F. DUBOIS.

HOSE DRYING APPARATUS.

APPLICATION FILED APR. 25, 1919.

1,332,326.

Patented Mar. 2, 1920.

2 SHEETS—SHEET 1.

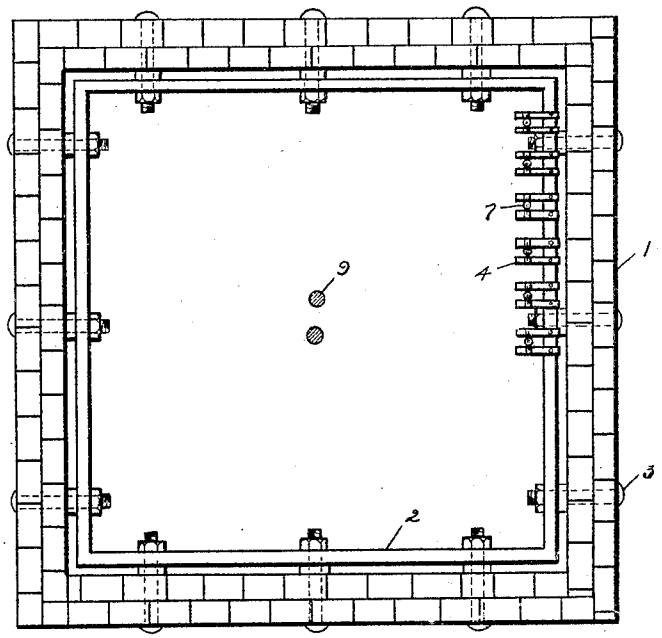


FIG 1

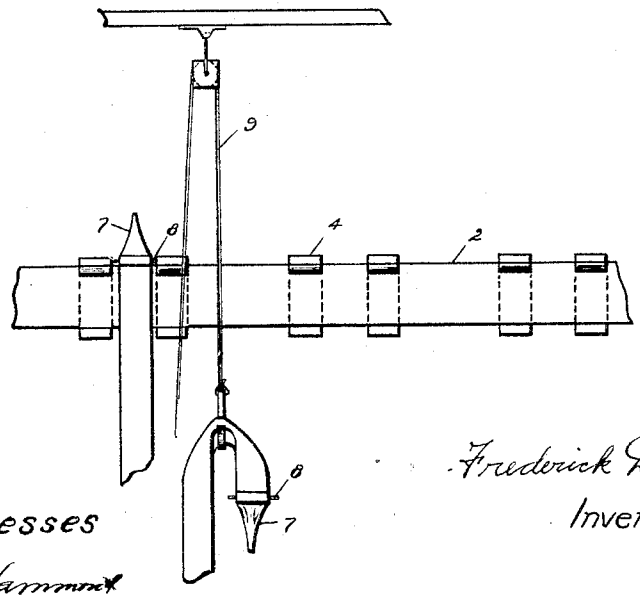


FIG. 2

Witnesses

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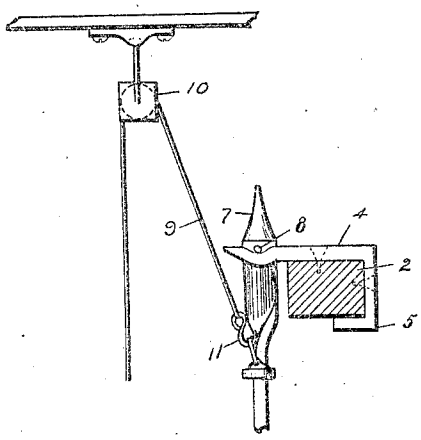


Fig. 3

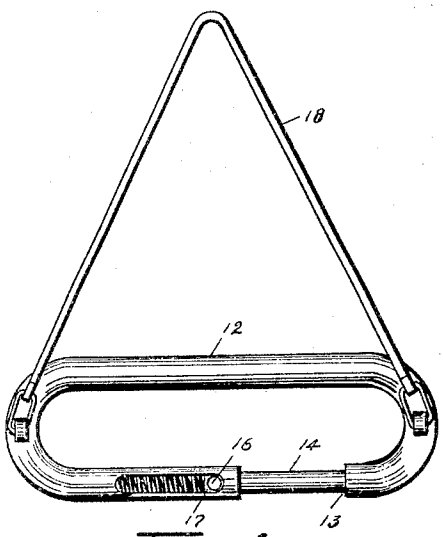


Fig 4

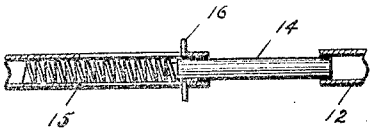


Fig. 5

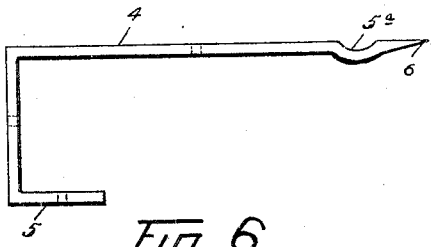


Fig. 6

Witnesses

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UNITED STATES PATENT OFFICE.

