connected at their adjacent ends by known means, such as corrosion-resisting hollow rivets 10. Of these remaining tong bars, the outermost bar which is forward in the pulling direction comprises only an upper half-bar 4''.

In the embodiment shown by way of example the tong bars 4, 5 are made of plastics material, e.g., by injection molding. Alternatively, they could be made from a polyester reinforced with glass fibers or could consist of a steel core with a covering of a suitable plastics material. The associated inner and outer tong bars 5, 4 are pivotally interconnected at the center of their length by the free end of a carrying rod 3, which is inserted into suitable bores 11, 12. The carrying rods 3 consist preferably of metal and are provided with a plastics material covering 13, which does not extend entirely to the respective end of the carrying rod 2 so that the outermost portion of the end which is inserted into the respective bore has a bright metallic surface. The bore 11 in the inner tong bar 5 conforms at least in a certain portion to the outside diameter of the plastics material covering 13 on the carrying rod so that part of the plastics-covered end of the carrying rod can be inserted into the inner tong bar 5 and is retained by the latter due to the adhesion which is caused by the surface contact between plastics materials. This adhesion may be increased by the use of different types of plastics materials for the various parts. To increase the contact area between the plastics material covering and the inner tong bar 5 and to prevent an exposure of the bright end of the carrying rod due to a shrinkage of the plastics material covering 13, the inner tong bar 5 is provided on the side which faces away from the adjacent tong bar 4 with a sleeve-like extension 14, which is integral with the inner tong bar 5 and has an inside diameter which is equal to the outside diameter of the covering 13. The bore 12, which is formed in the outer tong bar 4 and the inner tong bar 5 as a continuation of the bore 11 in the outer tong bar 4 is smaller in diameter and conforms in diameter to the bright metallic end of the carrying rod 3. The outer tong bar 4 is also provided with a protective cap 15, which covers the free end of the carrying rod 3 and is integral with the outer tong bar 4. The inner tong bars 5 have cylindrical extensions 16, 16' in the middle and at the

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ends adjacent to the joints connecting them to the outer tong bars 4. These cylindrical extensions 16, 16' extend into conforming apertures 17, 17' in the outer tong bar 1. The tong bars 4 and 5 are provided with longitudinally extending stiffening ribs 18, 18' on their side faces which are remote from each other in the assembled clothes drier. These ribs adjoin the sleeve-like extension 14 and the protective cap 15, respectively. The tong bars 4, 5 are provided on their confronting side faces with shallow longitudinal depressions 19, 19' which extend in the longitudinal direction of the bars.

The clothes drier can be secured, e.g., to a wall with its two side parts 2 consisting of lazy tongs and with mounting plates 6 which consist preferably also of plastics material. It can be fixed with different amounts of overhang and in its extended position can be swung up by about 90° toward the wall on which it is mounted.

What is claimed is:

1. A clothes drier, which comprises mounting plate means, two horizontally spaced apart, generally parallel lazy tongs consisting of inner and outer tong bars, which are articulately connected to said mounting plate means and have a surface of plastics material, each of said tong bars having a bore at the length center thereof, each of said inner tong bars being provided on the side which is remote from the outer tong bars of the same lazy tongs with a sleeve, which is integral with the respective tong bar and coaxial with and communicates with said bore therein, each of said outer tong bars being provided on the side which is remote from the inner tong bars of the same lazy tongs with a protective cap, which is integral with the respective tong bar and coaxial with and communicates with said bore therein, said clothes drier further comprising carrying rods, each of which extends through said sleeves, protective caps, and bores of an inner tong bar and an outer tong bar of each of said lazy tongs and is covered with plastics material in contact with said inner tong bars, said carrying rods having free end portions extending in said protective caps, said sleeves and protective caps conforming in inside diameter to the outside diameter of the portions of said carrying rods extending therein.

2. A clothes drier as set forth in claim 1, in which each

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of said lazy tongs comprises an outer tong bar which is pivoted to said mounting plate means and first and second inner tong bars which have free ends and are respectively disposed next to and remote from said mounting plate means, said clothes drier comprising an end connecting rod connecting said free ends of said first inner tong bars and another end connecting rod connecting said free ends of said second inner tong bars.

3. A clothes drier as set forth in claim 1, in which said tong bars consist substantially of plastics material.

4. A clothes drier as set forth in claim 1, in which said tong bars have a covering of plastics material.

5. A clothes drier as set forth in claim 1, in which each of said inner tong bars has on the side which faces the outer tong bars of the same lazy tongs an outer sleeve, which is integral with the respective tong bar and coaxial with and communicates with said bore therein and each of said outer tong bars is formed with an aperture, which conforms to and receives said outer sleeve of the adjacent inner tong bar.

6. A clothes drier as set forth in claim 1, in which each of said inner tong bars is formed on the side remote from the outer tong bars of the same lazy tongs with stiffening ribs, which adjoin and support said sleeve of the respective inner tong bars and extend from said sleeve in the longitudinal direction of the respective tong bar toward the ends thereof, and each of said outer tong bars is formed on the side remote from the inner tong bars of the same lazy tongs with stiffening ribs, which adjoin and support said protective cap of the respective outer tong bar and extend from said cap in the longitudinal direction of the respective outer tong bar toward the ends thereof.

References Cited

UNITED STATES PATENTS

1,994,897	3/1935	Owen	211—105
2,367,253	1/1945	Williams	211—105
2,493,936	1/1950	Williams	211—105

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