8857X

2 Sheets—Sheet 1.

W. WHITTEMORE, Jr.

Cotton Gin.

Patented May 29, 1835.

Fig: 1.

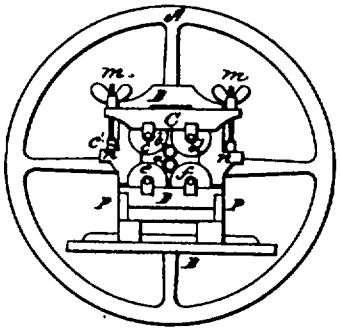


Fig: 2.

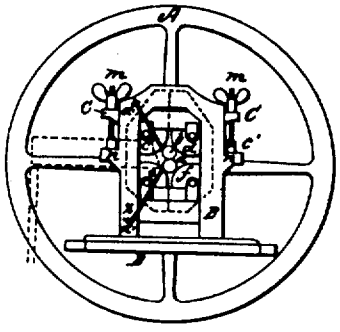
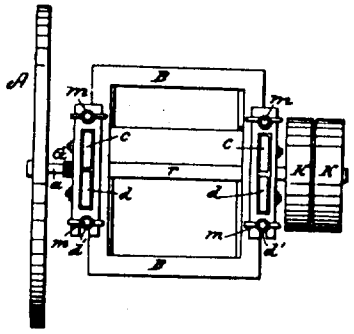


Fig: 3.



9857X

2 Sheets—Sheet 2.

W. WHITTEMORE, Jr.

Cotton Gin.

Patented May 29, 1835.

Fig: 1.

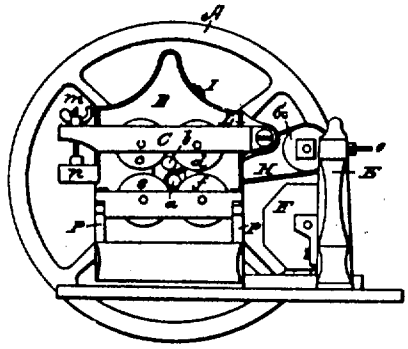


Fig: 2.

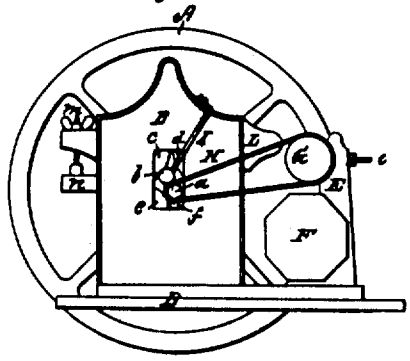
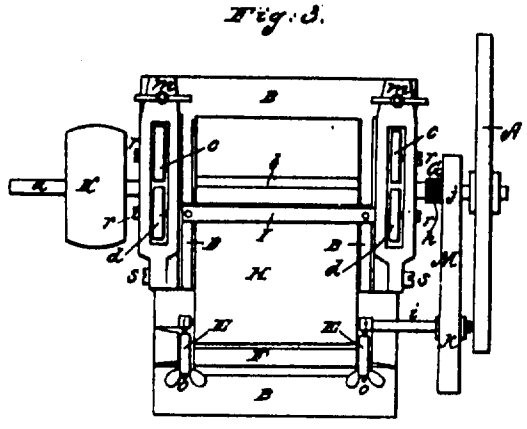


Fig: 3.



8857X May 29. 1835 135.

William Whittemore

The Schedule referred to in these Letters Patent and making part of the same containing a description in the words of the said William Whittemore the younger himself of his improvement in the machine used for separating seeds from Cotton called the roller Gin

To all to whom these presents shall come. William Whittemore the younger of West Cambridge in the County of Middlesex and State of Massachusetts sends greeting

Be it known that I the said William Whittemore have invented made and applied to use a new and useful improvement in the machine used for separating seeds from Cotton commonly called the Roller Gin. being an improvement upon my Machine or improvement for which Letters Patent were granted to me bearing date the seventh day of March in the year of our Lord Eighteen hundred and thirty four for a description of which improvement hereto fore patented to me Reference to the specification and drawings annexed to the said Letters Patent and to the drawings thereof hereto annexed, I do hereby specify my new improvement as follows, namely. The figures in the plate numbered one represent the patented improvement and the figures in the plate numbered two represent my new improvements thereon. In plate numbered two, figure one represents a side view of the Machine, figure numbered two represents a sectional view of said Machine. figure numbered three represents a birds eye view of said Machine.

