

(No Model.)

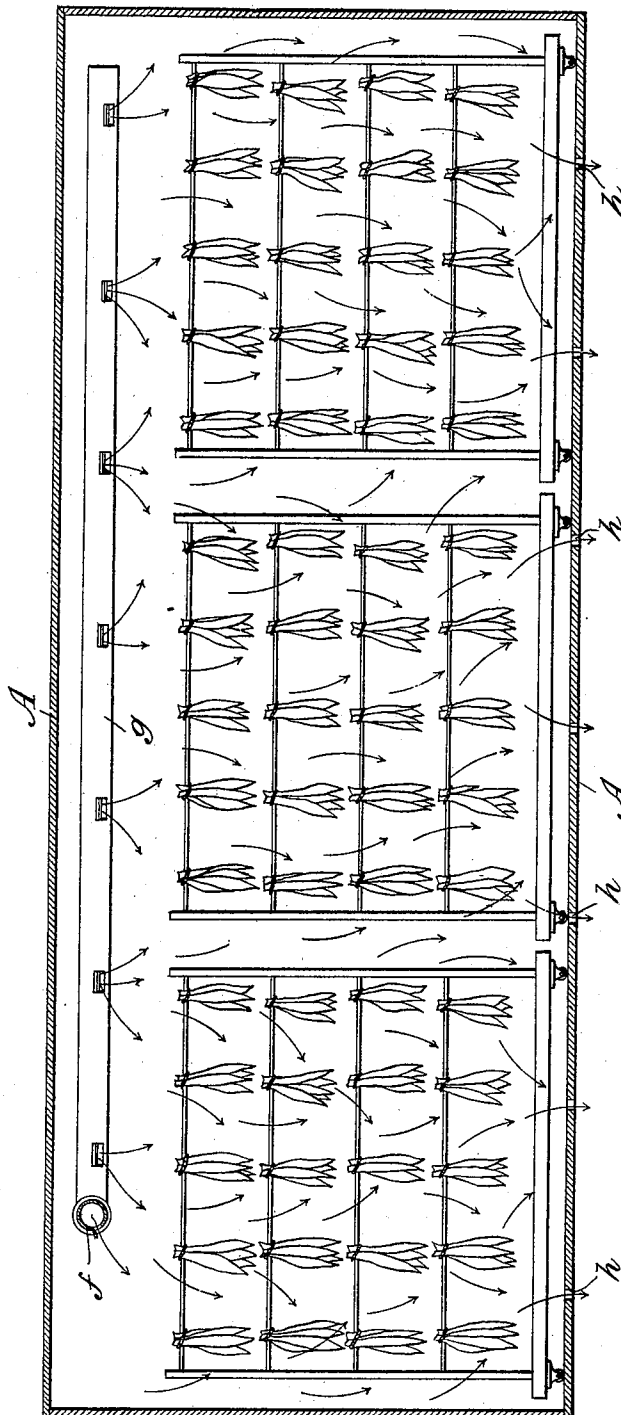
4 Sheets—Sheet 1.

J. K. PROCTOR.
APPARATUS FOR ORDERING TOBACCO.

No. 588,530.

Patented Aug. 17, 1897.

Fig. 1.



Witnesses:
William Fogh
Thomas M. Smith

Inventor:
Josiah K. Proctor
By J. Walter Simpson
Attorneys.