FREDERICK DUBOIS, OF KENORA, ONTARIO, CANADA.

HOSE-DRYING APPARATUS.

1,332,326. Specification of Letters Patent. Patented Mar. 2, 1920.

Application filed April 25, 1919. Serial No. 292,672.

To all whom it may concern:

Be it known that I, FREDERICK DUBOIS, a subject of the King of Great Britain, and resident of the town of Kenora, District of Kenora, Province of Ontario, in the Dominion of Canada, have invented certain new and useful Improvements in Hose-Drying Apparatus, of which the following is a specification.

The invention relates to improvements in hose drying apparatus as described in the present specification and shown in the accompanying drawings that form a part of the same.

The invention consists essentially of the novel features of construction whereby a hose suspended from a tower may be released from its support and lowered by means of a device capable of being operated from the base of the tower.

The objects of the invention are to avoid accidents consequent upon having to mount to the top of the tower to release the hose, to reduce to a minimum the time required to replace the hose after the drying operation, and generally to provide a hose drying apparatus which will be inexpensive of construction, simple of operation, durable and efficient.

In the drawings, Figure 1 is a plan view of a rack showing a number of hose suspended therefrom.

Fig. 2 is an inside view of a portion of one side of a rack and showing the manner in which the hose is raised.

Fig. 3 shows the manner in which the hose is released from its support.

Fig. 4 is a perspective view of the releasing member.

Fig. 5 is a detail view partly in section to show the means for admitting the hose to the yoke shown in Fig. 4.

Fig. 6 is a detail of one of the hose supports.

Like numerals of reference indicate corresponding parts in the various figures.

Referring to the drawings 1 represents the walls of the tower with which fire stations are usually provided and from which the hose is adapted to be suspended for drying.

2 is a frame located adjacent to the top of the tower and supported by means of bolts or pins 3 projecting horizontally from the walls 1 and into or through the frame, said frame being spaced on all sides from said walls to permit of adjusting the hose supports to be next described.

4 are hose supports projecting inwardly on a horizontal plane from the top sides of the frame 2 and arranged in pairs at intervals around said frame, each of said supports being formed of a metal strap having its end 5 bent to snugly fit the outer and bottom sides of said frame and on the top sides of its projecting end being notched or otherwise concaved as at 5^a and having the under side of said end cut away upwardly forming a lip 6.

The members of each pair of supports are spaced from one another a sufficient distance to permit of a hose nozzle 7 sliding freely therebetween so that the pins 8 with which said nozzles are provided will engage the notches 5 in the corresponding supports and thus securely hold the hose in its suspended position.

9 is a cable operating over a pulley 10 which is swivelly secured centrally of the tower to the ceiling or to any desired form of bracket, said cable being provided at one end with a hook 11 over which the nozzle end of the hose is adapted to be hung when raising same to the level of the frame 2 for subsequent removal to the support 4.

Heretofore it has been customary when lowering the hose for a person to mount to the top of the tower and raise each hose from its support and place it over the hook 11 on the cable 9 from which place it is then lowered by an operator located at the bottom of the tower but it is evident that this method of procedure has many disadvantages, as it is frequently necessary to lower the hose in great haste in which case accidents often occur resulting in injury to those engaged in lowering the hose or to the hose itself.

It is desirable therefore that the hose be removed from its support and lowered from the base of the tower and this is accomplished by means of the present invention as described hereinafter.

12 is a yoke preferably constructed of tubular material and being oval in formation and being provided on one side with an opening 13 through which the hose is adapted to be inserted, the opposite sides of said yoke being sufficiently spaced to permit

of its sliding freely on the hose but at the same time will not permit of the passage of the nozzle therethrough.

The opening 13 is closed by means of a bolt 14 slidable longitudinally in one end of said yoke and adapted to project across said opening and enter the other end of said yoke, said bolt being spring held to its extended position by means of a spring 15 inserted between the end of said bolt and a suitable stop in said yoke.

The bolt 14 is operated by means of pins 16 projecting from opposite sides thereof and operating in corresponding slots 17 in the yoke, so that to insert or withdraw the hose from the yoke it is simply necessary to draw backwardly on the pins 16 against the pressure of the spring 15 and thus provide a passage for said hose.

