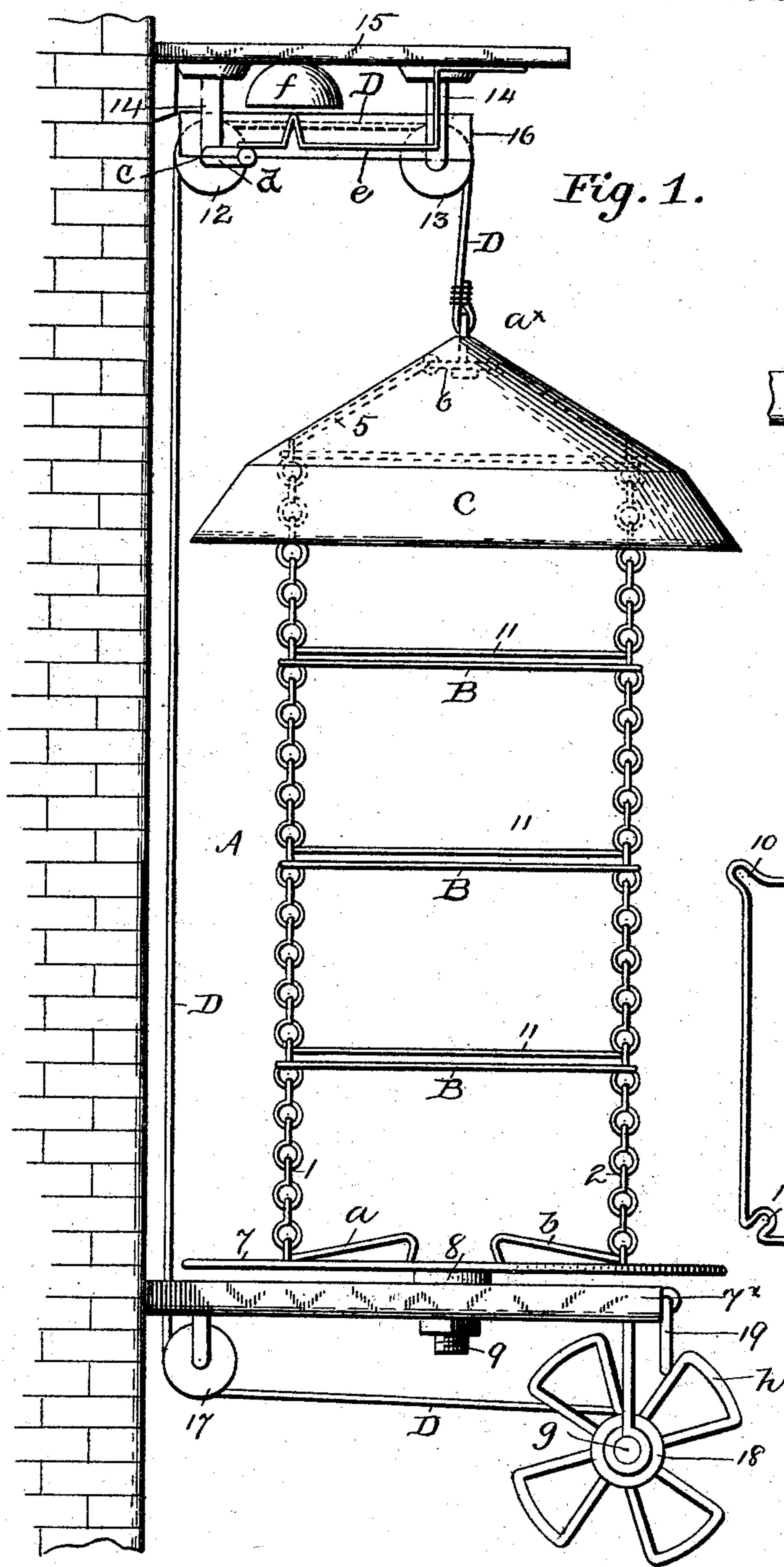


