

(No Model.)

J. J. FAULKNER.
COTTON SEED LINTING MACHINE.

No. 462,633.

Patented Nov. 3, 1891.

FIG. I.

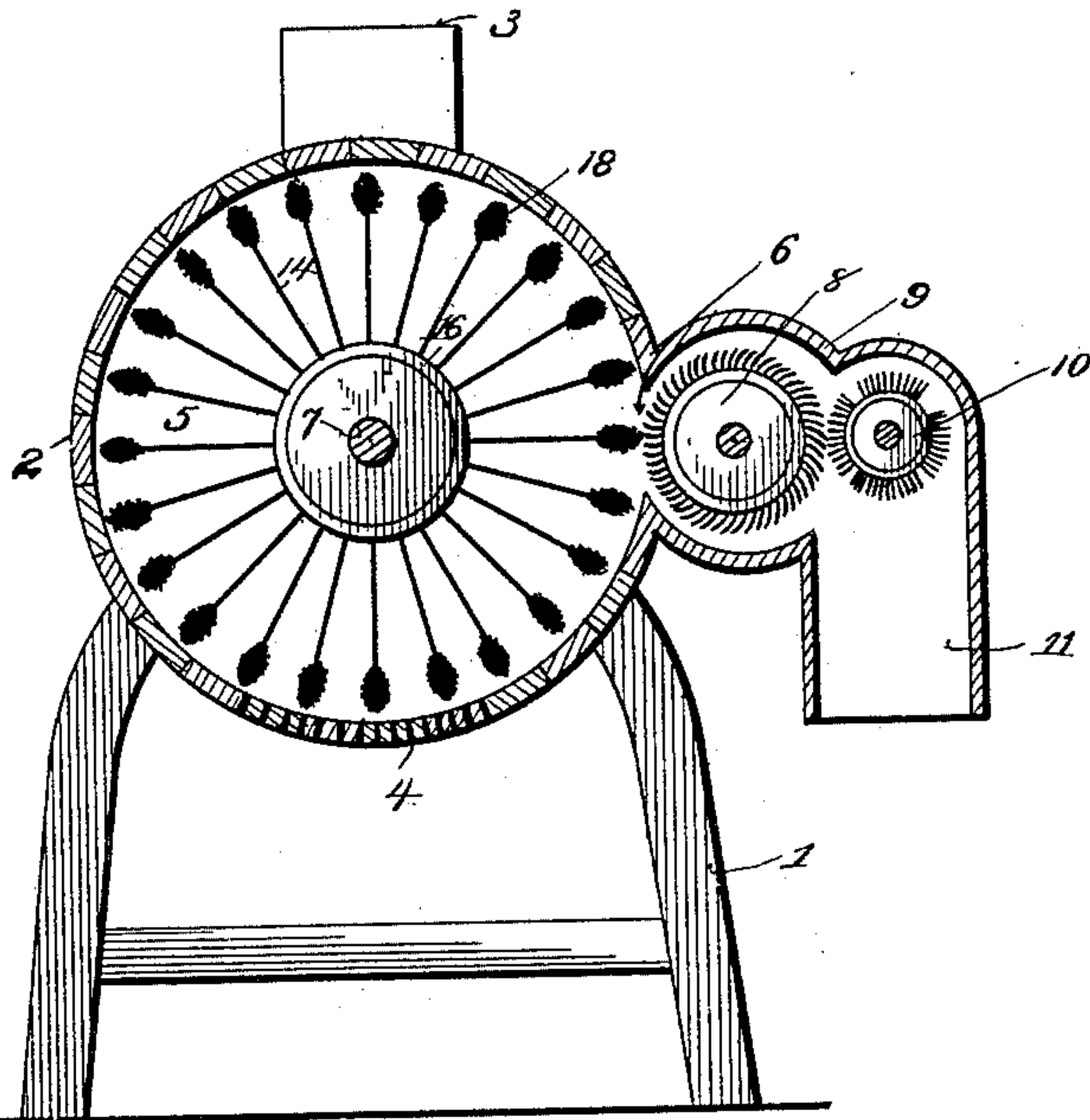


FIG. II.

