

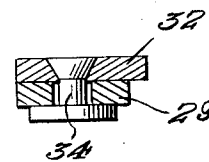
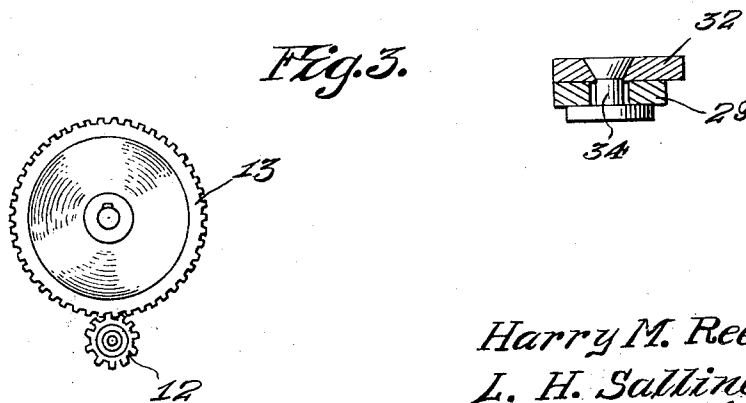
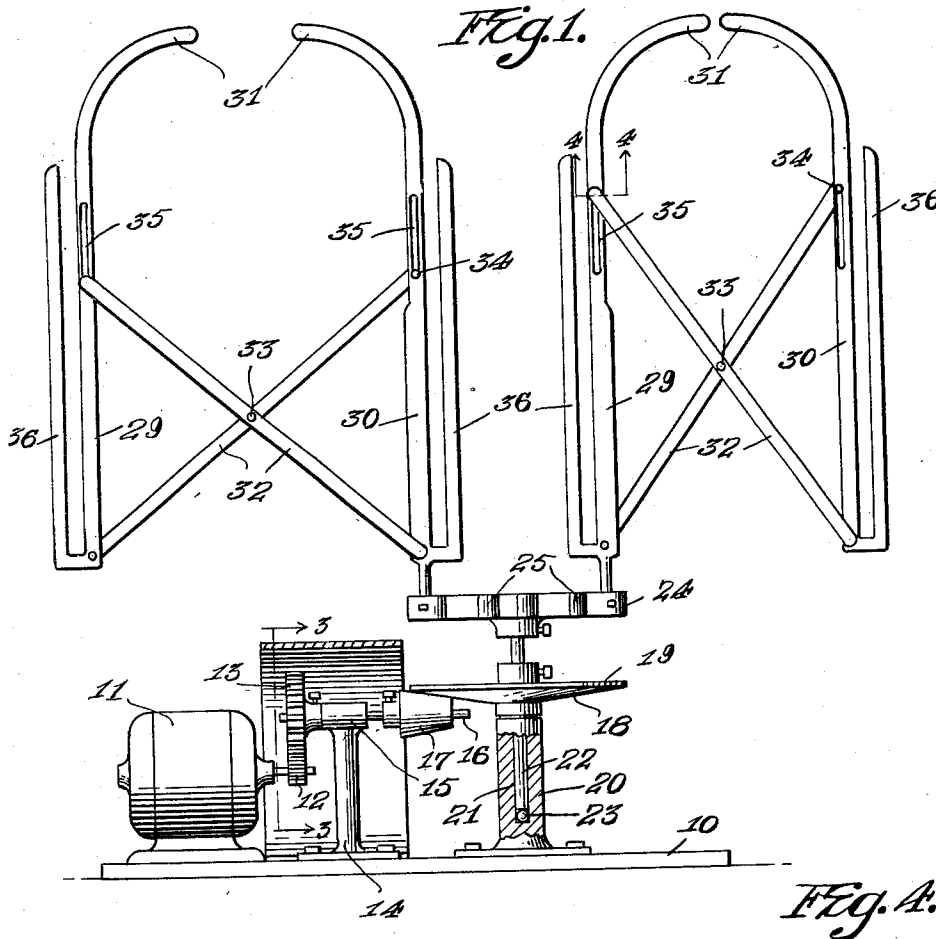
April 26, 1932.

H. M. REED ET AL
COLD AIR CLOTHES DRIER

1,855,312

Filed Dec. 15, 1930

2 Sheets-Sheet 1



Harry M. Reed,
L. H. Salling,
INVENTOR
BY Victor J. Evans
ATTORNEY

April 26, 1932.

H. M. REED ET AL
COLD AIR CLOTHES DRIER

1,855,312

Filed Dec. 15, 1930

2 Sheets-Sheet 2

Fig. 2.