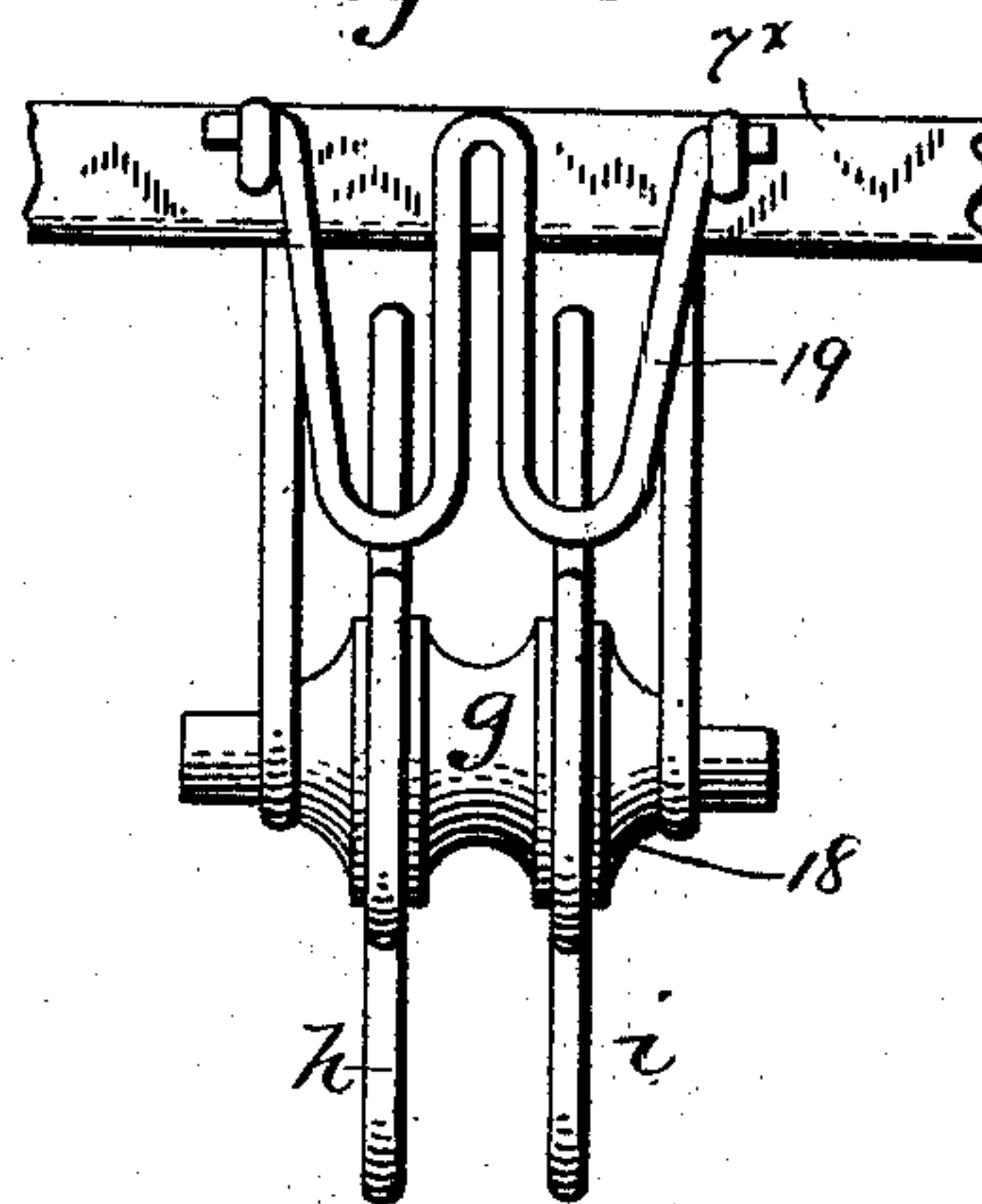
2 Sheets—Sheet 1.

No. 505,108.