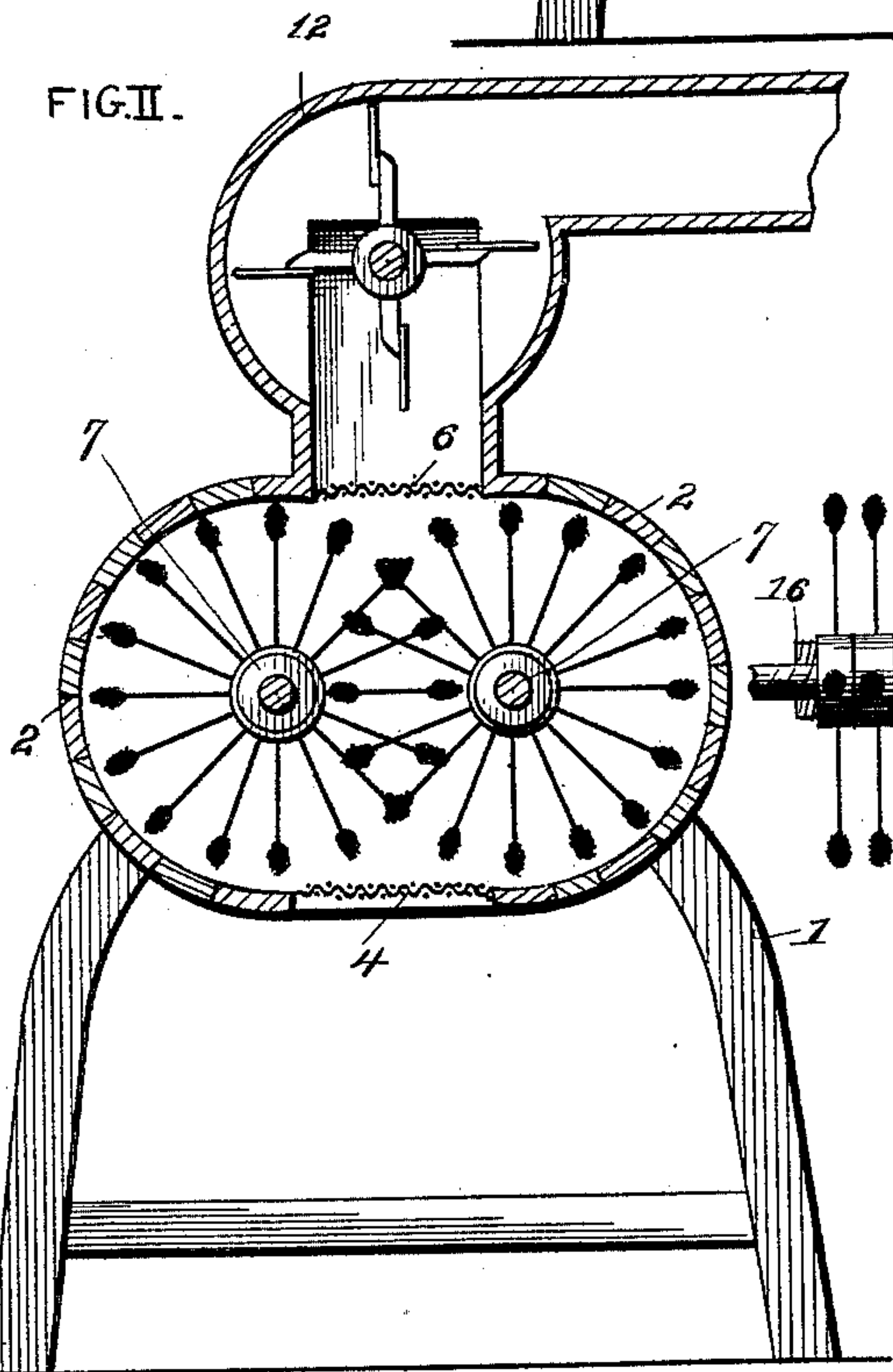
