

(No Model.)

C. W. BRIGG.
COTTON GIN BRUSH.

No. 369,041.

Patented Aug. 30, 1887.

Fig. 1.

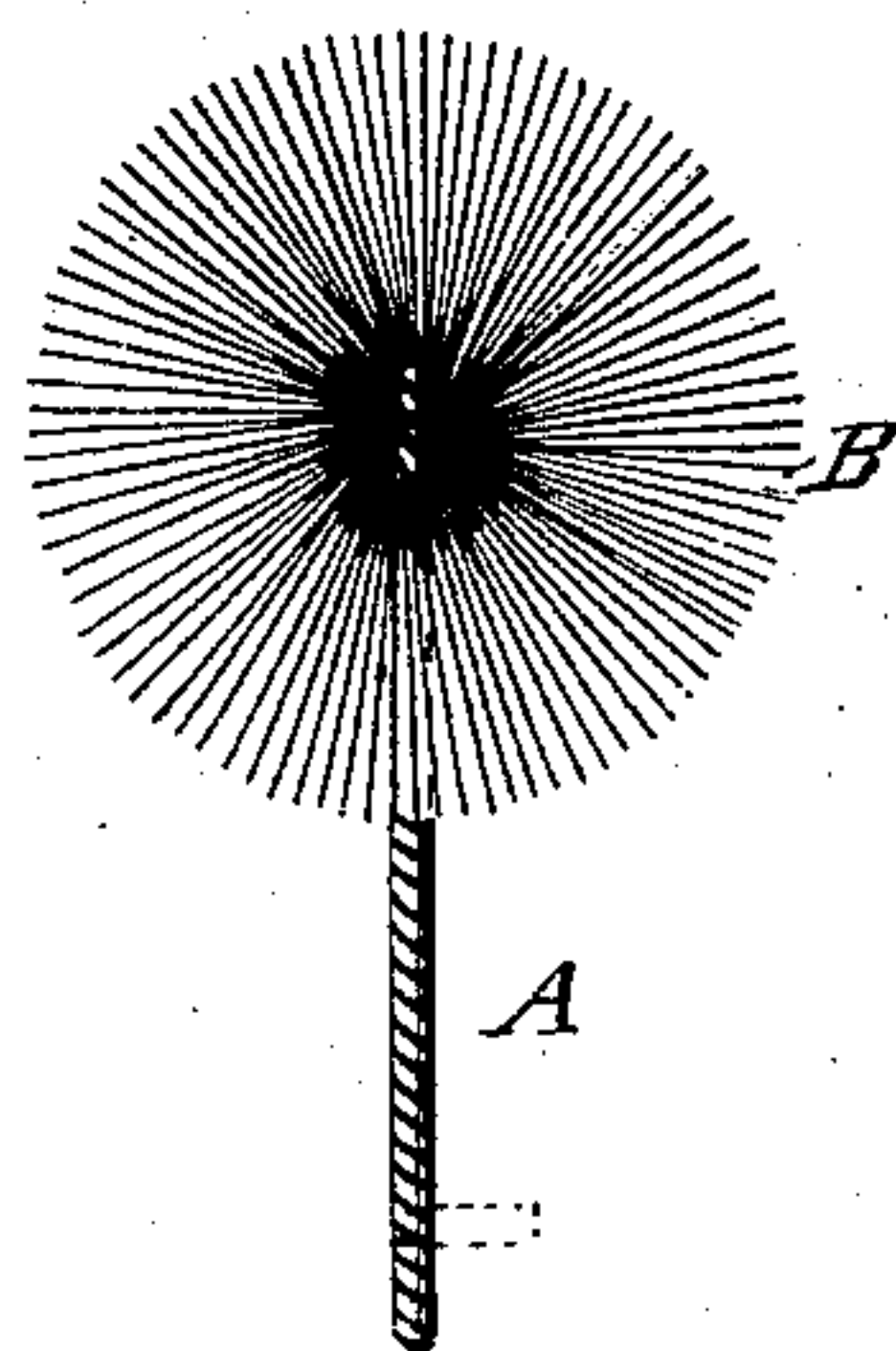


Fig. 2.



