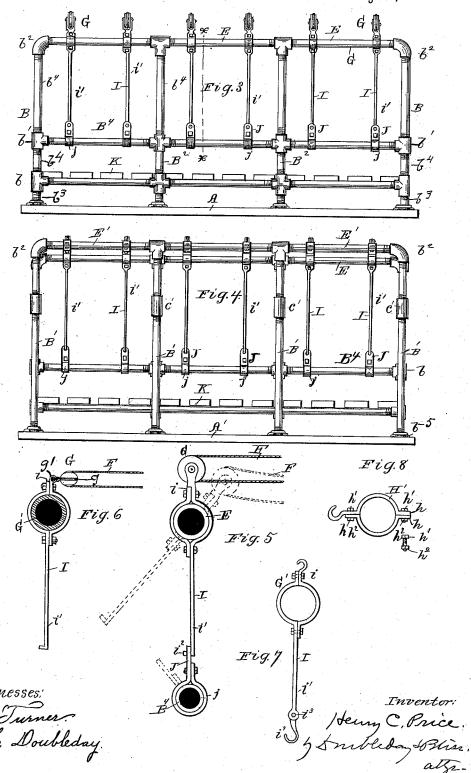
H. C. PRICE. CLOTHES DRIER.

No. 382,269. Patented May 1, 1888. Fig.Z ${\cal A}'$ . A H32 Fig. 2  $\mathcal{B}$ d'Fig. g. Fig.10. Witnesses: Inventor: Lo. Doubleday.

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No. 382,269.

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## UNITED STATES PATENT OFFICE.

HENRY C. PRICE, OF NEW YORK, N. Y., ASSIGNOR OF ONE-THIRD TO J. HOMER HILDRETH, OF SAME PLACE.

## CLOTHES-DRIER.

SPECIFICATION forming part of Letters Patent No. 382,269, dated May 1, 1888.

Application filed March 24, 1887. Serial No. 232,286. (No model.)

To all whom it may concern:

Be it known that I, HENRY C. PRICE, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Clothes-Driers, of which the following is a specification, reference being had therein to the accompanying draw-

This invention relates to improved devices for supporting, stretching, and manipulating the lines used for supporting clothes while drying them, they pertaining more especially to devices for these purposes adapted to be used

15 on roofs or in similar places, though they are also applicable for use in yards and where the lines are suspended by means of posts embed-

ded in the ground.

Figure 1 is a plan view of devices embody-20 ing my improvement. Fig. 2 is a side view of the same. Fig. 3 is an elevation of one of the end frames. Fig. 4 is an elevation of the structure, taken from the opposite end. Fig. 5 is a section on the line x x, Fig. 3. Figs. 6

25 to 8 show the details of parts slightly modified in respect to the construction shown in Figs. 1 and 2. Figs. 9 and 10 are sections of the feet

or pedestals of the frame.

In the drawings I have shown a support for the frame-work, it being indicated at A A'.

This may be the roof of the house, or a platform, or (as concerns the use of the invention under some circumstances) it may represent the surface of the ground.

B B represent posts or standards at one of the end frames. These are constructed of tubing in sections of such length and diameter as to attain the desired end. As shown, there are couplings  $b b' b^2$ , joined by sections  $b^4$ . The 40 lower section,  $b^3$ , is connected to the pedestal

b, which, as shown, consists of an expanded plate having an upwardly-projecting boss connected by a thread to the section  $b^3$ . The coupling b' connects the end standards, B, with 45 a horizontal bar, B4, also formed of tubing and extending from side to side of the frame.

B<sup>2</sup> B<sup>2</sup> are intermediate uprights or posts, these having pedestals and being united by couplings or otherwise to the bar B4.

E is a top bar or tube connected to the uprights B B by means of couplings at  $b^2$ .

By employing tubing and couplings of substantially the character shown a frame-work can be easily and cheaply constructed. On the support A', which may be part of the same 55 roof as that shown at A, or may be a distant roof or another part of the surface of the ground, there is arranged a frame in some respects similar to that above described, it having standards or uprights B' and a top hori- 60 zontal bar or tube, E'. These parts are made firm and rigid by means of braces C, which are inclined and joined to the bars B' by couplings c'; or they may be welded, bolted, or otherwise fastened; and at the lower end these braces are 65 similarly secured to pedestals or foot-pieces c. The standards or uprights B' are fastened to pedestals  $b^5$ .

The above described frame at the other end of the apparatus (indicated at B B2B4) is braced 70 by means of vertical parts D and horizontal connecting parts d d', the parts at D having pedestal or foot pieces  $b^5$ . In some respects the bracing of this last described sort is preferable, as the couplings, nipples, &c., are of 75 the ordinary construction. Moreover, these bracing devices at D d can be utilized for supporting the platform upon which the person stands when attaching the articles to the line.

The lines are represented by F F, they be- 80 ing supported upon the top cross-bars, E E'. Each line is endless and is supported upon pulleys G H.

