

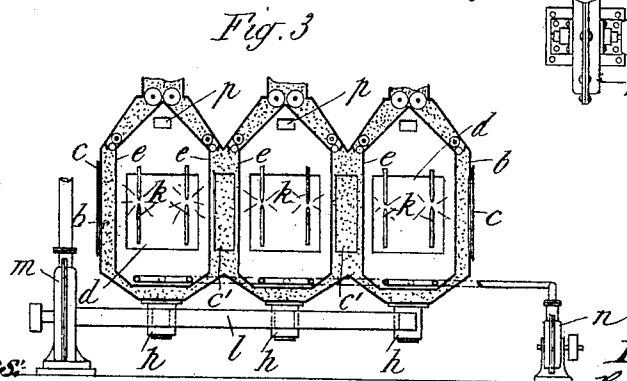
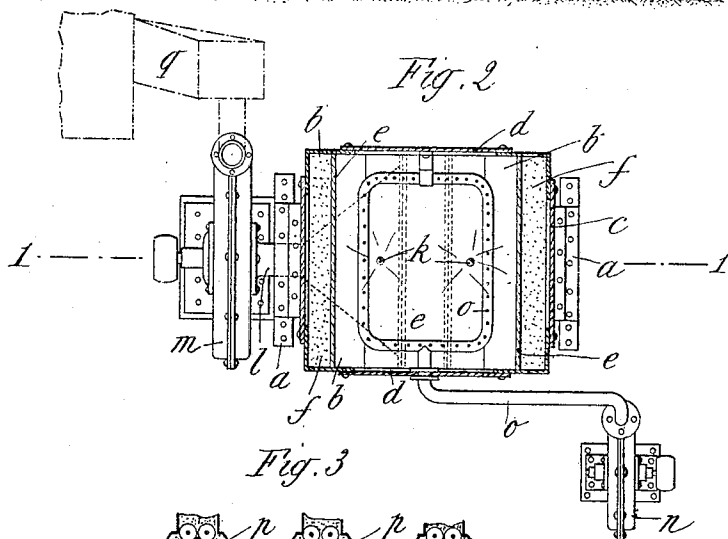
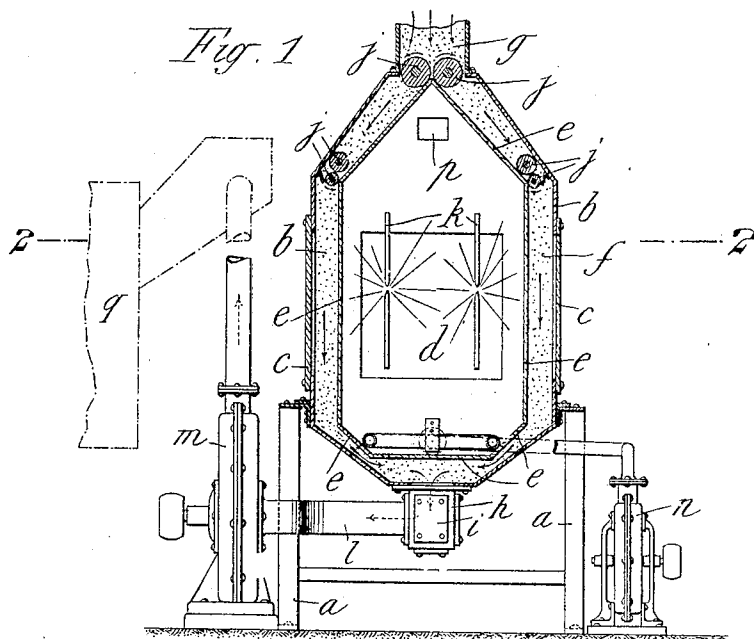
No. 805,652.

PATENTED NOV. 28, 1905.

P. A. LEPERCHE, V. ANGIOLINI-SALVADORI & V. DENIS.

APPARATUS FOR BLEACHING FLOUR.

APPLICATION FILED JULY 25, 1905.



Witnesses:

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UNITED STATES PATENT OFFICE

PIERRE ALBERT LEPERCHE, VICTOR ANGIOLINI-SALVADORI, AND
VICTOR DENIS, OF PARIS, FRANCE.

APPARATUS FOR BLEACHING FLOUR.

No. 805,652.