I dispense with the endless leather band B represented in said drawing and described in said specification and with the roller G. the cleaner D. and the pulley E. E. and their necessary appendages represented in said drawings and described in said specification; and for the purpose

polished cast steel rollers b. represented in said drawings and described in said specification. I substitute a wooden roller and I use another guard D. like the guard I represented in said drawing and described in said specification to be applied to the roller (A) represented in said drawings and described in said specification in the same way as the guard I. is applied to the roller b. at the same angle from a perpendicular, but upwards instead of downwards as is the guard I. The guards D. and I. are fastened by means of screws to small projections on the posts B.B. which projections are represented in plate numbered two by a a. instead of being fastened as the guard I. was represented to be fastened in my said specification. This roller is about eleven inches long and at the end three fourths of an inch in Diameter swelling gradually to about seven eighths of an inch in the middle part in order to allow for the springing and make all parts bear more equally on the under roller a. Instead of the wooden roller swelling it may be made throughout of the same Diameter and the steel roller made to swell. I prefer however to have the wooden roller swell. Cast steel or wrought iron bearings are then put and pinned to the wooden roller towards each end of the friction rollers as represented and described in said drawing and specification. Which I substitute for the said cast steel roller to move upon. This wooden roller is made of some very hard wood, I prefer walnut or hickory. If the wood is boiled either in linseed oil or water before being used it becomes much harder stiffer and firmer and less much liable to crack. This wooden roller should be turned or made as smooth as possible. The guard is of sheet iron and passes from below the centre of the frame, D to a little above the centre of the steel roller a. coming very nearly in contact with the roller in the same way as the guard

guard I. is situated with respect to the roller b. reversing that the guard I is applied downwards and the guard D. upwards. The advantages of using such wooden rollers as I have described with a metallic roller instead of two metallic rollers or two wooden rollers are that the band and its appendages used with the metallic rollers may be dispensed with. and the metallic lower roller a being thus filed or made rough will retain the roughness sufficiently for drawing through the Cotton Longer than a wooden roller, and such metallic roller cannot well be used with an upper roller of metal without the use of a leather band or some other thing between them. And the wooden roller is much more easily made and less expensive than a roller of steel, but not so durable, and one steel roller will operate in conjunction with a wooden roller as well or better than two wooden rollers In my improved machine I also use what I call preventers represented in plate number two figure 6 by the dotted lines e. they are placed on the inside of each of the posts B B. These preventers are each composed of two pieces of thin sheet iron or other suitable material, one of these pieces is placed on the post B. B. at the back side of the machine and between the guards and the posts B. B. and is so constructed as to fit closely or very nearly so upon the rollers. A (see b. the other part is made to lap over the first part at the top, and is there fastened with the other piece to the post B. B. by the screw b. which serves as a hinge or swivel upon which both parts open and shut. This part is so constructed as to shut down very closely or nearly so like the other part upon the rollers 2 and 6 on the front side of the Machine and when shut down presenting with the other part nearly an uniform surface. These two parts are constructed in the same manner and are precisely similar

The

The object of these presentes is to prevent the cotton and cotton seeds from coming in contact with the friction rollers. In my improved machine I also use screws M. M. M. M. with thumb nuts at each end of the prices of C.C. instead of cast iron using as before the screws m.m. at one end while the prices of cast iron C.C. moved upon the bolt s. at the other end as a hinge or swivel. The advantage of having screws at each end is that thereby the prices of cast iron C.C. are made to regulate more equally the bearing and pressure of the friction rollers e.d. e.d. On the front side of the machine the screws M.M. are made with a joint c.c and small prices d.d. are cut out of the prices of cast iron C.C. so as to permit the screw M.M. on the front to be bent or turned down and the prices of cast iron C.C. to be removed.

The object of this is to enable the operator to remove the wooden roller b. with more ease, speed and facility when it becomes worn or unfit for use, or when for any other cause it becomes desirable to remove it. I also use while operating my improved machine, a small wooden trough to receive the cotton represented in plate number two figure two by the red lines. This is placed upon the guard B about one half of an inch from the upper edge. This trough is about seven inches long and about seven inches wide. The object of this trough so applied and used is to catch the cotton after the seeds are pressed out. This trough is composed of a flat piece of board with two sides placed at right angles about three and a half inches high and is supported by a support e. of the same width with the bottom piece and about four inches long. What I claim as new and as my invention and improvement is as follows to wit 1.st The construction, application and use of such wooden or steel

or

roller
n metallic and such friction rollers and guards as are
before mentioned in reference to and as are described in
my said Letters Patent for the purpose of separating
the seeds from cotton. 2nd The application and
use of the wooden triangle placed against the ground
K in the manner combination and for the purpose
herein before mentioned and described. 3d the con-
struction application and use of those parts which
I call precentors represented by the dotted lines as
aforesaid in plate numbered two fig 2 in the
manner combination and for the purpose aforesaid.
In testimony Whereof I have hereto set my hand this
fifteenth day of October in the year of our Lord
one thousand eight hundred and thirty four.

Witness
Augustus H. Frike
Francis Gardner Jr

William Whitmore Jr

Esq. N.Y.

1595 w 85]

(Drawing)