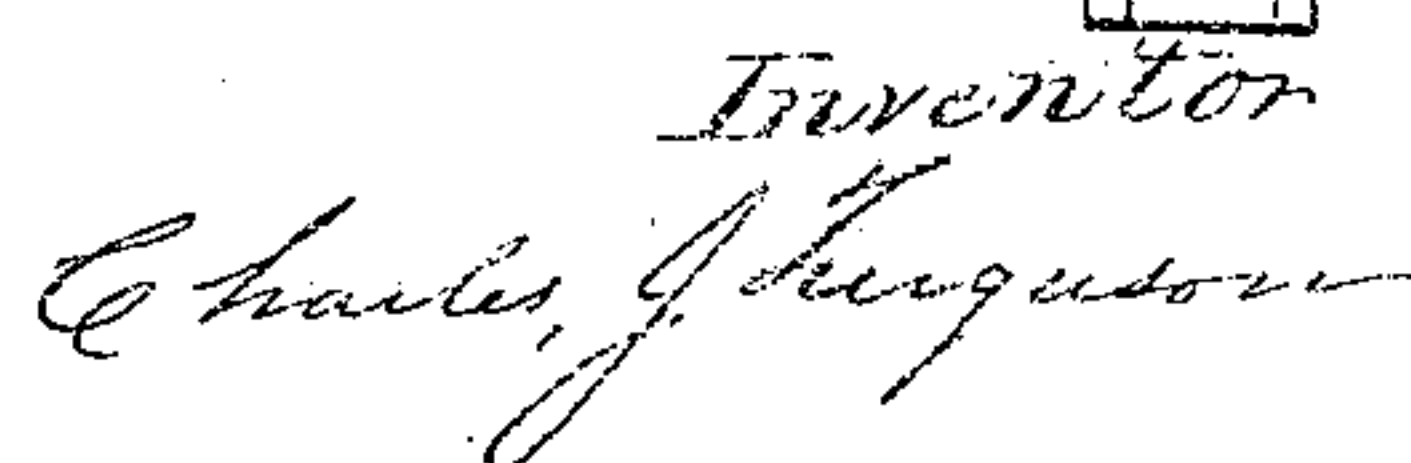


Patented July 17, 1860.



UNITED STATES PATENT OFFICE.

CHARLES J. FERGUSON, OF NEW YORK, N. Y.

CLOTHES-FRAME.

Specification of Letters Patent No. 29,151, dated July 17, 1860.

To all whom it may concern:

Be it known that I, CHARLES J. FERGUSON, of the city and State of New York, have invented certain new and useful Improvements in Revolving-Reel Clothes-Driers, of which the following specification embraces a full and fair description.

The nature of my invention may be most readily understood by reference to the accompanying drawing, constituting a part of this specification.

A is a shaft, say of wood, arranged to revolve in and between two upright pillars or posts B, connected at bottom by a bed piece or tie C, the fixing of which to the ground or otherwise, maintains the entire machine firmly in proper position.

Near each end of A, and inside or between the uprights B, are fixed two counterpart metallic knobs D, bearing eight equidistant radial arms *a*. The drawing is a longitudinal elevation of the entire apparatus, on a scale of about one inch to the foot.

Through the ends of each opposite pair of arms *a* passes a longitudinal slot or bar *a'*, *a*², &c. upon which the clothes to be dried are to be hung and fastened by clothes pins. These slats are fitted into the arms *a*, in such manner that they may revolve therein as the arms, or rather, the "reel," as a whole, revolves, for a purpose presently explained. These slats may be made of metal, wood, or bamboo—i. e. "cane." The latter from its hard outer shell or coating resists the tendency incidental to slats of ordinary wood to absorb moisture from the dependent clothes and thus become too flexible so as to "sag." If made of metal I prefer a simple zinc tube flattened into an ellipse as E, which is a cross section of such a slat, full size. The pin or axis Z, on which it turns in the arms *a*, I place eccentric so that the weight of the clothes hanging on it shall thus have a leverage to act through in causing it to revolve. F, shows a broken section of the end of arm *a* and a hollow metallic slat plugged with a small casting *x*, of corresponding outline bearing the pin Z which revolves in the bushing piece *z'* fixed in the arm *a*. The slat *a*³ being at about the

proper height; the user of the apparatus we will suppose to commence hanging the clothes to be dried or aired on it, the other slats being empty,—now unless checked, it will be seen that the weight of the clothes would turn the "reel" and carry this slat down under the reel to a very inconvenient position and bring slat *a*⁴ down upon the head of the operator. It is desirable therefore that the reel shall not revolve in either direction while clothes are being hung upon it. Also that there should be some convenient means of rotating the reel to bring each successive slat to a convenient elevation to receive clothes, as the previous ones are filled, and that the means both of check and rotation shall act and be operative at all points of such rotation. I find that the most satisfactory device for this purpose is a section of an "endless screw" working into a cog-wheel; the latter G, being fixed upon the shaft A and the former H being fixed upon a small vertical shaft I, and projecting down to within convenient reach of the hand and thereat being provided with a crank to rotate it.

It will be seen that if the slats *a'* *a*² &c. could not revolve in the arms *a* that as the "reel" was revolved the slats, clothes pin, and blanket (or other article appended) would gradually assume the position shown by I, when the clothes pin would not only be inverted but the weight of the blanket would bear with a twisting action on one jaw of the clothes pin and at once force it off, which of course must be avoided. The rotation of the slats does this; as will be readily seen.

Having now fully described my invention, what I claim and desire to secure by Letters Patent is—

The combination with the reel, of the revolving slats the cog wheel G, and endless screw or worm H, arranged and operating together in the manner and for the purpose specified.

CHARLES J. FERGUSON.

Witnesses:

SAML. WEST,
G. F. CASE.