

No. 670,102.

Patented Mar. 19, 1901.

O. A. GORR.
CLOTHES DRIER.

(Application filed Apr. 3, 1900.)

(No Model.)

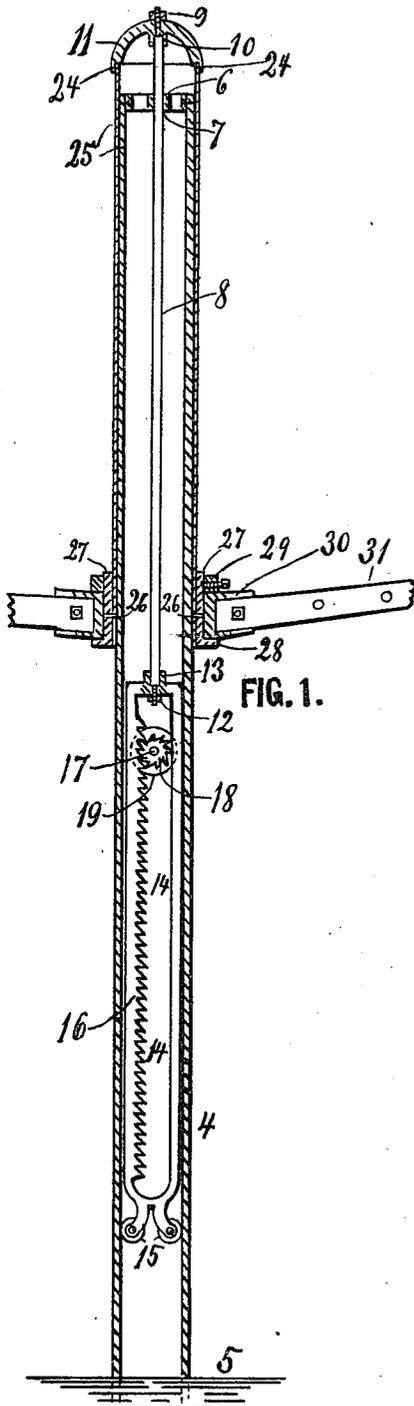


FIG. 1.



FIG. 3.

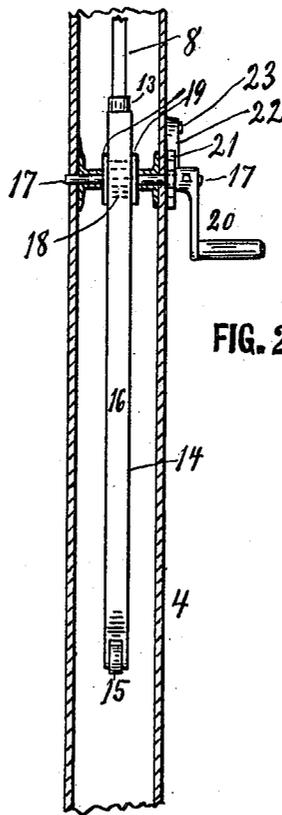


FIG. 2.

WITNESSES:

D. C. Carlson.
C. C. Carlson

INVENTOR:

Otto A. Gorr
BY HIS ATTORNEY:
A. M. Carlson.

UNITED STATES PATENT OFFICE.

OTTO A. GORR, OF EAST FARMINGTON, WISCONSIN.

CLOTHES-DRIER.

SPECIFICATION forming part of Letters Patent No. 670,102, dated March 19, 1901.

Application filed April 3, 1900. Serial No. 11,414. (No model.)

To all whom it may concern:

Be it known that I, OTTO A. GORR, a citizen of the United States, residing at East Farmington, in the county of Polk and State of Wisconsin, have invented certain new and useful Improvements in Clothes-Driers; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in clothes-driers; and its main object is to so improve upon the clothes-drier described in my recent application, Serial No. 6,456, filed February 26, 1900, for Letters Patent of the United States, that the rack and cog-wheel forming the main mechanism may be concealed and protected from the weather. This object I attain by the novel construction and arrangement of parts illustrated in the accompanying drawings, in which—

Figure 1 is a central vertical section through my new clothes-drier with most of the clothes-supporting bars omitted. Fig. 2 is an enlarged vertical central section through the lower half of the standard 4 in Fig. 1 looking from left to right. Fig. 3 is a top view of the standard 4, showing the spider or guide 6 secured in it.

