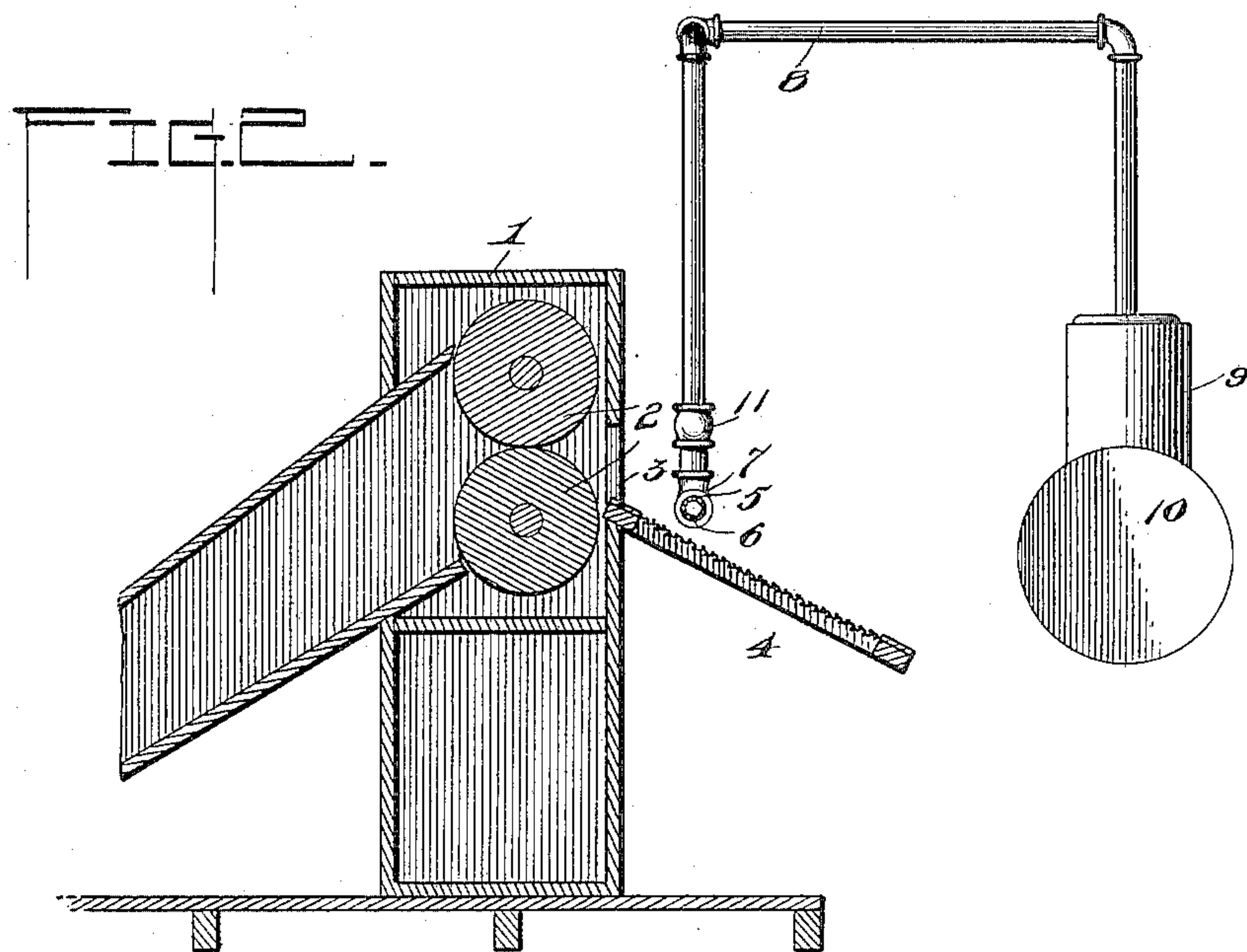
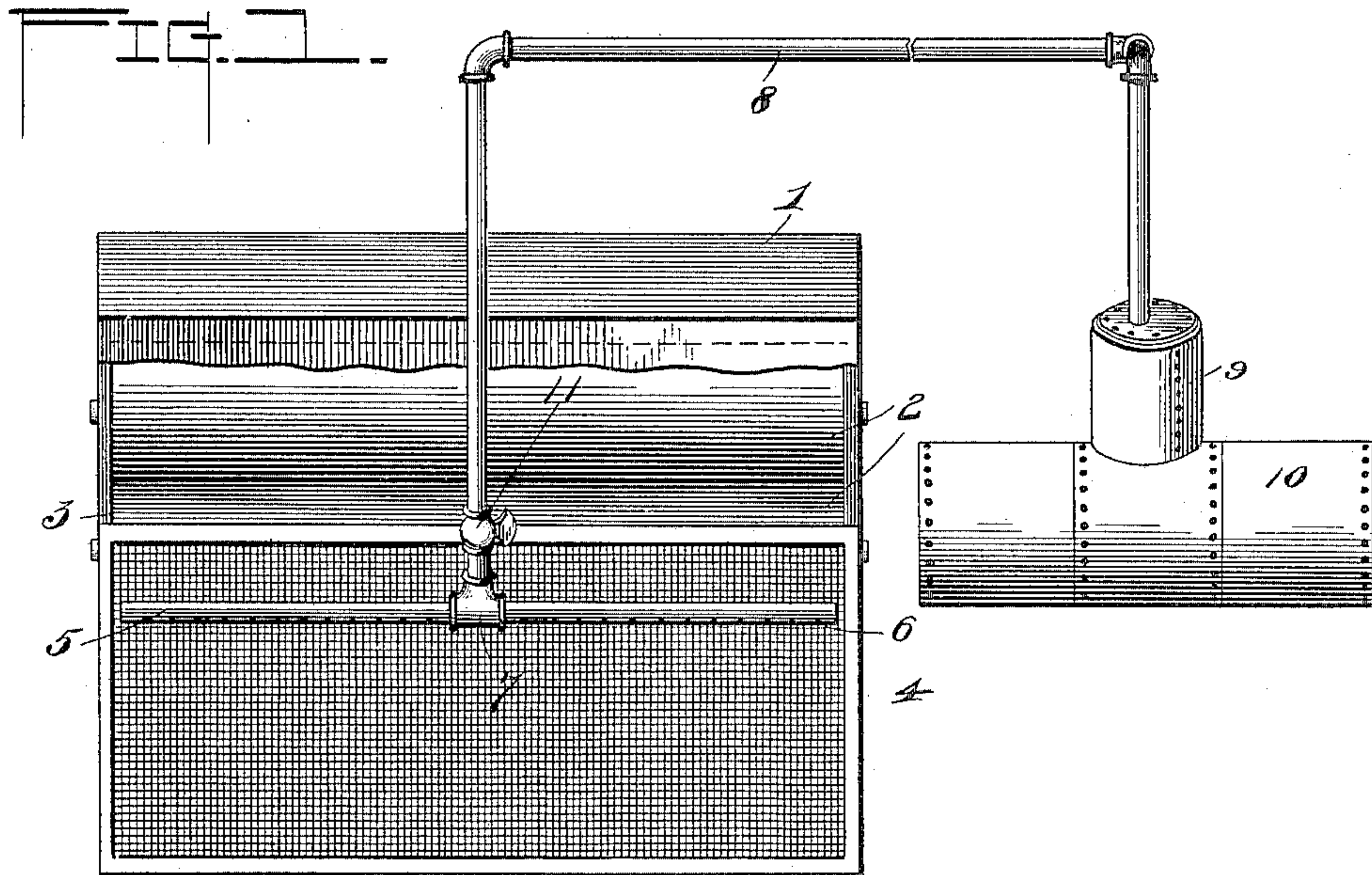