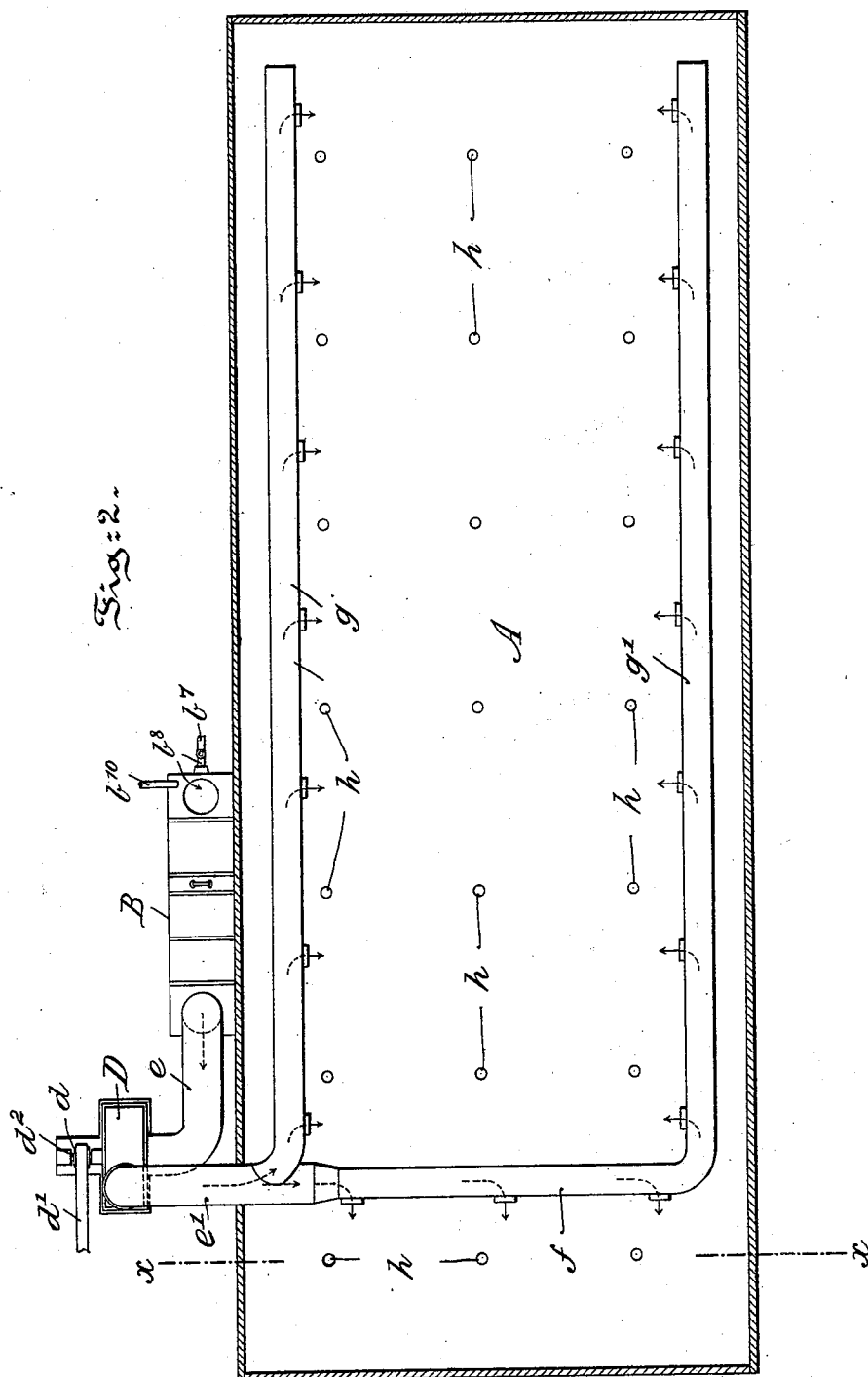
(No Model.)

4 Sheets—Sheet 2.

J. K. PROCTOR.
APPARATUS FOR ORDERING TOBACCO.

No. 588,530.

Patented Aug. 17, 1897.



Witnesses:
Wilhelm Vogt
Thomas M. Smith

Inventor:
J. K. Proctor,
By J. Walter Douglas
Attorney.