Specification of Letters Patent.

Patented Nov. 28, 1905.

Application filed July 25, 1905. Serial No. 271,148.

To all whom it may concern:

Be it known that we, PIERRE ALBERT LE-
PERCHE, a citizen of France, VICTOR ANGIO-
LINI-SALVADORI, a subject of the King of
Italy, and VICTOR DENIS, a citizen of France,
manufacturers, all residents of 26 Rue de
Havarin, Paris, France, have invented an Ap-
paratus for Bleaching Flour, of which the fol-
lowing is a specification.

The invention relates to an apparatus in-
tended for bleaching flour.

This apparatus is composed principally of
a chamber in which is produced a powerful
light of any nature whatever, preferably rich
in chemical rays, such as that produced by
electric lamps burning in closed chambers,
channels which are only separated from this
chamber by a glass wall, and of suitable means
for causing the flour to fall in a fine rain
through these channels in such a manner that
during its passage it is efficiently subjected
to the action of the light, and also of means
for cooling the apparatus. The result of this
treatment is to render the flour very white
without causing it to lose any of its qualities.

The accompanying drawings illustrate the
form of apparatus which we have found the
most suitable for attaining this result.

Figure 1 is a vertical section of the appa-
ratus on line 1 1 of Fig. 2. Fig. 2 is a hori-
zontal section on line 2 2 of Fig. 1. Fig. 3
is a diagrammatic vertical section illustrating
a modification.

On a frame *a* is supported a case *b*, of wood,
for example, provided on its four vertical
sides with opening panels *c c* and *d d*. The
walls *e*, composed of glass, form on two sides
of the apparatus channels *f f*, through which
the flour supplied at *g* falls and reunites at
the lower part at *h*, being exposed during
the whole period of its fall to the action of
luminous rays. Before arriving at the ver-
tical portion of these channels the flour is di-
vided up by grooved rotary rollers *j*. One or
preferably several lamps *k* are arranged in the
central compartment, to which ready access
may be obtained by opening the panels *d d*.

A tube *l* connects the interior box *h*, into
which the flour passes after its treatment,
with a suction-fan *m*, which, although it only
removes the fine flour, regulates the delivery.
The flour which it draws off is forced by it
into storage-chambers *q*. The box *h* is pro-
vided with a cleaning plug or cover *i* at one
of its two extremities. At the other, which

is lower, it bears a spout for delivering the
products into sacks.

A blower-fan *n* by means of a tube *o*, which
at the interior of the central compartment is
perforated and follows the glass walls, serves
to cool these latter and the whole apparatus.
The air escapes to the atmosphere by one or
more orifices *p*.

It will be understood that apparatus pro-
vided with more than two descending chan-
nels may be readily constructed, several rows
of lamps being employed. Channels having
the two walls of glass would thus be obtained
and in which a layer of flour would therefore
receive the action of the light on both sides.
This is what is illustrated diagrammatically
in Fig. 3. In this case access to the interior
of the intermediary channels would be ob-
tained through doors *e'*. The suction-con-
duit *l* of the fan *m* would be provided with
branches each leading to one of the boxes *h*,
and similarly the fan *n* would serve to cool
the whole of the light-chambers.

What we claim, and desire to secure by Let-
ters Patent of the United States, is—

1. An apparatus for bleaching flours, com-
prising channels for the fall of the flour in the
form of rain and a chamber separated from
said channels by glass walls and means for
producing light inclosed in said chamber.

2. An apparatus for bleaching flours, com-
prising channels for the fall of the flour in the
form of rain, a chamber separated from said
channels by glass walls and means for produc-
ing light inclosed in said chamber; rollers for
dividing up the flour before its entrance into
the said channels; a suction-fan for drawing
the flour through these channels and a blower-
fan for cooling the apparatus.

3. An apparatus for bleaching flours, com-
prising channels for the fall of the flour in the
form of rain and a chamber separated from
said channels by glass walls, closed chambers
within said chamber and electric lamps burn-
ing in said closed chambers.

In testimony that we claim the foregoing as
our invention we have signed our names, in
presence of two witnesses, this 11th day of
July, 1905.

PIERRE ALBERT LEPERCHE.
VICTOR ANGIOLINI-SALVADORI.
VICTOR DENIS.

Witnesses:

HANSON C. COXE,
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