C. Bange.

Centrifugal Clothes Drier.

No. 77,440. Patented May 5, 1868.

Fig. 1.

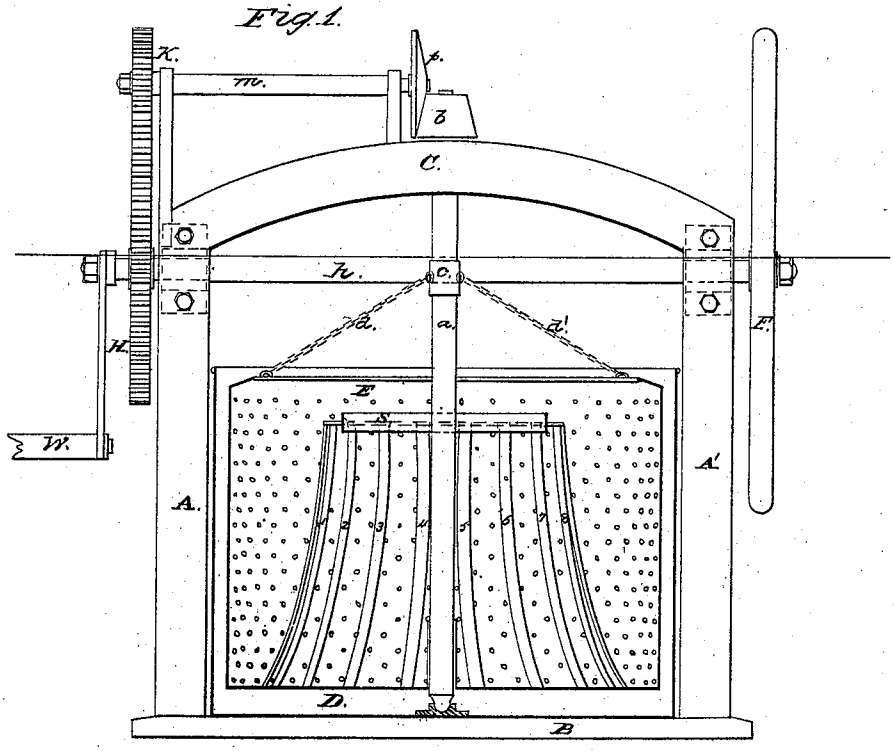
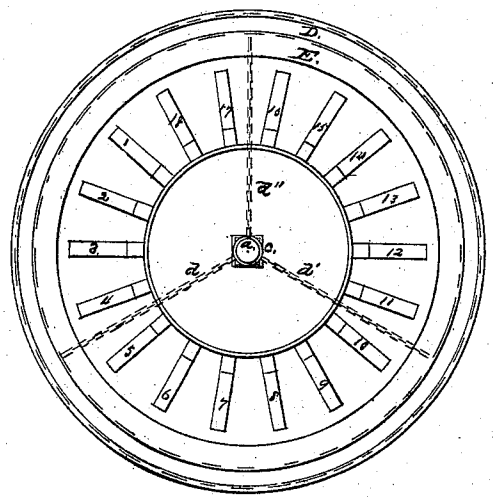


Fig. 2.



Witnesses:

I. Galladay

Saml. S. Byd

Inventor:

Charles Bange

United States Patent Office.

CHARLES BANGE, OF ST. LOUIS, MISSOURI.

Letters Patent No. 77,440, *dated May* 5, 1868.

IMPROVED CLOTHES-DRIER.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, CHARLES BANGE, of St. Louis, in the county of St. Louis, and State of Missouri, have invented a new and useful Improved Clothes-Drier, of which the following is a full, clear, and exact description, reference being had to the annexed drawing, making a part of this specification, in which—

Figure 1 represents a vertical sectional elevation of my invention.

Figure 2 represents a top view of a detached portion of same.

Similar letters indicate like parts.

It consists of a framework, formed of three uprights, A A′ A″, fig. 1; A″ not being shown, rising from a broad base, B; A A′ being connected at the top by the cross-piece C, while A″ curves so as to connect with C and from a brace. A cylinder, D, figs. 1, 2, of convenient size, is fixed firmly to the base, B, between the uprights; a shaft, *a*, figs. 1, 2, having its bearings in the bottom of the cylinder, and in the cross-piece C, by means of the collar *c*, and three chains, *d d′ d″*, fig. 2. *d d′*, fig. 1, attached to it, support a smaller cylinder, E, hanging in the cylinder D, and having the shaft *a* pass through its bottom, as shown. A horizontal shaft, *h*, having its bearings in A A′, has on one end a fly-wheel, F, and on the other a spur-wheel, H, gearing with the pinion K, on a horizontal shaft, *m*, having its bearings in the uprights *n o*, and on its other end a bevelled friction-wheel, *p*, engaging with the bevel-friction wheel *b*, on the upper end of the vertical shaft *a*.

The sides of the cylinder E are pierced with numerous holes, as shown in fig. 1, and around the shaft *a* is arranged a framework consisting of numerous uprights, 1, 2, 3, &c., having one end fastened to the bottom of E, while the other is connected with the hoop *s*, figs. 1, 2; this framework serving to divide the cylinder E into two parts.

The wet clothes being placed in the cylinder E, outside of the framework, by turning the crank *w*, the cylinder is made to revolve rapidly, which, causing a partial vacuum, the pressure of the atmosphere forces the water from the clothes, throagh the openings in E into D, whence it escapes through a suitable outlet into the vessel placed to receive it. The space inside the framework being entirely empty, the air has free access to the sides as well as the top of the articles in the cylinder.

By this machine the finest as well as the coarsest articles may be dried without the slightest injury, since nothing but the air acts upon them, there being no squeezing, wringing, or any of the other injurious operations to which clothes are subjected in other machines. This process does not, of course, completely dry the clothes, but it greatly facilitates their complete drying by expressing nearly all the moisture.

I am well aware that centrifugal driers have been used before, therefore I do not claim to be the inventor of this method of drying clothes; but

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

The fixed cylinder D, revolving perforated cylinder E, uprights 1, 2, 3, 4, &c., hoop *s*, chains *d d′ d″*, and collar *c*, all in combination with the wheels H, K, *p*, *b*, and F, and their respective shafts, when arranged in relation to each other and the framework of the machine, substantially as and for the purpose specified.

CHARLES BANGE.

Witnesses:

SAML. S. BOYD,

JOHN R. SHEPLEY.