L. HORN.

CLOTHES DRIER.

No. 40,936. Patented Dec. 15, 1863.

Fig. 2.

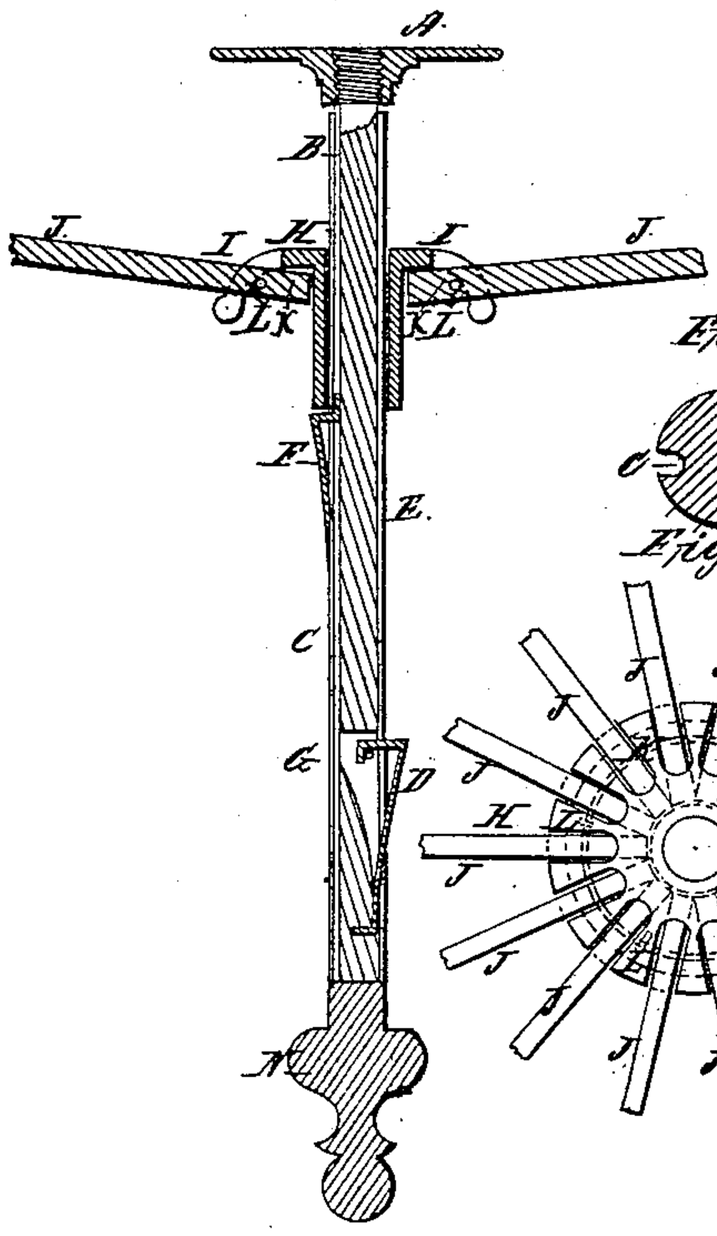


Fig. 3.

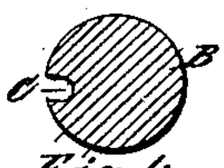


Fig. 4.

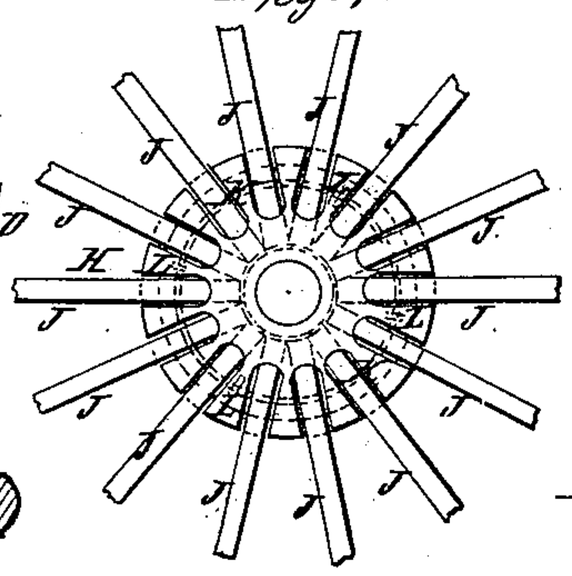
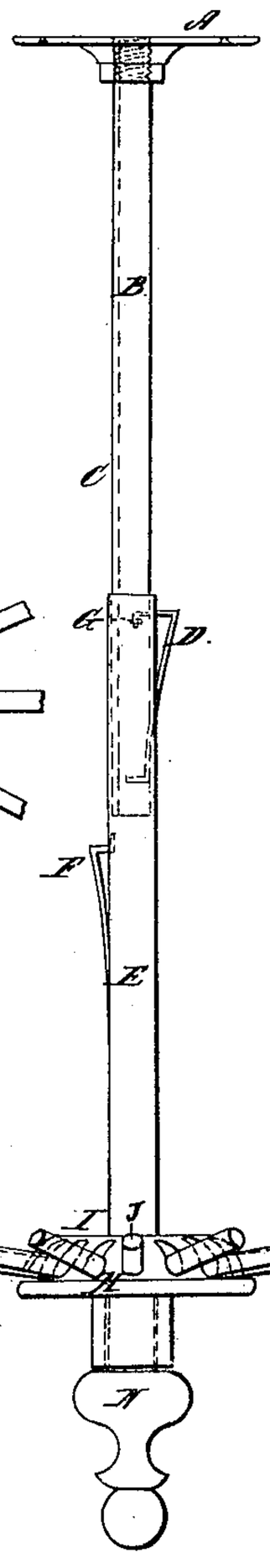