The yoke 12 is adapted to be suspended from the hook 11 of the cable by means of a substantially inverted V-shaped handle 18 loosely secured at opposite ends of said yoke.

The operation of this invention is as follows:

The nozzle end of the hose is hung over the hook 11 as shown in Fig. 2 of the drawings and is raised to the level of the frame 2 by simply pulling over the other end of the cable from where it is removed by some one stationed in the tower and placed on the supports 4 with the pins 8 from opposite sides of the nozzle 7 resting in the corresponding notches 5 of said supports.

When it is desired to lower the hose the handle 18 of the yoke 12 is hung on the hook 11 and the suspended hose is inserted within the yoke through the opening 13. The free end of the cable is then pulled which causes the yoke 12 to be drawn up the hose until it reaches the supports 4 over the ends of which it is deflected by the upwardly slanting lips 6 and in passing said supports raises the nozzles from engagement therewith and thus permitting of the lowering of the hose by means of said cable.

It will thus be seen that by the use of this device the hose may be quickly and safely lowered without possibility of injury to the hose through becoming detached from the cable and without danger to those employed.

What I claim is:

1. In hose drying apparatus, in combination, a supporting wall, a frame secured to said wall and spaced therefrom, a nozzle supporting member carried by said frame, a cable operating over a pulley located above said frame and a yoke carried by one end of said cable and slidably encircling the suspended hose and adapted on being raised through the operation of said cable to disengage said nozzle from said supporting member.

2. In hose drying apparatus, in combination, a supporting wall, a nozzle supporting member supported from said wall, a cable and pulley mechanism having a hook end adapted to receive the nozzle end of a hose for raising same to the level of said nozzle supporting member for manual transference to said nozzle supporting members and an automatic disengaging element.

3. In hose drying apparatus, in combination, a supporting wall, a nozzle supporting member supported from said wall, a pulley located above said nozzle support, a cable operating over said pulley and carrying a hook adapted to receive the nozzle end of a hose for raising same to the level of said nozzle supporting member for manual transference thereto and a disengaging element carried by said hook and adapted on the operation of said cable to free said nozzle from said nozzle supporting member.

4. In hose drying apparatus, in combination, a supporting wall, a frame spaced from said wall and carrying nozzle supports arranged in pairs at intervals, a pulley located above said frame, a cable operating over said pulley and carrying at one end a hose carrying element, said hose carrying element being adapted to slidably encircle the suspended hose and on the operation of said cable freeing said nozzle from engagement with said supports.

5. In hose drying apparatus, in combination, a supporting wall, a frame spaced from said wall, metal straps bent to grip said frame and projecting inwardly therefrom in pairs and forming nozzle supports spaced to permit of said nozzles sliding therebetween and provided on the upper sides thereof with transverse notches adapted to receive pins from opposite sides of said nozzles, a pulley swivelly mounted above said frame, a cable operating over said pulley and means carried by said cable for transporting the hose nozzle to and from said nozzle supports.

6. In hose drying apparatus, in combination, a supporting wall, a frame spaced from said wall, hose nozzle supports bent to grip said frame and projecting inwardly in pairs and notched to receive the pins from opposite sides of said nozzles, a pulley swivelly mounted above said frame, a cable operating over said pulley, a yoke carried by said frame and adapted to loosely encircle said hose and upon the operation of said cable being drawn upwardly on said hose for releasing said nozzle from its support.

7. In hose drying apparatus, the combination with a drying tower of a pulley swivelly mounted therewithin, nozzle supporting members supported therebelow, a cable operating over said pulley and carrying a hose holding element adapted on the operation of said cable to raise said hose to

the level of siad supporting members, a yoke carried by said cable and slidably encircling said hose, and adapted upon being raised through the operation of said cable to raise said nozzle from engagement with said supports and hold same for subsequent lowering.

8. In hose drying apparatus, the combination with a drying tower, of a pulley swivelly mounted centrally of the top thereof, a frame spaced from the walls of said tower and supported below said pulley, nozzle supports arranged in pairs at intervals around said frame and projecting inwardly therefrom, said supports being notched transversely on the top sides thereof to receive the pins from the depending hose nozzles and on the under sides being tapered to their outer ends, a cable operating over said pulley, means secured to said pulley adapted to transport said hose to said supports, a yoke carried by said cable and adapted on being raised through the operation of said cable to free said hose from engagement with said support and hold same for subsequent lowering, the arms of said yoke being spaced to prevent said nozzle passing therethrough and being provided with a hose passage through one arm thereof and a spring held bolt normally closing said passage.

Signed at the town of Kenora, Province of Ontario, this seventeenth day of January, 1919.

FREDERICK DUBOIS.

Witnesses:
J. S. ALLAN,
NORMA I. CURRIE.