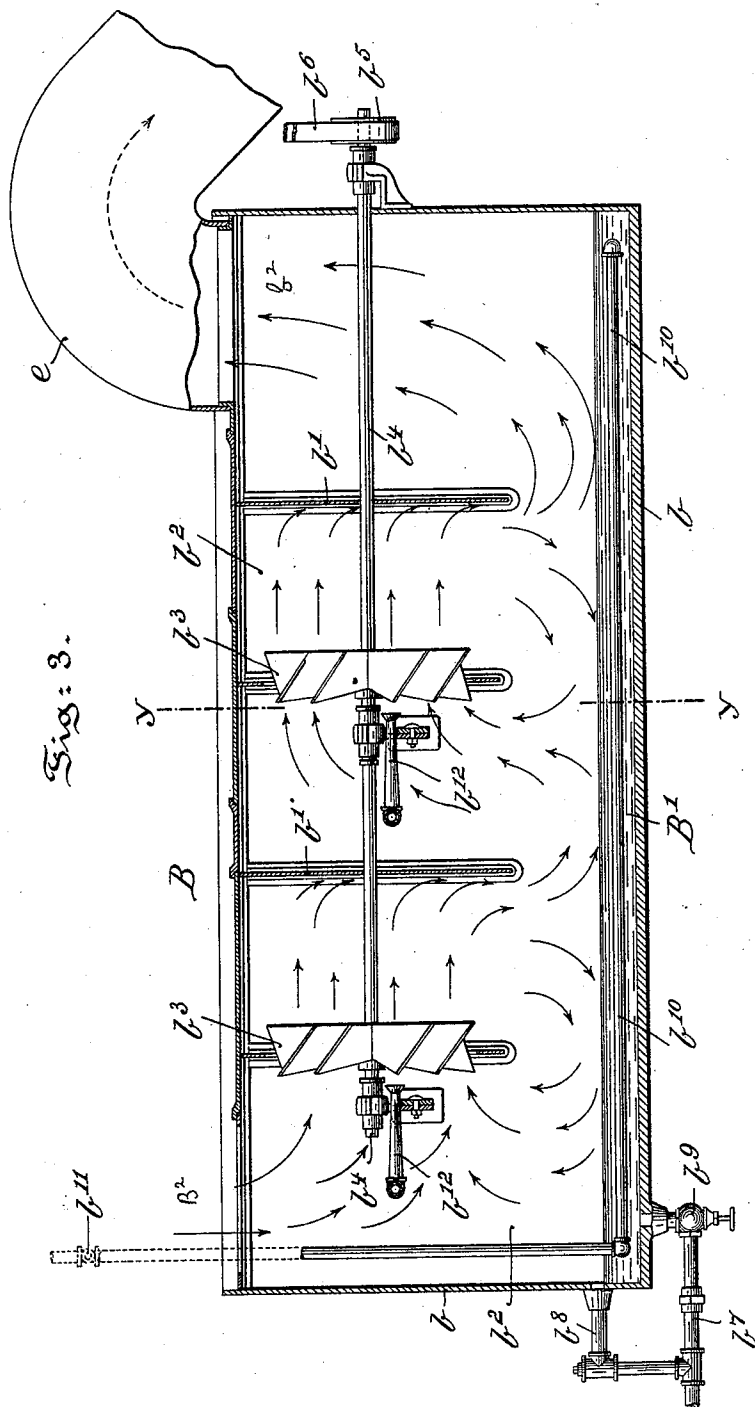
(No Model.)

4 Sheets—Sheet 3.

J. K. PROCTOR.
APPARATUS FOR ORDERING TOBACCO.

No. 588,530.

Patented Aug. 17, 1897.



Witnesses:

Wilhelm Vogt
Thomas M. Smith

Inventor:
Joseph K. Proctor,
By Walter D. Dwyer
Attorneys.

(No Model.)

4 Sheets—Sheet 4.

J. K. PROCTOR.
APPARATUS FOR ORDERING TOBACCO.

No. 588,530.

Patented Aug. 17, 1897.

Fig. 5.

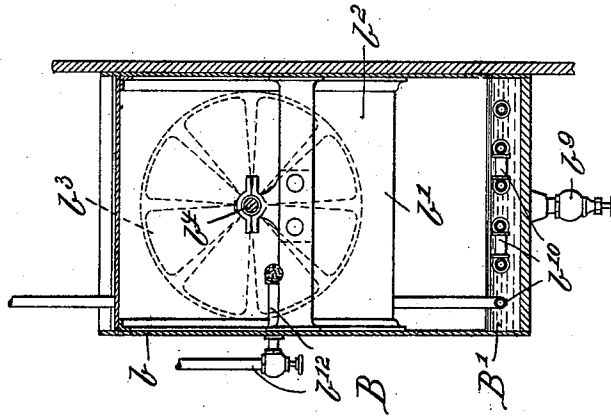
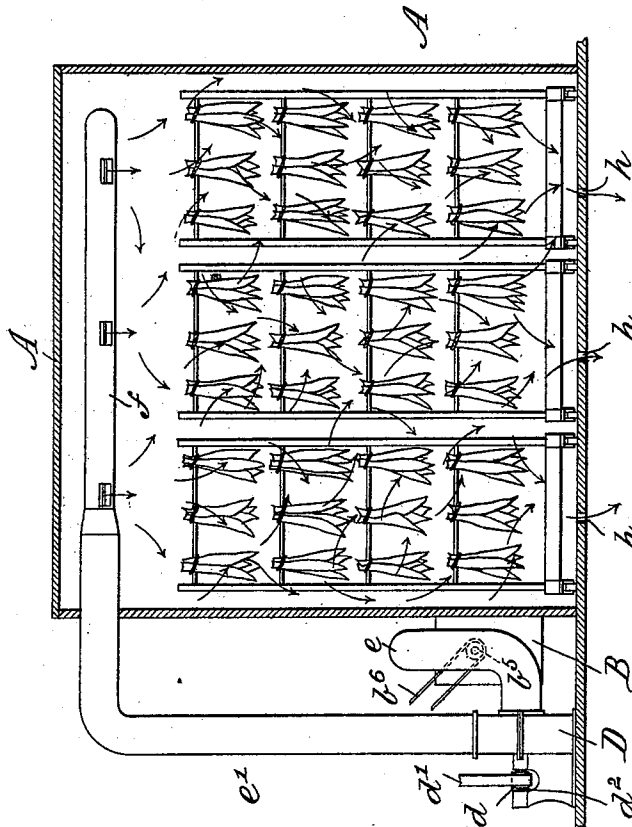