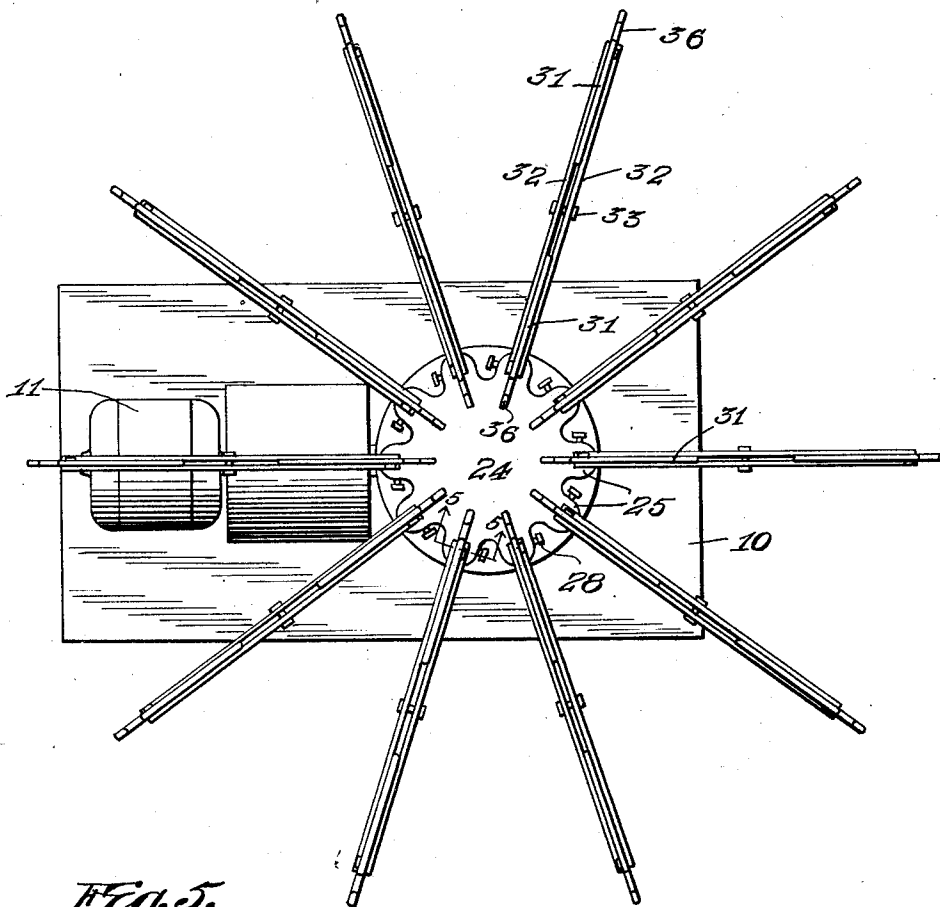
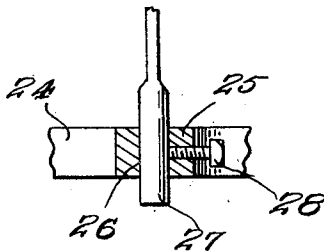


Fig. 5.



Harry M. Reed,
L. H. Salling,
INVENTOR

BY *Victor J. Evans*
ATTORNEY

UNITED STATES PATENT OFFICE

HARRY M. REED AND LINK H. SALLING, OF CHATTANOOGA, TENNESSEE

COLD AIR CLOTHES DRIER

Application filed December 15, 1930. Serial No. 502,603.

This invention relates to certain new and useful improvements in drying apparatus for clothing and the like.

Another of the objects of the invention consists of an apparatus of this character embodying a driven rotary support.

Another object of the invention contemplates the provision and arrangement of garment supports mounted upon the rotary support for simultaneous movement therewith during the clothes drying operation.

A further object of the invention embodies centrifugally operable expanding means for the garment supports whereby the garments will be held against shrinking during the drying operation.

More specifically stated the garment supports are provided with sleeve engaging means.

With the above and other objects in view, the invention further consists of the following novel features and details of construction, to be hereinafter more fully described, illustrated in the accompanying drawings, and pointed out in the appended claims.

In the drawings:—

Figure 1 is a side elevation of the present invention showing the operating mechanism partly in section.

Figure 2 is a top plan view of the invention.

Figure 3 is a sectional view taken on line 3—3 of Figure 1.

Figure 4 is a detail sectional view taken on line 4—4 of Figure 1 through one of the several connections for the expansibly connected sections.

Figure 5 is a fragmentary detail sectional view taken on line 5—5 of Figure 2 through the rotary support and illustrative of the connection of a garment support therewith.

