CENTRIFUGAL DRIER. Patented June 21, 1892. No. 477,413. Caux N. Swan b.M. Holden

Billy Stanfres by Edwin Glanta.

## United States Patent Office.

TILLY HAYNES, OF BOSTON, MASSACHUSETTS.

## CENTRIFUGAL DRIER.

5PECIFICATION forming part of Letters Patent No. 477,413, dated June 21, 1892.

Application filed January 2, 1890. Serial No. 335,610. (No model.)

To all whom it may concern:

Be it known that I, TILLY HAYNES, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Mechanism for Drying Clothes and other Articles, of which the following, taken in connection with the accompanying drawings, is a specification.

In centrifugal machines employed for extracting dampness from various articles sufficient moisture is not extracted to render the articles sufficiently dry for the next operation. This is particularly the case with clothes that have been washed and have to pass from the

wringer to the mangle.

The object of my invention is to more perfectly dry the articles before leaving the centrifugal machine; and the invention consists in mechanism for the application of a hot or cold blast to the articles while the same are in the machine, as hereinafter fully described, and pointed out in the claims.

Referring to the accompanying drawings, 25 Figure 1 represents a side view of a centrifugal machine and apparatus for supplying a hot or cold blast according to my invention, parts of the casing and basket being broken away. Fig. 2 is a plan or top view of the same. 30 Figs. 3 and 4 are detail views of parts here-

inafter explained.

The centrifugal machine shown is of ordinary construction, and consists of a casing A, supported upon standards B, with an inner perforated basket or drum C, to which a rapid rotary motion is imparted by a shaft D, operated by a belt E, driven from any suitable source.

F is a discharge-pipe to carry off the water 40 that has been extracted.

G is a fan driven by a belt H from any convenient source; and to the fan-casing is connected a pipe I, upon which is mounted a T-piece J, which is free to swing or turn upon said pipe I. To the T-piece J is connected a pipe K, bent down at its outer end and provided with a flaring mouth-piece k, as shown. Near the outer end of the pipe K is connected one end of a cord or chain L, the other end of which is attached to a beam or other convenient place. The object of this chain is to sup-

port the pipe K in the desired position when a blast is being supplied to the machine.

In the pipe I is formed an oval hole i, (see Figs. 3 and 4,) which hole is covered by the 55 T-piece J and is directly opposite the pipe K, so that when the pipe K is let down the blast from the fan G is free to pass from the pipe I to the pipe K, and thence into the inner basket or drum C; but when the pipe K is raised, (so 60 that the articles in the basket or drum can be removed therefrom,) as shown in dotted lines in Fig. 1, the T-coupling J will cover the hole i and cut off the blast. By extending the end of the pipe beyond the pipe K other pipes 65 may lead from it to other driers, or it may be extended to a point where the blast from the blower or fan may be permitted to escape without interfering with the convenience or comfort of the operator when the pipe K is 70 turned up, as shown in dotted lines in Fig. 1, and the blast is shut off from the pipe K. This will permit of the blower being run constantly without the trouble and annoyance of having to start and stop it whenever the pipe 75 K is turned up out of the way.

In operation the fan G would be rotated continuously. The pipe K is raised, as shown in dotted lines in Fig. 1. The clothes or other articles to be dried are then placed in the 80 basket or drum C, which is then caused to rotate. The pipe K is then brought down into the position shown in full lines and a blast of air is admitted into the basket or drum C in the center of the clothes or other articles, 85 which air circulates through the clothes or other articles and very materially assists in

drying the same.

Although I have described the operation of drying clothes, it is obvious that any material 90 placed in the basket C could be dried in the same manner and a blast of hot or cold air might be maintained without the use of a fan by means of pipes, through which a draft of air is caused to pass. A series of centrifugal 95 machines may be employed and supplied with a blast from the pipe I, which would be provided with a hole i, T-piece J, and pipes K for each machine, so that when it is desired to place articles in or remove them from one 100 machine the blast will be cut off from that machine by simply raising its pipe K without

stopping the fan or interfering with the blast to the other machines.

What I claim as my invention is—

1. The improved apparatus for drying clothes, consisting of a centrifugal machine having the casing A and the inclosed basket C, a blower G, a pipe I, leading from said blower and provided with an opening i, a T-coupling mounted on said pipe I and adapted to cover the opening i, a pipe K, connected with the T-coupling and provided with a flar-

with the **T**-coupling and provided with a flaring mouth, said coupling being rotatable upon the pipe I and the pipe I being extended beyoud the opening *i* and left open and unob-

structed, whereby a free exit is afforded from the blower when the pipe K is thrown out of register with the opening *i*, and means for raising and lowering the pipe K, substantially as described.

2. The improved apparatus for drying 20 clothes, consisting of a centrifugal machine having the casing A and the basket C, a pipe I, having an opening i, a blower connected with said pipe I, a T-coupling J, mounted on said pipe I and adapted to cover the opening 25 i, a pipe K, connected to the T-coupling J and having a flaring mouth k, means for raising and lowering the pipe K, and means for rotating the centrifugal machine, as set forth.

In testimony whereof I have signed my 30 name to this specification, in the presence of two subscribing witnesses, on this 14th day of

December, A. D. 1889.

TILLY HAYNES.

Witnesses:

DUDLEY P. BAILEY, EDWIN PLANTA.