Fig. 3.

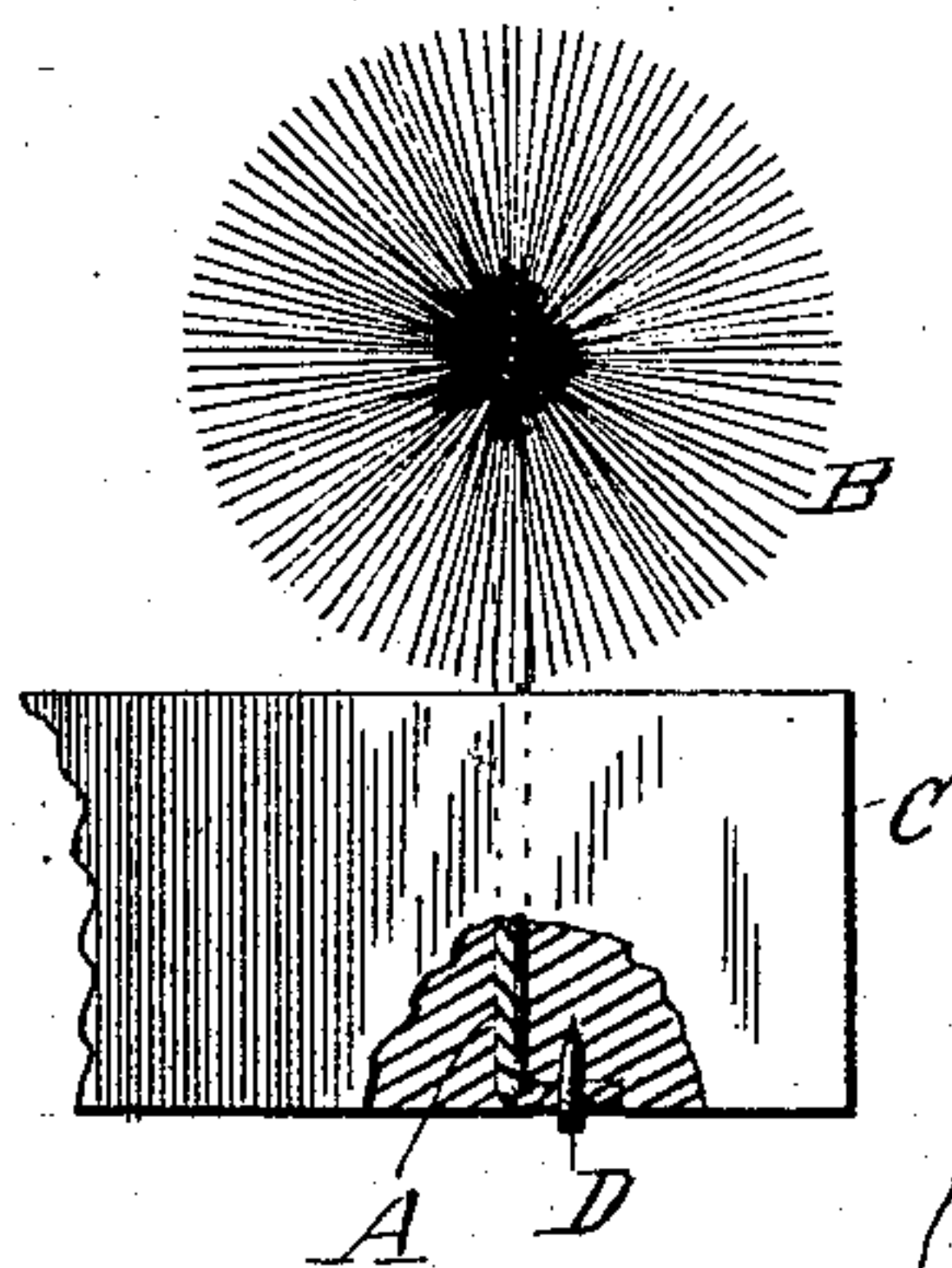


Fig. 4.