Referring to the drawings in detail wherein like characters of reference denote corresponding parts, the reference character 10 indicates generally a base, to the upper side of which is suitably anchored a motor 11 having a spur gear 12 upon the extremity of the armature therefor for meshing engagement with an outside gear 13 in the manner shown in Figures 1 and 3 of the drawings. A standard 14 also supported upon the base 10 termi-

nates to provide a horizontally disposed bearing sleeve 15 upon its uppermost end to journally accommodate a shaft member 16; the latter having fixed thereto the outside gear 13. A cone member 17 carried upon the opposite end of the shaft 16 has the inclined wall thereof frictionally engaged with the frusto-conically shaped face 18 of a disk member 19. A bearing member 19, carried by and upstanding from the base 10 in the manner shown in Figure 1 of the drawings, is provided with a vertically disposed socket opening 21 for the accommodation of a shaft member 22 supporting the disk 19 at its upper end. A ball bearing 23 is located within the bottom of the socket opening 21 and against which the immediate extremity of the shaft 22 reposes.

The rotary support, alluded to in the foregoing, consists of a disk member 24 having a succession of spaced radially disposed ears 25 formed upon the outer periphery thereof and vertically apertured, as at 26, to accommodate the attaching ends 27 of the garment supports. Set screws or other fastenings, such as indicated at 28, are employed as the means for lockingly retaining the garment supports against displacement and as suggested in Figures 2 and 5 of the drawings the pockets formed between the opposed faces of the adjacent ears have the heads or wrench engaging ends of the set screws projected therein to prevent their entangling with the garments.

The garment supports comprise arm members 29 and 30 respectively disposed in spaced parallel relation throughout the major portions of their lengths and which terminate to provide at their uppermost ends in oppositely curved extremities 31 which in combination conform more nearly to the shoulder structure of garments. Toggle links 32 pivotally associated, as at 33, at their points of intersection are pivotally secured at their lowermost ends with the immediate extremities of the arm members 29 and 30. The uppermost ends of the toggle links disposed for overlapping relation with the arm members 29 and 30, carry fastenings 34 slidably positioned within slots 35 in the arms to facil-

itate widening and narrowing the garment supports. Standards 36, carried by and up-
standing from the arms 29 in spaced parallel
relation, are designed to pass through the
5 sleeve openings in the garments mounted up-
on the several garment supports.

From the foregoing, it is understood that
the motor 11 upon being energized will ro-
tate the shaft 16 through the gearing con-
10 nections 12 and 13 whereby the cone member
17 frictionally engaging the frusto-conical
face 18 of the disk 19 will impart rotary mo-
tion to the support 14 in a horizontal plane.
The garment supports are readily disposed
15 upon the rotary support in the manner sug-
gested in Figure 2 of the drawings and will
expand and retract, through the toggle links
36, pursuant to the velocity of centrifugal
force attained wherebv the garments will be
20 prevented from shrinking during the drying
operation.

The general trend heretofore in the dry
cleaning industry was that dresses washed
in gasoline could only be dried in steam heat-
25 ed drying tumblers or in steam heated dry-
ing rooms, either of which methods has
caused ruination of hundreds of garments
by shrinking and tearing beyond repair.
Our method completely separates each gar-
30 ment from the other during the drying opera-
tion to obviate the usual abrasive effect fre-
quently resulting in rendering portions of the
garments threadbare. The garments will not
only be prevented from shrinking during the
35 more gentle form of drying process but the
obnoxious fumes of the cleaning solutions
will be fanned out. It is obviously appar-
ent that the velocity of the rotary support
may be regulated pursuant to the nature and
40 quantity of the garment material to be dried,
for instance woolen material will shrink more
than silks and the support would be rotated
faster in the case of woolen material inas-
much as greater centrifugal force would be
45 required to hold the woolen garments against
shrinkage.

The invention is susceptible of various
changes in its form, proportions and minor
details of construction and the right is here-
50 in reserved to make such changes as properly
fall within the scope of the appended claims.

Having described the invention, what is
claimed is:—

1. A clothes drying apparatus comprising
55 a rotary support, garment supports having
attaching portions carried by the support,
sleeve engaging portions arranged upon the
garment supports obviating entanglement of
the several garments during the drying op-
60 eration, and toggle links carried by the gar-
ment supports controlled by centrifugal force
to obviate shrinking of the garments.

2. A clothes drying apparatus comprising
a rotary support, garment supports having
inner and outer sections, the innermost of the

sections having engagement with the support,
toggle links pivotally connected at points
spaced from the ends thereof and having piv-
otal and sliding connection terminally there-
of with the respective sections, and garment
70 sleeve engaging portions carried by each of
the sections.

In testimony whereof we affix our signa-
tures.

HARRY M. REED.
LINK H. SALLING.

75

80

85

90

95

100

105

110

115

120

125

130