Referring to the drawings by reference-numerals, 4 is a tube or hollow standard secured in the ground 5 or to any other rigid object. In the upper end of this standard I secure a spider 6, having a central square hole 7, guiding the square rod 8, which has its upper end secured by the nut 9 in the square socket 10 of a cap 11 and its lower end secured by the nut 12 in the square socket 13 of a yoke 14, which if smaller than the inner diameter of the standard may be guided in it by rollers 15 at one or both ends of the yoke. One of the parallel bars of said yoke 14 is a rack 16 or is provided at its inner side with teeth, as shown.

17 is a shaft journaled transversely through the standard and provided in the center of same with a cog-wheel, (in the present instance of the ratchet-wheel type.) This wheel 18 is secured on its shaft, fills between

the bars of the yoke, and engages the rack 16 thereof, while the flanges 19 of the wheel engage the flat sides of the yoke, and thus guide the latter from slipping toward either end of the teeth of the wheel. Beyond the standard are secured on the shaft 17 a hand-crank 20 and a ratchet-wheel 21, which may be held in any position by the pawl 22, pivoted at 23 to the side of the standard.

To the inside of the lower edge of the cap 11 I secure by the rivets 24 or similar means a thin tube 25, which hangs down loosely about the standard. Upon the lower end of said tube 25 is secured by the rivets 26 the short sleeve 27, which between its integral collar 28 and its set-screwed collar 29 carries the regular rotating spider 30, in which the clothes-supporting bars 31 are secured by bolts in the manner shown.

In operation when the crank 20 is turned the yoke 14 16 is thereby raised and lowered, and with the yoke move the rod 8, cap 11, tube 25, and spider 30, so that the latter is raised and lowered by the crank and secured at any desired elevation by the pawl 22 and ratchet-wheel 21. The spider turns on the sleeve 27, because the latter is prevented from turning by its connection with the square rod 8, sliding in the square hole 7 in the guide 6.

Many modifications may be made without diverging from the principle of the invention, which is mainly the telescoping post and capped tube, with operating mechanism contained inside the same, so that no snow, ice, or dirt of any kind can blow into and clog up the gear or obstruct or damage it.

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

1. A clothes-drier comprising in combination, a hollow standard or upright, an outer tube closed at its top and telescoping downward upon the standard, a spider carried by said tube and provided with clothes-supporting arms, a hand-crank outside the standard, and mechanism operated thereby inside the standard, and connected with the upper end of said tube, in a manner enabling the tube to be raised and lowered by the crank.

2. In a clothes-drier, the combination with a hollow upright or standard having a transversely-journaled shaft provided with a crank

outside the standard, and a cog-wheel inside
the standard, and having in its upper end a
guide with a central hole adapted to guide
and prevent turning of a rod, of a slidable
5 rod inserted in said guide and carrying at its
lower end a guided rack engaging the cog-
wheel, and at its upper end a cap from which
extend downwardly upon the standard, a tube
carrying between two collars, a revoluble
10 spider having arms for supporting the clothes
to be dried, and means for holding the tube
and spider at any desired elevation.

3. In a clothes-drier of the class described,
the combination with a hollow standard, of
15 a spider-carrying tube sliding thereon and
closed at its upper end, a rod secured in said
upper end and having to its lower end se-
cured a yoke consisting of two parallel bars,

one of which forms a rack having its teeth
adjacent the other bar, a cog-wheel engaging 20
the teeth of the rack and touching loosely
the other bar of the yoke, said wheel also
having the side flanges or guards 19, so that
the rack is guided at both sides, and by its
blank bar held in proper meshing contact 25
with the wheel; said wheel having a shaft
journaled in the standard and provided with
a hand-crank for turning it, and with means
for locking it, substantially as and for the
purposes set forth. 30

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

OTTO A. GORR.

Witnesses:

ROBERT G. GORR,
EARNEST SCHMIDT.