J. E. Allen.

Dressing Tobacco.

No. 5,817. Patented Oct. 3, 1848.

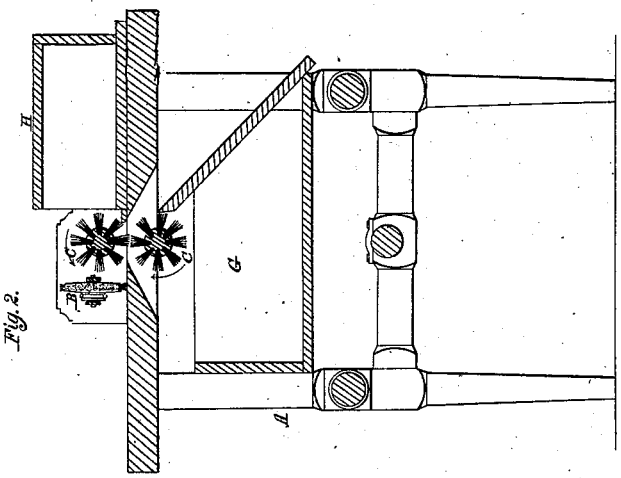

Fig. 2.

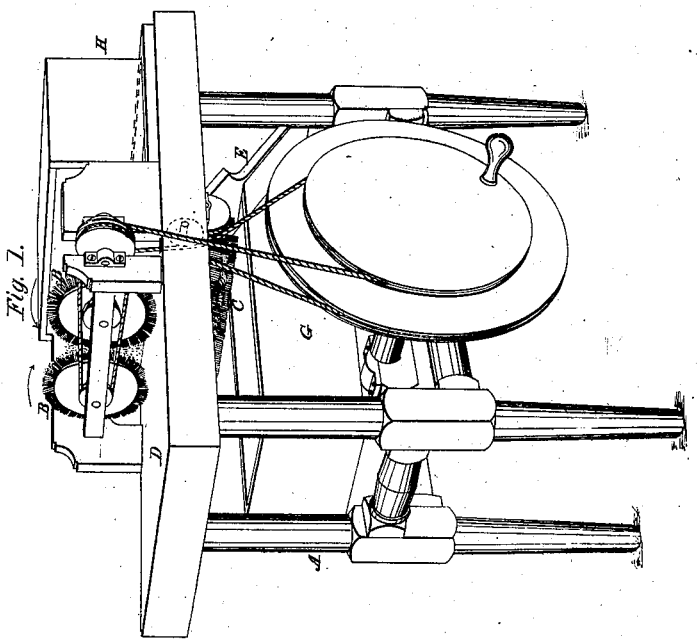

Fig. 1.

UNITED STATES PATENT OFFICE.

JAMES E. ALLEN, OF GRANVILLE COUNTY, NORTH CAROLINA.

IMPROVEMENT IN MACHINERY FOR CLEANING TOBACCO-LEAVES.

Specification forming part of Letters Patent No. **5,817**, dated October 3, 1848.

To all whom it may concern:

Be it known that I, JAMES E. ALLEN, near Oxford, Granville county, State of North Carolina, having invented a new and useful Machine for Brushing Tobacco, called "Allen's Cylindrical Tobacco-Brush," which is described as follows, reference being had to the annexed drawings of the same, making part of this specification.

Figure 1 is a perspective view of the machine. Fig. 2 is a longitudinal section of the machine.

Similar letters in the several figures refer to corresponding parts.

The present mode of brushing tobacco by hand is found to be not only a very tedious and expensive operation, but altogether insufficient, as all persons who use the article in the form of chewing-tobacco sadly experience from the loss of their teeth by constantly grinding the grit thereon, which remains on the leaf during the process of curing it for want of the application of proper mechanical means to remove it, such as my machine is designed to furnish.

The nature of my machine consists in combining and arranging in a suitable frame, A, four cylinder-brushes, B B C C, in pairs, the axis of one pair being parallel and at right angles to the other pair, which are likewise propelled and made to turn simultaneously by suitable gear of bands and pulleys or other means—one pair, B B, turning toward each other, and the other pair, C C, toward each other—the first pair, B B, opening and spreading the leaf of tobacco and partially brushing it transversely from the center to the sides, and the other pair, C C, then receiving it between them, and brushing it effectually on both sides simultaneously, the tobacco being introduced to the said brushes by a horizontal plane or table, D, and discharged or conducted to a receiver by an inclined plane, E, between which planes the revolving cleaning-brushes C C are placed, the spreading-brushes being arranged over the introducing or conducting table or plane, upon which the tobacco-leaf is spread, the cleaning-brushes being as long as the width of the leaf of tobacco, and the spreading-brushes being much shorter.

The frame A of this machine may be made of an oblong or other shape, and of any convenient size and suitable material.

The introducing or spreading table D may be horizontal or slightly inclined.

The discharging or conducting plane E may be arranged at any suitable angle.

The revolving spreading-brushes for opening and spreading the leaf of tobacco upon the table may be made of any convenient length and diameter suitable for the purpose intended, and of any suitable materials—say about one or two inches long and five or six inches in diameter—turning in suitable boxes in the frame by bands and pulleys arranged in the manner represented in Fig. 1, or in any other convenient way, having their axes in the same horizontal plane and above the table, and made to turn from the center toward the sides of the table at any desired velocity, the circumference of the brushes touching the table slightly.

The revolving cleaning-brushes for brushing off all grit, ~~dust, dirt, or other injurious substances~~ from the tobacco-leaf simultaneously on both sides are made of any suitable size and material—say from nine to twelve inches long, three inches diameter—with a speed of about three or four hundred revolutions per minute, or any desired velocity suitable for the purpose intended, arranged at or near the middle of the table, with their axes in the same vertical plane—one above and the other below the table—and revolving in contrary directions toward each other, with their peripheries touching slightly in a line nearly coincident with the horizontal plane of the table, the motion of the brushes being produced by bands and pulleys arranged in the manner represented in Fig. 1, or some other convenient mode for producing the required result.

The power to propel the machine may be manual, steam, or other power applied by means of a crank or pulley, or otherwise, to a driving-shaft, such as that represented at Fig. 1, on which there may be pulleys and bands or other more suitable gearing.

The grit from the lower brush must be discharged in a receiver, G, below the inclined plane, and the grit from the upper brush, C, must be thrown into a receiver, H, placed upon the rear part of the table.

The leaf of tobacco to be opened, spread, and brushed is first laid upon the table D and brought in contact by hand with the peripheries of the revolving brushes B B, which are caused to turn at the rate o three or four hun-

dred revolutions per minute. These open and spread the leaf from the center to the sides, and partially brush it and free it of some of its impurities. It is then received between the two cleaning-cylinders C C, which brush the upper and under surface effectually as it passes through between them, and delivers it upon the conducting or discharging board E, which conducts it to the receiver. In this manner each leaf of tobacco is treated.

What I claim as my invention, and wish to secure by Letters Patent, is—

The mode of spreading and brushing tobacco by rotary brushes, in the manner substantially as above set forth.

April 9, 1847.

JAS. E. ALLEN.

Witnesses:

BENJ. C. COOKE.

J. H. GOOCH.