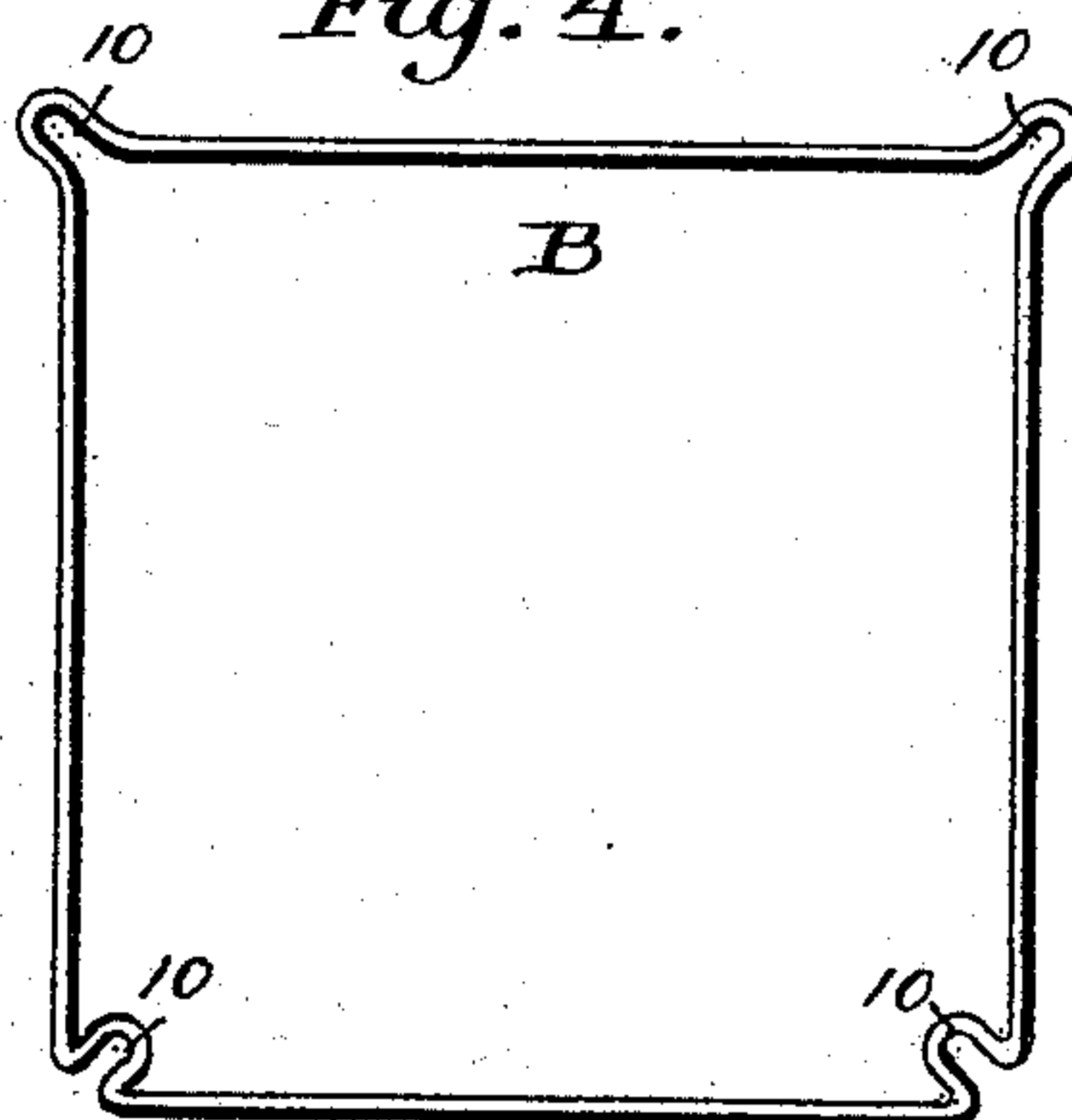
Patented Sept. 19, 1893.