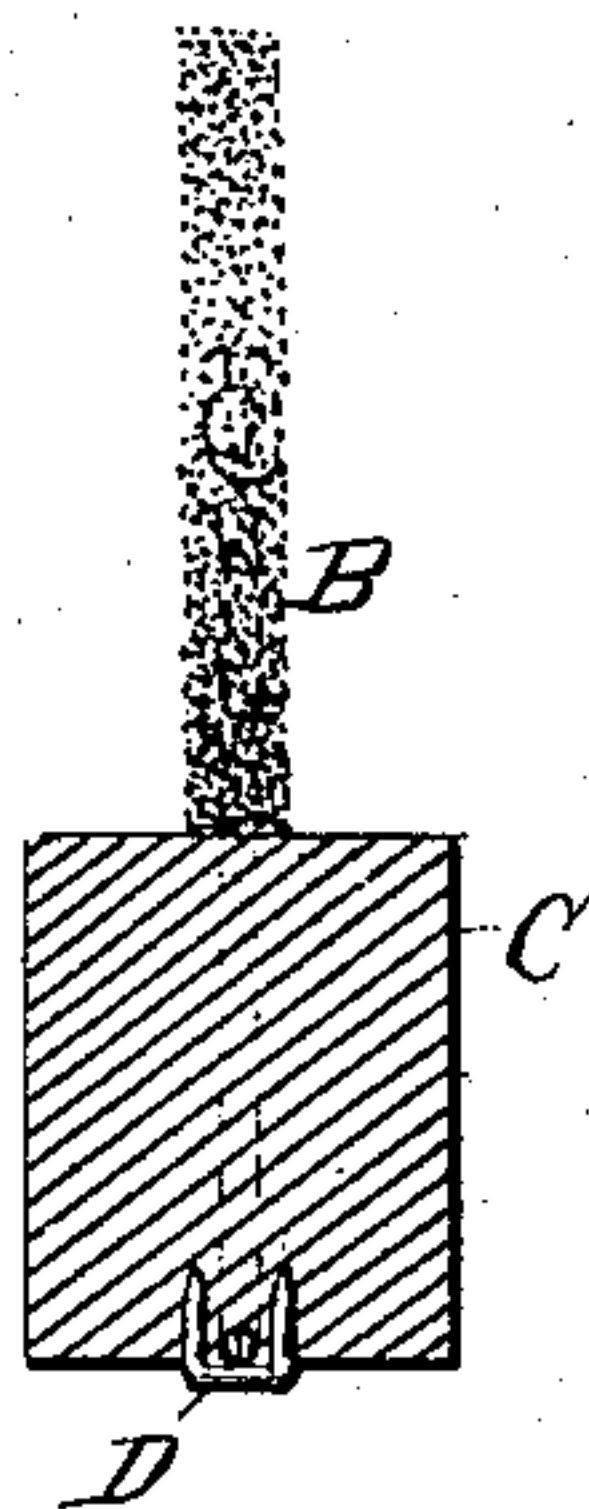
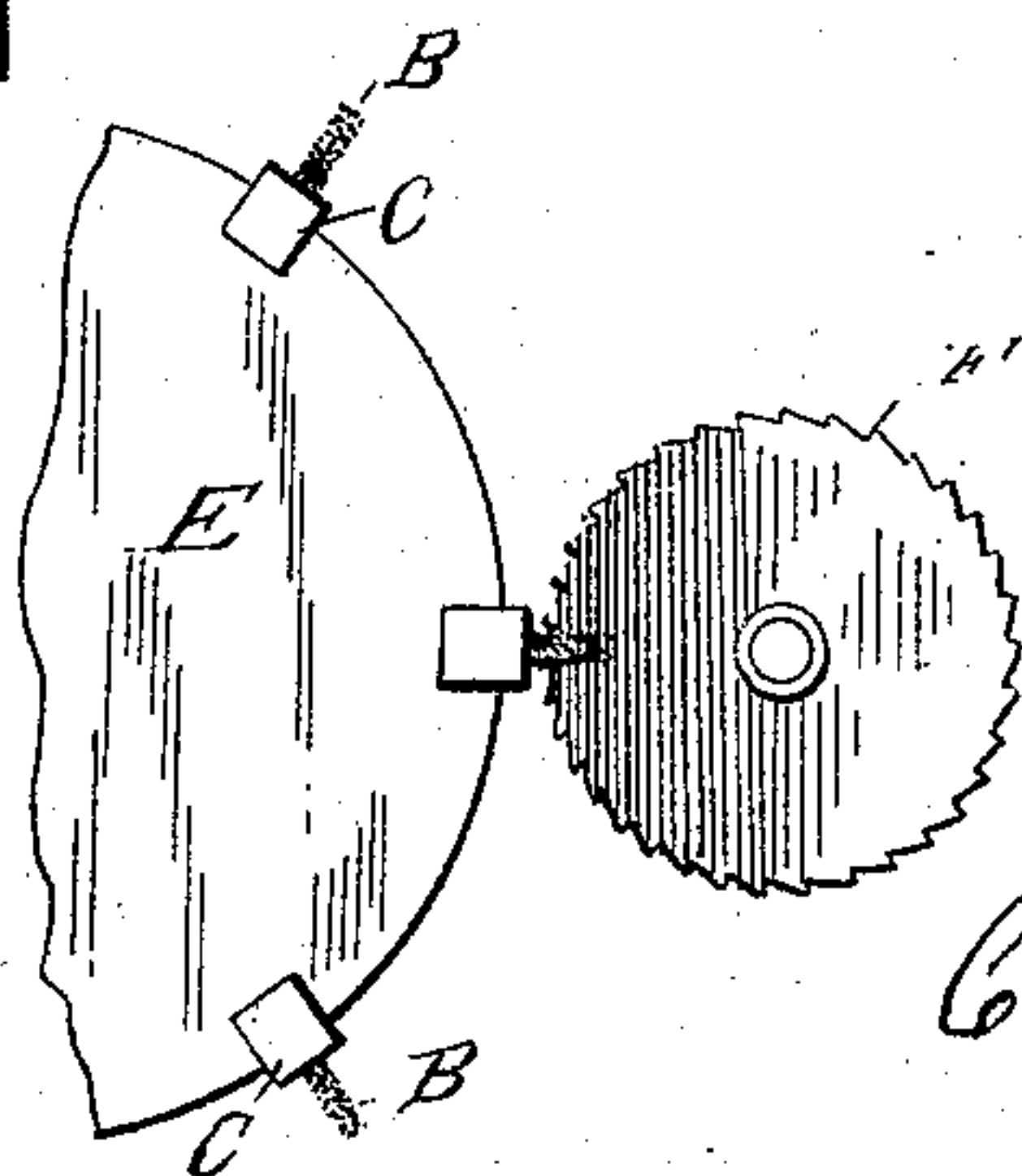