Fig. 4.



Witnesses:
Wilhelm Vogt
Thomas M. Smith

Inventor:
Josiah K. Proctor
By J. Walter Douglass
Attorneys.

UNITED STATES PATENT OFFICE.

JOSIAH K. PROCTOR, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO THE PHILADELPHIA TEXTILE MACHINERY COMPANY, OF SAME PLACE.

APPARATUS FOR ORDERING TOBACCO.

SPECIFICATION forming part of Letters Patent No. 588,530, dated August 17, 1897.

Application filed December 16, 1895. Serial No. 572,238. (No model.)

To all whom it may concern:

Be it known that I, JOSIAH K. PROCTOR, a citizen of the United States, residing at the city of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in an Apparatus for Ordering Tobacco, of which the following is a specification.

My invention has relation to an apparatus for the ordering of tobacco, and it relates particularly to the construction and arrangement of such an apparatus.

The principal object of my invention is to provide in a tobacco-ordering apparatus, in conjunction with an inclosure or structure wherein tobacco or other fibrous material is placed, a humidizing apparatus located without the structure and adapted to humidize, temper, and otherwise condition the outside atmosphere and to force the same under pressure through the inclosure, from which it in turn escapes into the outside atmosphere.

My invention, stated in general terms, comprises an apparatus for mechanically creating in a separate structure a humid atmosphere and supplying under pressure and maintaining the same uniform in a structure or building in substantially the manner hereinafter described and claimed.

The nature and scope of my invention will be more fully understood from the following description, taken in connection with the accompanying drawings, illustrating an apparatus of my invention adapted for the conduct of the method thereof, and in which—

Figure 1 is vertical central section through a structure or building adapted for the ordering of tobacco or treatment of fibrous materials embodying features of my invention. Fig. 2 is a top or plan view of the interior of the structure especially adapted for ordering tobacco, with the top removed, and also showing the humidizing appliance and its accessories and the perforated pipe connections and suction-blower connected therewith for presenting the humid atmosphere under pressure to the housing and with outlets in the bottom of the same. Fig. 3 is a vertical longitudinal sectional view through the humidizing appliance. Fig. 4 is a vertical cross-

sectional view on the line *xx* of Fig. 2, and Fig. 5 is a similar view on the line *yy* of Fig. 3.

Referring to the drawings, A represents the structure or building within which the operations are conducted and having in connection therewith the separate air-humidizing appliance B. The structure or building A is of oblong shape for internally receiving racks or trucks, as shown in Fig. 1, for supporting tobacco during ordering of the same or other fibrous material during treatment thereof.

The humidizing appliance B consists of an oblong chamber *b*, the casing of which may be of metal, and which is located outside of the building A. The appliance is provided with a series of internal dash or baffle plates *b'*, dividing the same into chambers *b²*, in each of which is a fan *b³*, mounted on a longitudinal shaft *b⁴*. This shaft is actuated by means of a pulley *b⁵* and belt *b⁶* from any suitable source of power. (Not shown.)