(No Model.)

C. VAN ORDEN.
APPARATUS FOR CLEANSING AND PREPARING COTTON FOR GINNING
AND BALING.

No. 599,272.

Patented Feb. 15, 1898.



Inventor

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Witnesses

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UNITED STATES PATENT OFFICE.

CHARLES VAN ORDEN, OF LAWRENCE, TEXAS.

APPARATUS FOR CLEANSING AND PREPARING COTTON FOR GINNING AND BALING.

SPECIFICATION forming part of Letters Patent No. 599,272, dated February 15, 1898.

Application filed September 30, 1895. Serial No. 564,237. (No model.)

To all whom it may concern:

Be it known that I, CHARLES VAN ORDEN, a citizen of the United States, residing at Lawrence, in the county of Kaufman and State of Texas, have invented a new and useful Apparatus for Cleansing and Preparing Cotton for Ginning and Baling, of which the following is a specification.

This invention relates to apparatus for cleansing and preparing cotton for ginning and baling; and it has for its object to provide novel and efficient means for cleaning cotton of dust and other fine impurities, while at the same time dampening it as it is fed into a gin or delivered from the condenser to the press. In the accomplishment of this object the invention is especially useful in treating the cotton as it is delivered from the condenser to the press as the lint-cotton is subjected to a final cleaning and is also placed in the best possible condition for baling, whereby the necessity of wetting the cotton in the press is entirely obviated.

