

H. WINTER.  
Clothes-Drier.

No. 166,053.

Patented July 27, 1875.

Fig. 1

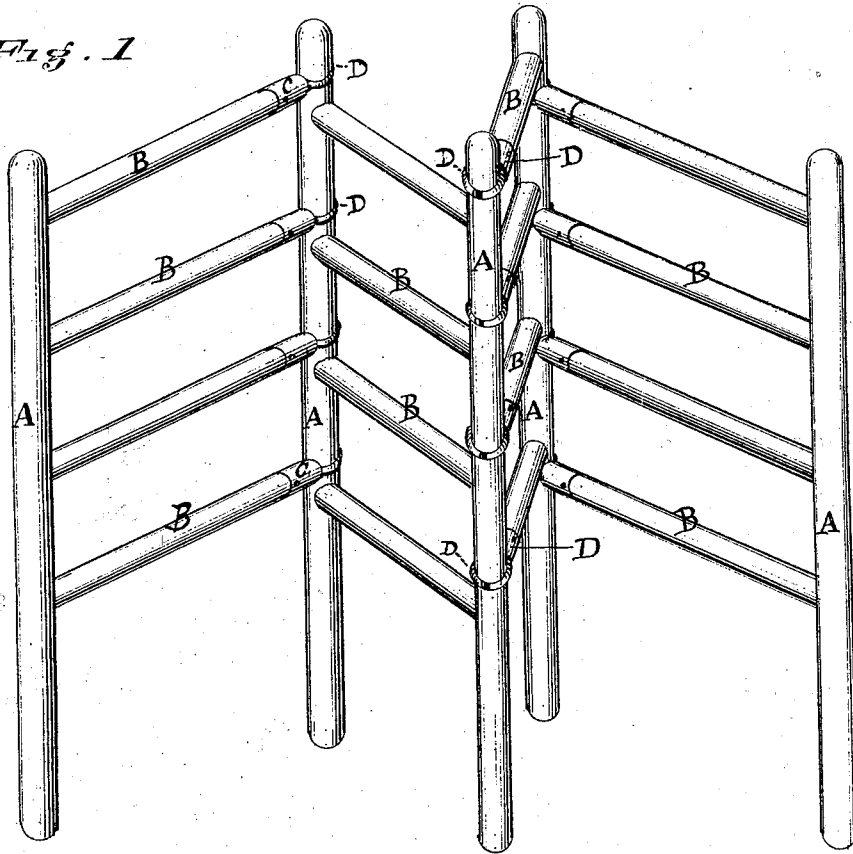


Fig. 2

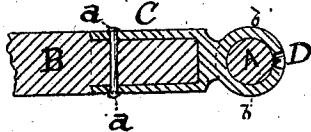
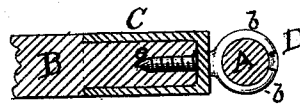


Fig. 3



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Clerk. N. D. Pressel

Inventor  
Henry Winter per  
Wm. Hubbell Fisher,  
his atty in fact.

# UNITED STATES PATENT OFFICE.

HENRY WINTER, OF CINCINNATI, OHIO, ASSIGNOR OF ONE-HALF HIS RIGHT  
TO WILLIAM P. KURTZ, OF SAME PLACE.

## IMPROVEMENT IN CLOTHES-DRIERS.

Specification forming part of Letters Patent No. **166,053**, dated July 27, 1875; application filed  
November 27, 1874.

*To all whom it may concern:*

Be it known that I, HENRY WINTER, a resident of the city of Cincinnati, in the State of Ohio, have invented certain new and useful Improvements in Clothes-Driers, of which the following is a specification:

This invention relates to that class of articulated clothes-driers, each section of which consists of a vertical post carrying a number of fixed horizontal bars, which are hinged to the post of the next section by a coupling device.

Various forms of couplings for this purpose have been patented, and others suggested; but none produced, so far, seems to combine such a degree of simplicity and efficiency as to recommend it for universal use by the trade. One of these is composed of a ring-bolt screwed into the end of the horizontal bar, and bent around the post of the next section, to fit a groove therein, a separate ferrule being used on the end of the horizontal bar to prevent it from splitting. My improvement is intended to simplify this particular coupling device, and to shape it in such a way that it will be both more reliable and more ornamental.

To this end my invention consists in providing a coupling composed of a single piece of malleable cast-iron, combining in its construction a socket or ferrule for capping the end of the horizontal bar, and a clasp-ring to be pressed into an annular groove in the post of the adjacent section.

In the accompanying drawings, Figure 1 represents a clothes-drier embodying my improvements. Fig. 2 represents a central longitudinal section of my socket, clasp, and those parts of my clothes-drier to which the said socket and clasp are attached. Fig. 3 represents a similar section of the socket, clasp, &c., the socket being provided with a screw.

A represents the parts of the clothes-drier, and B the bars of the same. Each section of the drier consists of one post and four bars; but the number of bars to each section may be varied as desired. Each bar is attached to the post in any of the ordinary methods of attachment. The other end of each bar is connected to the post of the adjacent section

by means of the metallic socket C and clasp D. The socket C is fitted over the end of the bar. The diameter of the socket is preferably that of the bar onto which it is to be fitted. In such case, the orifice of the socket being necessarily smaller than the original diameter of the bar, the latter is reduced to fit the orifice, leaving on the bar a shoulder abutting against the edge of the socket. The end of the socket is provided with a clasp, D, consisting of two tines, *b b*, the two being of equal length, and long enough together to nearly or quite encircle the post A. If preferred, one of the tines may be dispensed with, the remaining tine being made sufficiently long to nearly or quite encircle the post A. The post A is, in cross-section, round, and should be always round or rounded where the clasp encircles it, so that the clasp may move around it as the sections of the drier are moved. A groove is preferably cut in the post at that point where each clasp is attached, so that the clasps may prevent the post they encircle from slipping through them. Through each side of the socket is a hole, *a*, which receives a rivet or nail. (See Fig. 2.) The socket, instead of being secured on the end of the bar by a rivet or nail, may, when desired, be constructed with a screw, *e*, fastened to the socket at the center of the interior end of the orifice of the socket. (See Fig. 3.) When the screw *e* is employed the rivet or nail may be dispensed with. The clasp and socket are made in one piece of malleable iron. When a screw is provided in the socket, the screw, socket, and clasp are all cast in one piece, the thread being chased on the screw in a lathe, or formed on it in any other way known to mechanics.

The method of constructing the clothes-drier is as follows: The bars B having been attached to the post A in any of the ordinary ways, a socket, C, is fitted over the end of each bar, as shown in Fig. 2. A rivet is then passed through hole *a* in one side of the socket, through the bar, and through hole *a* in the other side of the socket, and headed; or a nail may be driven through hole *a* into the bar, and usually this is sufficient to secure the socket in place on the bar. When the screw *e* is employed in connection with

the socket, the latter is rotated upon the end of the bar, thereby screwing the screw into the end of the bar, and bringing the socket to its place on the bar. The tine or tines of the clasp are then sprung apart sufficiently to admit the post of the adjacent section, and are then bent closely around the post in that groove of the post intended for their reception. The socket affords a very strong and firm foundation for the clasp, and renders the latter more useful and available.

What I claim as new, and desire to secure by Letters Patent, is—

In an articulated clothes-drier of the character stated, the socket-clasp C D, composed of a single piece of malleable cast-iron, and applied substantially as and for the purpose specified.

HENRY WINTER.

In presence of—

T. J. SULLIVAN,  
CHAS. MUNROE.