In the bottom of the chambered appliance B is established a body of water *B'* through pipes *b⁷* and *b⁸*, the former being provided with a stop or regulating cock *b⁹*. In the top or roof of the humidizer B is formed an inlet or opening *B²*, through which air from the external atmosphere is drawn into the humidizer.

b¹⁰ is a steam-coil located in the body of water *B'* from any suitable source and having a shut-off cock *b¹¹*.

b¹² is a combined water and steam union leading downward and terminating in a rose, sprayer, or atomizer to one side of each of the fans *b³* for permitting of the churning by said fans of the same along with the air heated and fogged by the steam-coil *b¹⁰* and agitated and churned against the baffle or dash plates *b'*, so as to cause a thorough admixture or commingling of water therewith and a uniformly-tempered resultant atmosphere—that is, one having the required quota of water therein for delivering to the building or structure A by means of the suction-blower D, rotated by means of a pulley *d* and belt *d'*. The pulley *d* is mounted on a shaft *d²*, as clearly illustrated in Fig. 2 of the drawings.

e is a conduit connected with the blower D and the humidizing appliance B.

e' is a pipe connection leading from the blower D and connected with a transverse end perforated pipe *f* and the latter with perforated longitudinal pipes *g* and *g'*. The perforations therein are arranged at suitable distances apart and located below the roof of the structure or building A.

h represents a series of small exit-openings in the bottom of the structure or building A for the escape of the air deprived of its moisture or a portion from the structure or building.

It may be here remarked that the size of each of the series of openings in the longitudinal and transverse conduits beneath the roof of the structure of the building A is about twice that of the series of small exit-openings *h* in the bottom of the building. This is made necessary in order that the entire housing may be under pressure for imparting the moisture of the air to the matter or materials to undergo treatment therein and in order that the atmosphere after having conditioned such matter or materials freed of its moisture or a portion thereof may be liberated from the structure A through the small openings *h*. It should be, however, understood that this is the case continuously during the entire operation of the apparatus in its treatment of matter or materials therein, whereby is insured great uniformity in the action of the humid atmosphere in the structure or building A owing to its greater specific gravity than the constantly-liberated air freed of moisture or a portion thereof from the housing A.

I am aware that heretofore a humidizing apparatus has been used in conjunction with a tobacco-ordering apparatus, but usually in the same structure as that in which the tobacco is placed, and when so used the circulation has been continuously through the tobacco and the humidizing apparatus. I am also aware that it has been proposed to locate the humidizing apparatus outside the structure in which the tobacco is to be ordered and to connect the humidizer with the structure by means of inlet and outlet pipes, so that the circulation has been continuously through the tobacco and through the humidizing apparatus. My invention is distinguishable from these structures in that no true circulation is

established between the ordering-chamber and the humidizer, but, on the contrary, outside air is first conditioned in the humidizer and thereafter forced under pressure into the ordering-compartment, from which it escapes into the outside atmosphere.

Having thus described the nature and objects of my invention, what I claim as new, and desire to secure by Letters Patent, is—

In an apparatus for ordering tobacco, the combination with a structure wherein tobacco is adapted to be placed and wherein air under pressure is adapted to be maintained, of a humidizing appliance B, located without the structure, consisting of an oblong chamber *b*, with internal dash or baffle plates *b'*, dividing the same into chambers *b²*, in each of which is a rotatable fan *b³*, and in the bottom of which appliance a body of water B', is established by means of the pipes *b⁷* and *b⁸*, the former being provided with a stop or regulating cock *b⁹*, and in the roof of which appliance is provided an inlet or opening B², through which external air is drawn into said appliance, a steam-coil *b¹⁰*, located in said body of water B', said coil being provided with a cock *b¹¹*, a water and steam union *b¹²*, leading downward and terminating in a rose, sprayer, or atomizer, to one side of each of said fans for permitting of the churning by said fans of water along with air heated and fogged by said steam-coil and agitated and churned against said baffle or dash plates, a suction-blower D, for forcing the uniformly-tempered atmosphere to said structure, which latter is provided along the roof on the inside with longitudinal and transverse perforated pipes and with exit-openings in the bottom, the construction being such that matter to be treated in said structure is subjected to the action of a substantially non-circulatory or inert volume or mass of conditioned air from said appliance, substantially as and for the purposes described.

In testimony whereof I have hereunto set my signature in the presence of two subscribing witnesses.

JOSIAH K. PROCTOR.

Witnesses:

J. WALTER DOUGLASS,
THOMAS M. SMITH.