Fig. 1.



Witnesses:
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Inventor:
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UNITED STATES PATENT OFFICE.

LORENZO HORN, OF WOLFBOROUGH, NEW HAMPSHIRE.

IMPROVED CLOTHES-DRIER.

Specification forming part of Letters Patent No. **40,936**, dated December 15, 1863.

To all whom it may concern:

Be it known that I, LORENZO HORN, of Wolfborough, in the county of Carroll and State of New Hampshire, have invented a new and useful Improvement in Clothes Airers or Driers; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making part of this specification, in which—

Figure 1 is an elevation view; Fig. 2, a longitudinal section; Fig. 3, a transverse section of rod B; Fig. 4, a bird's eye view of hub H and its arms J.

Similar letters indicate corresponding parts of the several figures.

A is a circular plate of metal with a hole through its center, into which is screwed a round rod of wood, B. This rod has a longitudinal groove, C, on the left-hand side. (Shown by parallel red lines in Fig. 2 and dotted red line, Fig. 1, and more fully shown in section by Fig. 3.) This rod has also attached to it, on its right-hand side, near its lower end, a spring, B, made of wire, attached to the rod, and operated precisely like the old and well-known spring used for holding umbrellas open. Over the rod B is a sliding tin tube, E. This tube has two slots through it on the right hand side, one near the upper end, through which spring D operates to hold the tube when it is drawn down, as seen in Fig. 1. The other slot is near the lower end, and through which the same spring D operates to hold it in place when pushed up over the rod B, as in Fig. 2. This tube has also a slot on the left-hand side, through which a spring, F, operates. This spring is attached to the tube E, and differs very materially from spring D both in its shape and the functions it performs—viz., the loose end of spring D is bent downward and prevented from springing out too far by a pin, G, whereas spring F has its loose end bent upward inside of tube E which prevents it from springing out too far. This end of the spring, being parallel with the groove C in rod B and inside the tube, fits into groove C and guides tube E while it is pushed up or drawn down, so as to insure the perfect operation of spring D through its slots in the tube. Spring F can only be operated when the tube E is drawn down, as shown by Fig. 1. The end of spring F is then out of the groove C, and a little below the end of rod B, and can be sprung inward, as will be described hereinafter. The end of spring F does not leave groove C until after spring D has entered its slot in the upper end of tube E sufficiently far to insure its perfect operation.

H is a peculiarly-shaped hub with several radial slots I, through which the end of the several arms J pass, and are held in by a wire, K, passing through them a short distance from their inner ends, Figs. 2 and 4. This wire forms a ring, the ends being suitably fastened together. The ring is held in its proper position by pins L L, Fig. 2, which prevents the arms J from sliding down through their slots when they are folded up around the tube E prior to being taken down.

M is a piece of elastic cord with a button, O, attached to one of the arms J, to be carried around the arms J and buttoned by loop P on the end of cord when the arms are folded up to hold them in place when taken down.

N is a knob attached to the lower end of tube E, by which to operate it. The airer or drier is to be attached to the ceiling overhead by means of screws through plate A.

The operation is as follows, the position being as in Fig. 2: first, press in spring D, and by knob N draw down tube E. Now press in spring F, which will allow hub H, with arms J, to slide down and rest against knob N. The positions are now shown by Fig. 1. Now put the clothes for airing or drying onto arms J. Then slide the hub and arms up over spring F, which will hold it in place. Then by knob N push tube E up over rod B till the spring D catches into its lower slot in the tube. The hub H cannot be moved up or down over spring F while the tube is up, as in Fig. 2, as the spring F cannot be pressed in while acting as a guide for the tube. When not in use, the rod can, if desired, be unscrewed from plate A, the arms folded up and fastened by cord M, and laid away till again wanted.

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

The spring F upon tube E, arranged and operating in combination with spring D and groove C of rod B, substantially as and for the purpose herein specified.

LORENZO HORN.

Witnesses:
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THOMAS RUST.