While the invention finds special application in the dampening of cotton as it is delivered from a condenser to a press, it also has an important use in connection with seed-cotton fed to a gin, as by carrying out the invention in connection with seed-cotton the latter is subjected to a primary cleaning action, which serves to separate dust and light impurities therefrom, and is also placed in such a condition as to prevent the lint from being broken or cut by the gin-saws, thereby preserving the fiber in its natural length, and it is also a feature of importance in this connection that a dampening of the cotton preparatory to its introduction into the gin wets the same sufficiently to prevent ignition of the staple on its way through the gin from grit or friction.

With these and other objects in view, which will readily appear as the nature of the invention is better understood, the same consists in the novel construction, combination, and arrangement of parts hereinafter more fully described, illustrated, and claimed.

In the drawings, Figure 1 is a plan view, partly in perspective, of an ordinary cotton-condenser, showing the improved apparatus applied for use in connection therewith. Fig. 2 is an enlarged detail vertical sectional view

showing the screen delivery-apron and the screened steam spray-pipe.

While the invention is equally as well adapted for use in treating both seed and lint cotton, still, for the purpose of explaining the invention, the application of the apparatus is illustrated in the drawings in connection with an ordinary condenser, which forms the cotton into a bat prior to its baling, and, referring particularly to the drawings, the numeral 1 designates an ordinary cotton-condenser of the class referred to, having the usual pair of condensing-rolls 2 arranged at one side of the discharge-mouth 3, through which the bat of cotton is delivered from the rolls in the usual way.

To carry out the present invention, there is employed, in connection with the condenser, an inclined screen delivery-apron 4, which apron is rectangular in form and is of a length equaling the full width of the condenser, so as to receive thereon the entire bat as it issues from between the two condensing-rolls. The inclined stationary screen delivery-apron 4 has the upper edge thereof fitted against the condenser-casing at the lower edge of the discharge-mouth 3 thereof, while the lower edge of the said apron is adapted to be arranged over the upper end of the press-box of an ordinary baling-press to provide for directing the bat of cotton from the condenser into the press for baling.

At a point adjacent to the mouth 3 of the condenser and above the plane of the stationary delivery-apron 4 is arranged a stationary horizontal spray-pipe 5 of a length approximately equaling the length of the said apron and provided in its lower side with a plurality of jet-orifices 6, which are formed in the pipe from end to end thereof and serve to spray the steam in jets to the bat of cotton as it passes over the screen-apron 4 into the press. The stationary horizontal spray-pipe 5 has coupled thereto at a point between its ends by means of an ordinary T-coupling 7 one end of a supply-pipe 8, the other end of which pipe preferably extends to the drum 9 of an ordinary steam-boiler 10; but said supply-pipe may of course be extended from any source of steam-supply for the purpose of delivering a supply of steam to the pipe 5, which is arranged lengthwise above the screen delivery-

apron. At any suitable point the supply-pipe 8 has fitted thereto a controlling valve or cock 11, by means of which the supply of steam to the spray-pipe may be readily controlled or
5 entirely cut off at will.

In the operation of the condenser the bat of cotton issues out of the mouth 3 and passes over the inclined delivery-apron 4 into the press-box of the press, and as the bat of cotton takes this course steam is sprayed from
10 the pipe 5 over the entire bat, the effect of which spraying is to expel dust and other light impurities from the lint which may remain therein and cause such dust and impurities
15 to work through the meshes of the screen-apron 4, thereby giving the cotton a final cleaning before it is pressed into a bale. The spraying of the cotton with steam also serves to dampen the same sufficiently to place it in
20 the best possible condition for compact and thorough pressing without danger of injury to the staple.

By changing the location of the delivery-apron to a point adjacent to the mouth of the
25 roll-box of the gin the wet cotton can be treated in precisely the same way as just de-

scribed in connection with the condenser, and the same effect is produced—namely, to clean the cotton and place it in the best possible condition for being operated upon by the gin. 30

Having thus described the invention, what I claim, and desire to secure by Letters Patent, is—

An apparatus for cleaning and preparing cotton for ginning or baling, comprising a
35 stationary inclined screen-apron over which passes the supply of cotton, a horizontal stationary spray-pipe arranged longitudinally of the apron in a plane directly above the same and provided throughout the entire length
40 thereof in its under side with a plurality of jet-orifices, and means for supplying said spray-pipe with steam under pressure, whereby the said pipe will forcibly jet the steam against the cotton on the screen and thereby cause
45 the dust and other impurities therein to be forced through the meshes of the screen, substantially as described.

CHARLES VAN ORDEN.

Witnesses:

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