

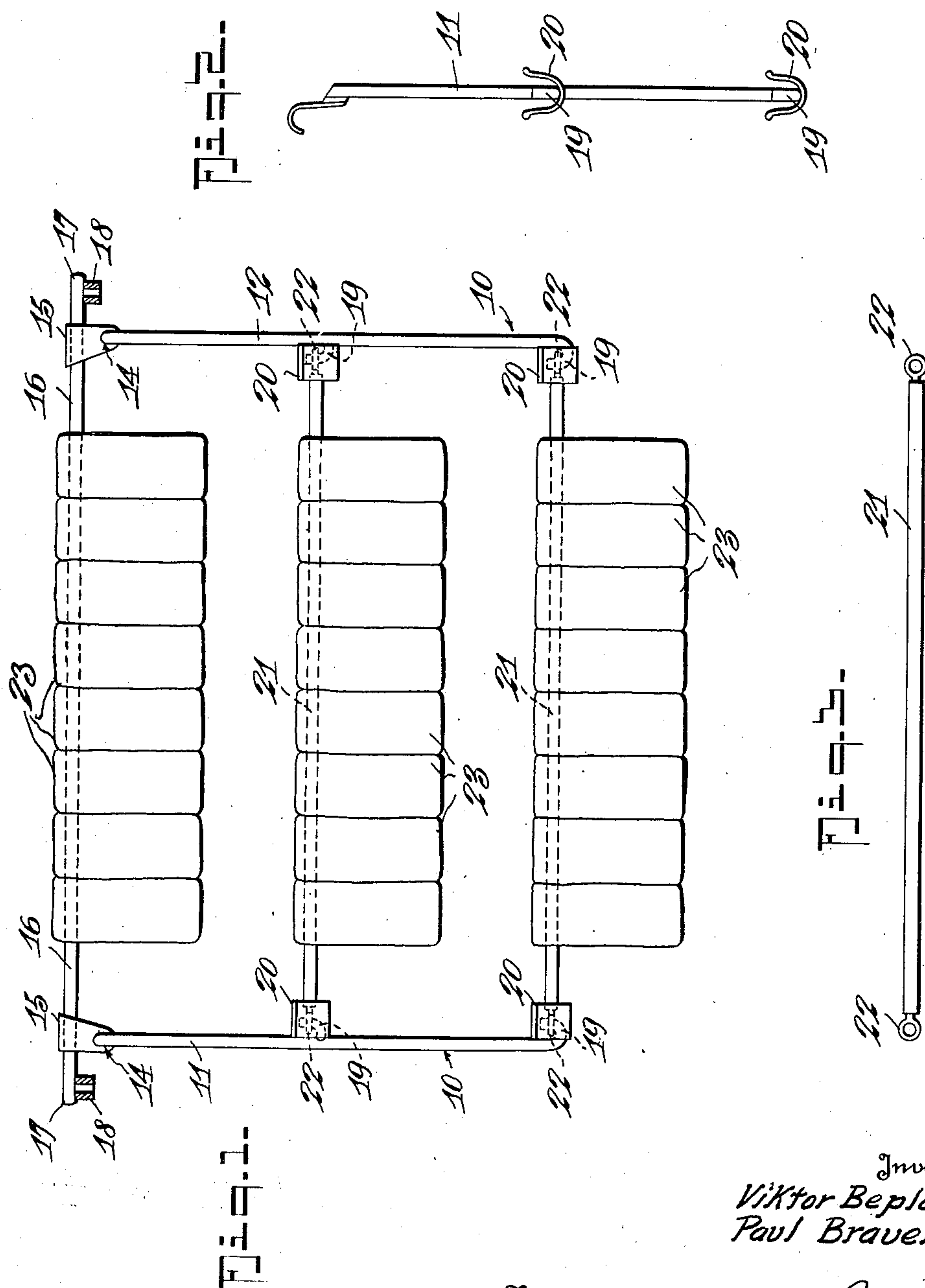
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SKEIN DRYING

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SKEIN DRYING

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2 Claims. (Cl. 34—26)

This invention relates to a new arrangement for drying skeins of artificial silk and other textile materials. The drying heretofore has been done by placing the skeins on carrier sticks which are then loaded on endless transporting belts or chains and passed through drying furnaces. Generally the drying furnace is provided with a plurality of tiers of endless belts or chains thus allowing a greater number of skeins to be dried in a given interval of time.