*Fig. 3.*



*Fig. 4.*



Witnesses  
Albert B. Blackwood  
Jack Blackwood

Inventor  
John G. Kurtz.  
By A. G. Keyserling  
Attorney

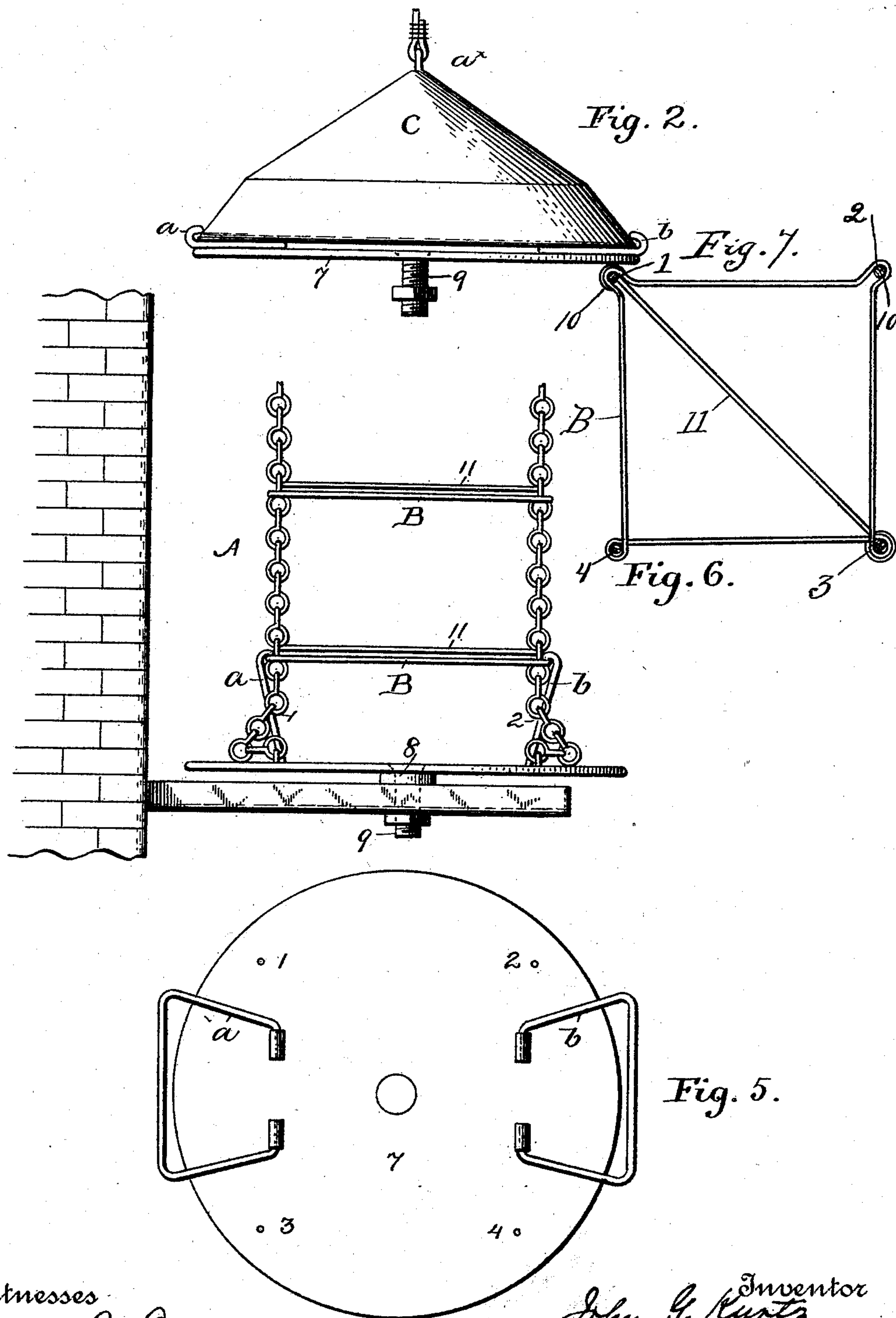
(No Model.)

2 Sheets—Sheet 2.

J. G. KURTZ.  
CLOTHES DRIER.

No. 505,108.

Patented Sept. 19, 1893.



Witnesses  
Albert B. Blackwood  
Jas H Blackwood

Inventor  
John G. Kurtz  
by A. G. Heyman.  
Attorney



# UNITED STATES PATENT OFFICE.

JOHN G. KURTZ, OF WASHINGTON, DISTRICT OF COLUMBIA.

## CLOTHES-DRIER.

SPECIFICATION forming part of Letters Patent No. 505,108, dated September 19, 1893.

Application filed December 14, 1892. Serial No. 455,154. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN G. KURTZ, a citizen of the United States of America, residing in the city of Washington, in the District of Columbia, have invented a new and useful Clothes-Drier, of which the following is a specification.

My invention has relation to improvements in clothes driers and the object is to provide a reliable, cheap, efficient and simply constructed, extensible, and revoluble clothes drier for domestic and general purposes in drying any article.