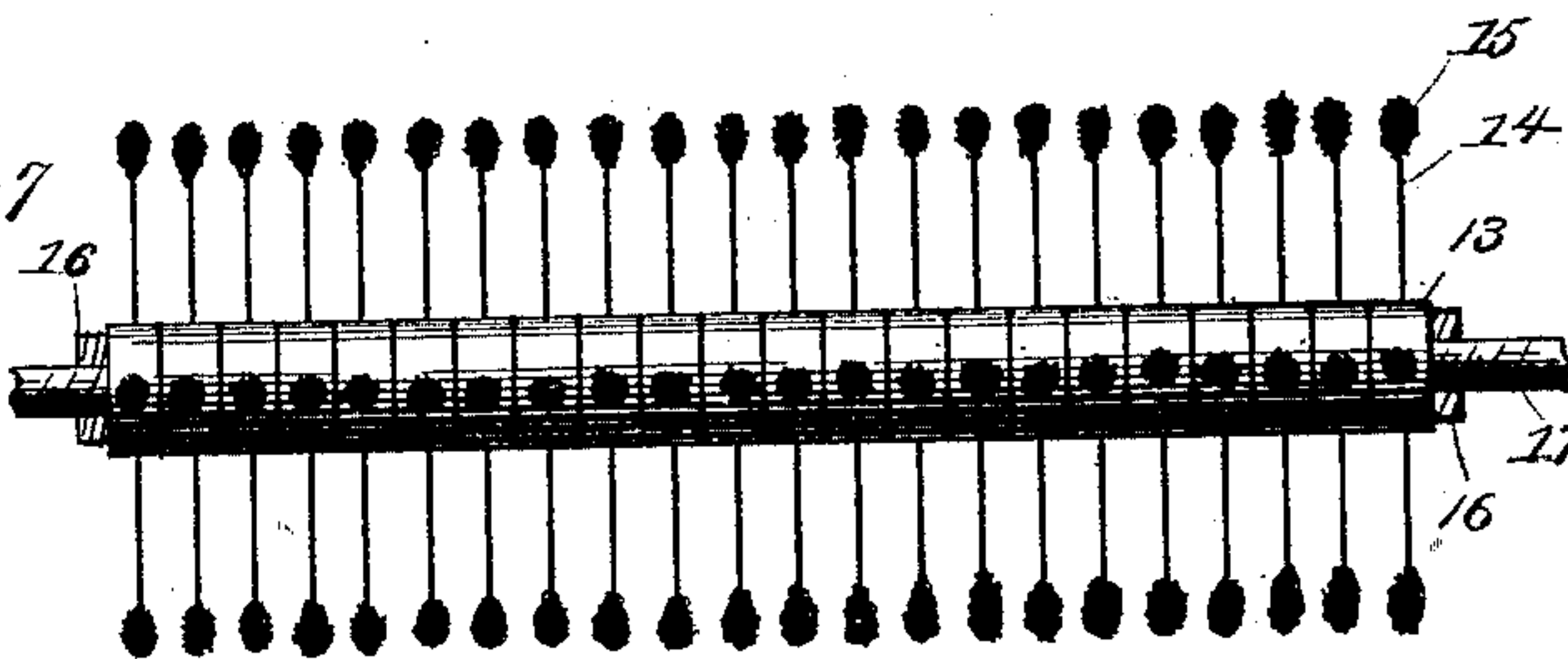


