

Swing rack for outdoor clothes drying

Description

The conventional way for an HDB resident to dry clothes outdoor is to insert the laundry-pole into an existing built-in rack (graph 1). It is a tough work because the operation must be done well outside the window. The operator should have strong arms to handle. In this patent disclosure, a new design is described that allows the user to load/unload the laundry-pole inside the window with little effort.

The new rack consists of a base assembly, a carrier assembly and braces which are connected at the four joint points A, B, C and D (graph 2). The base assembly is to be firmly mounted to an existing built-in rack. The carrier assembly is to carry the laundry-pole. The carrier assembly may swing up from its normal position to the loading/unloading position (graph 3) where the user may easily load/unload the laundry-pole onto/from the carrier assembly because it is now inside the window. The user then may swing the carrier assembly down to its normal position after loading/unloading (graph 4). The system is deliberately designed so that drawing the four joint points together will form a parallelogram (DCAB in graph 2). Because line CD is always parallel to line AB, the carrier assembly (thus the attached laundry-pole) keeps pointing in the same direction when the rack swings up and down. A simple way to ensure that DCAB will be a parallelogram is to have AB equal to CD and AC equal to BD.

In the above graphs, there are only two braces drawn for each rack. However, each of the drawn braces may be replaced by two parallel braces located at the both sides of the carrier assembly and the base assembly.

With the assistance of such a rack, an HDB resident may complete outdoor clothes drying with little effort. To load, the user should first swing the carrier assembly to the upper position and attach the laundry-pole (loaded with wet clothes) firmly to the carrier assembly, followed by swinging it back to its normal lower position. To unload, the user may swing the carrier assembly together with the laundry-pole to the upper position where the laundry-pole and dried clothes are detached from the carrier assembly, followed by swinging it back to its normal lower position. The whole process is illustrated in graph 5.

Claims

- (1) A rack that may swing up to a position where the laundry-pole and clothes may be easily loaded/unloaded, and then swing down to return to its normal position.
- (2) A rack as specified in (1), with such a feature that its four joint points are the vertexes of a parallelogram.