I have fully and clearly illustrated my invention in the accompanying drawings, wherein—

Figure 1 is a side view in elevation, of the drier extended. Fig. 2 shows the drier lowered or collapsed. Fig. 3 is a detail of the hoisting sheave and locking-bail. Fig. 4 is a detail of one of the clothes bars. Fig. 5 is a plan view of the revoluble base-piece. Fig. 6 is a view showing the hinged bails or keepers engaged over one of the frames of the clothes bars. Fig. 7 is a detail view of one of the clothes-bars, showing a modified or different construction of the corner-eyes, and the diagonal bar in position.

Referring to the drawings, A designates the clothes drier, composed of corner chains 1, 2, 3, 4, or other flexible material, of suitable strength and character to meet the uses to which the device may be put. These corner chains are preferably what are termed "jack-chains," because the links can be utilized at the middle or center portion for sustaining and holding the clothes-bars.

At the top the corner-chains are suspended from a frame 5, composed of rods connected at their upper ends to a center piece 6, substantially as shown. The lower ends of the corner chains are secured to a base-piece 7, which is mounted on a suitable support, as 8, turning and stayed on a headed pin or stud 9. The base piece is held from upward displacement by the head or obstruction on the stud, as indicated in the drawings. For convenience, I support the base piece 7 on a table 7<sup>x</sup>, on which the clothes to be put on the drier may be placed, preliminary to hanging them thereon.

On the base piece are hinged oppositely

arranged bails *a, b*, having the bar of the bail hooked to engage over the flange of the top of the drier when setting down over the clothes, or to engage the bars of the drier frame when it is desired to use but a portion of the length and hold it so that the part extended may be held taut as indicated in the drawings.

B designates the clothes-bars arranged on and secured to the flexible corner supports at determined distances in elevation suitable for hanging or suspending articles thereon. These clothes-bars are made of anti-corrosive metal and are made of a single piece of wire having eyes 10, at the corners to take and hold about the corner-chains. The eyes, see Figs. 4 and 7, may be formed simply by turning the wire back on itself forming a ring or eye therein at the corners, or they may be formed as shown in the detail illustration in the drawings, and then compressed or sprung on the supporting chains. The clothes-bars are supported on the corner chains by being closed thereon at the junction or central portions of the links of the chains, as shown.

To hold the clothes-bars braced and square in original conformation, a cross-bar 11, is arranged diagonally across between the suspension chains having its ends secured to the chains as indicated in the drawings. These diagonally arranged bars 11 may be disposed alternately in opposite directions at right angles to each other, and they serve not only to retain and brace the clothes-bars but they are intended to be used for hanging articles on.

Over the frame 5 is secured a covering C, which may be of sheet metal secured to the frame, and the corner suspension chains of the clothes drier may then be attached directly to the covering C.

12, 13, designate grooved pulleys journaled in hangers 14, secured to a support 15, projected from and secured to any suitable place or thing where the device is suspended from or in; and over and between the pulleys is a shield piece 16, which covers the upper portion of the pulleys and protects the suspension cord from the effects of the weather at this point or place. To one of the sheaves, as at *c*, is connected an arm *d*, to turn therewith and engage with a spring tappet *e*, and strike against a bell *f*, suitably mounted to be rung by the strokes of the tappet, the object



being that when the drier is extended with the clothes thereon, and any unwarranted attempt is made to lower it, the alarm will be made and the owner made aware of it.

5 Below the base is mounted and journaled a sheave 17, around which the suspension cord is carried, and from there to a windingsheave 18, about which it is wound. This winding-sheave consists of a roller or drum *g*, having  
10 radially arranged arms *h*, *i*, between which the cord is confined when wound up.

To provide means for holding the cord-sheave at any point a bail 19, is so hung as to drop behind the arms of the sheave and  
15 thus keep it from running down.

D designates the pulley cord having one end secured to a swiveled-staple *a*<sup>x</sup>, in the apex of the frame or cover, and from thence carried over the sheaves 12, 13, and from  
20 thence down and under the sheave 17 and carried out and fastened to the winding-sheave 18.

To stop the elevation or descent of the clothes frame at any point, the winding-sheave  
25 is engaged by a bail 19, or any equivalent means to stop and hold the sheave from turning.