It is an object of this invention to provide a novel arrangement of the skeins in the dryer whereby a better utilization of the space in which the skeins are placed may be had.

A further object of this invention is to use a frame having means whereby several carrier sticks may be supported one below the other and suspending the frames on the transporting means.

Another object of this invention is to provide means on the frame to support the carrier sticks in a secure manner. Other objects will be developed in the following description, and from the drawing whereon:

Figure 1 is a diagrammatic view of the carrier frame in position on the transporting chain or belt;

Figure 2 is a detailed view of one of the side members of the frame; and

Figure 3 is a detailed view of one of the carrier sticks.

In Figure 1 there is shown a frame 10 made up of a pair of side members or rods 11 and 12 which are removably secured in openings 14 formed in depending brackets 15 secured to a horizontal rod or carrier stick 16. The ends 17 of this rod extend beyond the openings and provide suitable means for suspending the frame from the transporting belt or chain 18 as is clearly shown in Figure 2.

The side members 11 and 12 of each frame are provided at spaced intervals with hooks 19 and adjacent each hook is provided suitable supporting or holding means 20. The members 20 are usually U shaped. The carrier sticks 21 are formed at each end with sockets or eyes 22 through which the hooks 19 are inserted.

The assembly of the device is as follows: The skeins 23 which are to be dried are loaded first on the rods or carrier members 16, and these members are then suspended on the endless conveyor or transporting means in the dryer (not shown). The side members are then hooked to the brackets and as each carrier stick is loaded it is secured in a horizontal position by means of the hooks 19 and firmly supported by the mem-

bers 20. The number of carrying sticks which may be carried by the frame is limited only by the size of the frame and dryer.

By the above arrangement it is possible, even with a single pair of transporting chains to pass several rows of carrying sticks one below the other through the passage or canal in the dryer, which results in a considerable reduction in the cost of the installation. Moreover where only short skeins were dried such as those in the form of spinning cakes, the old arrangement in drying has been found to be uneconomical, since each pair of conveying chains carries only one row of carrying sticks. Thus a great amount of available drying space has been hitherto wasted.

Moreover, with the insufficient use of the space there was always a corresponding inefficient use of the drying apparatus because the flow of air was not distributed in the desired manner and because the cross section could not be exposed everywhere uniformly with the material to be dried.

It is to be understood that the above embodiment described is given only by way of example and is not to be construed as in anyway limiting, the invention which includes within its purview whatever changes that come within the spirit or terms of the appended claims.

Having now set forth our invention as required by the patent statutes, what we claim is:

1. In a skein carrying means for artificial filaments, in combination, a rod adapted to carry the skeins, a pair of side members swingingly suspended therefrom, and a plurality of other supporting rods shorter in length than the first-named rod, secured at spaced intervals to said side rods, said plurality of supporting rods being secured by means of trough-like elements arranged at spaced intervals on said side rods and being securely held in said trough-like elements by means of hooks therein.

2. In a skein carrying means for artificial filaments, in combination, a rod adapted to carry the skeins, a pair of side members swingingly suspended therefrom, and a plurality of other supporting rods shorter in length than the first-named rod, secured at spaced intervals to said side rods, said plurality of supporting rods being secured by means of trough-like elements arranged at spaced intervals on said side rods, the ends of the supporting rods being provided with loops adapted to cooperate with hooks within said trough-like elements.

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