The pulleys H are secured to the bar or tube E' by means of bands H' tightly clamped to 85 the bar or tube. I prefer to make each as semi-rings with flanges h, through which bolts h' can pass, the threads of the bolts engaging with nuts  $h^2$ . A suitable form is shown in Fig. 8, it having a hook or eye, h<sup>3</sup>, for secur- 90 ing the pulley H, which latter may be of the kind shown in Figs. 1 and 2 or of that in Fig. 6, that shown in Figs. 1 and 2 being mounted in the open end of a fork by a pivot passing through the ends of the fingers of the fork and 95 through the pulley, while in Fig. 6 the pulley is shown mounted in a stirrup, g, upon a pivot passing through the legs of the stirrup about midway between their ends, the eye g' being connected to the open end of the stirrup.

The pulleys G are so mounted that their pivots or shafts can be moved toward and

from the pulleys H, so that the ropes F can be made very taut or loosened, as may be required. This can be accomplished in several ways. In Figs. 1, 3, 4, and 5 the pulley G is 5 shown as being carried by a rocking lever, I, fulcrumed upon the bar E, the short arm i carrying the pulley, and the longer arm, i', projecting downward. The latter is adapted to be grasped and moved to and fro and to be 10 locked after the rope is tightened, the lock being of any suitable character. In Figs. 1, 3, 4, and 5 it is locked by a movable perforated plate, J, secured to the cross-bar B<sup>4</sup> by a ring,

plate, J, secured to the cross-bar B<sup>4</sup> by a ring, j. After the lever has been brought down the part J is turned around until it engages with the hook at i, and when the rope is to be loosened the part J is moved away from the lever. The part of the lever which engages with the bar or tube E is preferably formed of

20 two half-rings or segments bolted together and forming a hinge-eye for the lever; or, when preferred, the locking part Jj may be fixed rigidly on the bar  $B^i$ , when the hook  $i^2$  can be pivoted to the lever I, as shown in Fig. 7.

25 The manner of using these devices will be readily understood. The lever I is first released and its pulley G is allowed to move in a short distance. After this the line or rope F can be readily moved to and fro around the 30 pulleys G and H to permit the fastening thereto of the clothes. After the line has been loaded the lever is drawn in the opposite direction and fastened by means of the locking part J j.

In order to prevent the roof from being 35 marred, and also in order to enable the operator to easily reach the line, I provide a platform which is elevated to any suitable height. As shown, it is composed of the longitudinal bars K' and the cross boards K, the whole forming a detachable flooring, which can be supported at either end upon the above described bracing frame D d d'. This may be of any preferred or suitable dimensions. Thus

it will be seen that a frame of this kind hav-45 ing parallel horizontal bars d d' projecting rearward or inward from the frame B B<sup>2</sup> B<sup>4</sup> is adapted to not only brace the upright frame against the pull of the clothes lines, but to support the detachable flooring at different

sc heights, as may be required, and also to serve as a ladder to facilitate reaching the flooring and descending therefrom, during which movements persons can steady themselves by taking hold of the adjacent vertical post. Moresover, a bracing-frame of this kind—that is to say, having the parts d d'—is very strong and not so liable to be broken at the couplings as would be a frame with but a single horizontal bar or pipe-section supported from the roof at its inner end.

I am aware that structures of various sorts have been heretofore made of iron tubing, among others articles of furniture, and I do not claim such structures, broadly, as my invention.

It is a matter of great convenience in a structure of this sort that each line should be mounted at one end upon a roller carried by a separate and independent lever, whereby the tension of each line can be independently 70 adjusted, and whereby, also, each line can be moved around its roller or pulley without requiring that all the lines of the series, with their loads, should be moved at the same time. All of the pulleys H are supported on a com- 75 mon bar, E', and yet are practically independent of each other, which is also true of the pulleys G and their supporting-levers I. By making the hinging or attaching devices for the pulleys and levers in the way shown, the 80 lines can be placed comparatively close together and a small area can be made available for a large amount of work.

What I claim is—
1. In an apparatus for drying clothes, the 85 combination of the end frames having the top bars, E E', the series of independent pulleys H, all supported on the said bar E', the opposite series of independent pulleys G, the series of independent hinged levers arranged parallel 90 to each other and all supported in common on the said bar E, the series of independent endless lines, respectively supported on the said pulleys and levers, and the series of independent fastening devices for the said levers, 95 substantially as set forth.

2. In an apparatus for drying clothes, the combination, with the frame having the top horizontal bar E and the lower horizontal bar, B', the endless lines, the pulleys G, and the roc levers I, hinged to the top bar E, of the fastening devices for the levers, having the hinged lock pieces J, connected to the said bar B', substantially as set forth.

In testimony whereof I affix my signature in 105 presence of two witnesses.

HENRY C. PRICE.

Witnesses:
J. Homer Hildreth,
Sam. Tro. Smith.