FIG. III.



Witnesses:

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Inventor:

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UNITED STATES PATENT OFFICE.

JAMES J. FAULKNER, OF MEMPHIS, TENNESSEE, ASSIGNOR OF TWO-THIRDS TO THE NATIONAL COTTON SEED OIL AND HULLER COMPANY, OF SAME PLACE.

COTTON-SEED-LINTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 462,633, dated November 3, 1891.

Application filed December 24, 1890. Serial No. 375,686. (No model.)

To all whom it may concern:

Be it known that I, JAMES J. FAULKNER, a citizen of the United States, residing at Memphis, in the county of Shelby and State of Tennessee, have invented certain new and useful Improvements in Cotton-Seed-Linting Machines, of which the following is a specification.

This invention relates to machines for removing the lint from the cotton-seed in which the seed is fed into a cylinder having a hopper, a scouring-agitator, a seed-outlet, and a lint-outlet, with means for drawing the lint through said outlet.

My present invention consists in certain improvements in the agitator and the lint-collecting device, as will hereinafter more fully appear.

The agitator consists of one or more drums or shafts having radiating pins or beaters constructed of flexible material, and provided each at its end with a bulb or knob of scouring material, such as emery, sand, or a special preparation to be hereinafter referred to.

The device for removing the lint consists of a cylinder provided with carding-teeth mounted in a suitable casing, which communicates at one side with the cylinder and provided with a suitable doffer located above a chute.

In order that the invention may be better understood, I will proceed to describe the same with reference to the accompanying drawings, in which—

Figure I represents in transverse section one form of my machine. Fig. II represents a similar view of another form, and Fig. III is a detail view of the agitator.

1 represents the frame; 2, the casing; 3, the feed-hopper; 4, the perforated bottom of the casing; 5, the agitator, and 6 the lint-outlet.

7 is the main shaft that runs through the cylinder and drives the agitator.

The casing may be constructed in any suitable and well-known way and coated on the inside with a composition hereinafter described, and the whole may be supported by any suitable frame or stand.

The agitator may be single, as represented in Fig. I, and the lint be withdrawn therefrom

by means of the carding-cylinder 8, mounted in a casing 9 and having a doffer 10 located over a chute 11; or a double agitator may be used having intermeshing radial pins or feeders, as shown in Fig. II, and the lint may be drawn off therefrom through a guarded outlet 6 by means of a suction-fan 12.

The agitator consists of a number of sections or rings 13, having closely-arranged radial pins 14, on the ends of which are formed bulbs or knobs 15, preferably of a special composition, to be hereinafter described. These rings or sections 13 are placed upon the shaft 7 and are secured in fixed relation by means of jam-nuts 16, engaging the threaded portion 17 of the shaft 7.

The agitating arms or pins 14 consist of switches of any suitable flexible material, such as ordinary wood, bamboo, or rattan, and even steel strips might be used; but I prefer to employ the materials first named.

For the scouring composition, with which the pins or arms 14 and the interior of the casing are coated, I use either a mixture of Japan varnish and emery, which is applied and then baked, or a mixture of gutta-percha and emery or other grinding material, and the rubber may be hot or in a cold liquid state, or rubber may be substituted for gutta-percha. Further than this, I may use a mixture of the above ingredients, or I may use the rubber without the emery. I therefore desire it understood that I do not limit myself to the use of any particular composition of matter as an abrading-coating for my apparatus, though I have found the above-mentioned material to be very efficient in working with damp or wet material, as it is better adapted to engage and tear off the fiber and is not effected by moisture, it being understood that it is advantageous to wet or moisten the seed before introducing it into the machine.

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

1. In a cotton-seed linter, the combination, with a casing having an inlet and an outlet for the seed, of an agitator consisting of a supporting drum or shaft and a number of radial

flexible pins or beaters projecting therefrom, substantially as and for the purpose set forth.

2. In a cotton-seed linter, the combination, with a suitable casing having an inlet and an outlet for the seed, of an agitator consisting of a supporting shaft or drum and a number of flexible radiating beaters having their ends coated with bulbs of concrete scouring composition, substantially as and for the purpose set forth.

3. In a cotton-seed linter, the combination, with a suitable casing, of an agitator consisting of a supporting shaft or drum and a number of sections or rings mounted upon said drum and provided with flexible radiating pins or beaters and means for securing them upon the shaft, substantially as herein set forth.

4. In a linting-machine, the combination, with the casing, of two revoluble drums or shafts arranged in the same horizontal plane, having flexible intermeshing agitating arms, and said arms being provided at their outer ends with surrounding knobs or bulbs com-

posed of an abrading compound, substantially as set forth.

5. In a cotton-seed linter, the combination, with a suitable casing, of two intermeshing agitators consisting of the shafts or drums and the flexible radiating scouring pins or beaters overlapping, substantially as herein explained, and means for drawing off the lint.

6. In a cotton-seed linter, the combination of the casing having suitable inlet and outlet, an agitator consisting of a drum and radiating flexible pins or beaters located within said casing and having bulbs or knobs of scouring material, and the means for removing the lint, consisting of the carding-cylinder and doffer located in a suitable casing having communication with the agitator-casing and being provided with a discharge-spout beneath the doffer, substantially as set forth.

JAMES J. FAULKNER.

Witnesses:

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