I do not limit myself to the specific means shown for holding the sheave in a fixed position against rotation, as any suitable contrivance which will stop and hold this sheave  
30 or the suspension cord from moving will, serve the purpose.

It will be perceived from the foregoing description and reference to the drawings that the frame of the clothes drier is suspended and sustained above and below on pivotal or swiveled bearings whereby the frame may be turned on the bearings and the bars thus be  
40 presented to the person hanging up the clothes in succession; that the frame may be hoisted and lowered to meet the exigencies or uses as desired. It will be further perceived that by using the "jack-link" chain I can open the  
45 links and then slip the eye of the clothes-bar over the opened portion after which the link may be again connected and closed on the other link, whereby the clothes-bar is held and sustained at the center of the link. The  
50 extensible and revoluble frame of the drier may be of any length desired and hence may consist of any number of clothes-bar frames. When the corner chains are fully extended and stretched the frame may be turned or  
55 revolved on its supporting bearings at the top and bottom and thus the clothes be always arranged from the place where the person stands. The frame may be turned whether fully stretched or not, but after the articles  
60 have all been "hung out" it is preferable that the frame be then extended to its full length, as the tension keeps it from swinging from the action of the wind.

The frame is hoisted or extended by simply turning the sheave 18 at the base to wind  
65 up the suspension cord; and when the desired height or tension is reached, the stop or bail

is applied and the sheave stayed at that point thereby holding the frame at the place to which hoisted; and on removing the stop the  
70 frame descends by gravity. In case of showers or rain the frame with the clothes thereon can be lowered, the clothes piling or bunching on the base-piece and the cover setting  
75 on and over them, keeping them from the rain and wet until such time as it may have ceased, when the frame with the clothes thereon can be again lifted and the drying go on. The frame cover may be held down by the application of the bails.  
80

The device may be arranged and erected in any suitable position such as in air-shafts, area-ways of houses, or yards, or it may be sustained in any convenient place suitable for it.  
85

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

1. A clothes-drier comprising an upper support, pulleys in the support, a covering over  
90 the pulleys, an extensible clothes drier composed of an upper frame, a covering over the frame, a bottom piece, chains connecting the base and the upper frame, said frame and base being mounted to turn, clothes-bars on  
95 the corner-chains, a sheave at the base, a cord on the pulleys and sheave, and means to stop the bottom sheave against turning, substantially as and for the purpose specified.

2. The extensible frame for a clothes-drier  
100 composed of an upper frame, a lower base-piece, chains connecting the said frame and base piece, clothes-bars arranged on the chains, diagonally arranged bars having their ends secured to the chains, and a covering on  
105 the upper frame, as specified.

3. In a clothes-drier, the combination with suitable supports and means for hoisting the drier, of a revoluble and extensible clothes-frame composed of an upper frame, corner-chains suspended therefrom, clothes-bars consisting of a single wire extending around and  
110 between the corner-chains, and diagonally disposed clothes-bars, as specified.

4. The combination with the corner-chains,  
115 and the upper and lower supports therefor, of the clothes-bars consisting of a single wire formed into angular shaped frames and having eyes at the corners thereof to grasp and retain the suspension-chains, as specified.  
120

5. The clothes-drier comprising the supporting table at the base, the revoluble base-piece secured on the table, a revoluble upper frame, chains connecting the upper frame and the base-piece, clothes-bars secured to and between the chains and means for hoisting and  
125 lowering the frame, as set forth.

6. In a clothes-drier, the frame A, composed of corner-chains consisting of links having narrower central portions than ends and the  
130 clothes-bars consisting of a single wire frame with eyes at the corners to take and retain the central portions of the chain links, as specified.



7. In a clothes drier, an extensible frame, a  
bottom piece, and bails on the bottom piece  
to lock onto the extensible frame whereby it  
may be held taut at different heights of ex-  
5 tension.

8. In a clothes drier an extensible frame, a  
cover over the frame and attached thereto, a  
bottom piece having the lower end of the  
frame connected thereto, and bails on the bot-  
10 tom piece arranged to lock over the rim of

the cover of the frame when it is lowered and  
keep the cover in position at the bottom.

In witness whereof I have hereto set my  
hand in the presence of two attesting wit-  
nesses.

JOHN G. KURTZ.

Witnesses:

A. G. HEYLMUN,  
JOS. H. BLACKWOOD.