Fig. 5.



Witnesses
H. Raeder.

Thos. E. Robertson

Inventor
Charles W. Brigg

By his Attorney

T. W. Robertson

UNITED STATES PATENT OFFICE.

CHARLES W. BRIGG, OF BRISTOE, VIRGINIA, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO WILLIAM W. BRIGG AND M. B. HILLYARD, BOTH OF NEW ORLEANS, LOUISIANA.

COTTON-GIN BRUSH.

SPECIFICATION forming part of Letters Patent No. 369,041, dated August 30, 1887.

Application filed February 28, 1887. Serial No. 229,206. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. BRIGG, a citizen of the United States of America, residing at Bristoe, in the county of Prince William and State of Virginia, have invented a certain new and useful Improvement in Cotton-Gin Brushes, of which the following is a specification, reference being had therein to the accompanying drawings, in which—

10 Figure 1 represents an enlarged front view of my brush detached. Fig. 2 is a side view of the same, also enlarged and detached. Fig. 3 is a front view of a portion of a lag with a brush inserted therein, and having part broken 15 away; and Fig. 4 represents a cross-section of a lag with a brush in position. Fig. 5 is a view, on a smaller scale, of part of a gin, showing my improvement in position.

This invention is an improvement in cotton-gin brushes; and it consists in the peculiar construction of the brush and the manner of securing the same in the lag, as hereinafter more fully described and claimed.

In carrying out my invention I prefer to 25 proceed as follows: I take two or more suitable lengths of wire of the proper size and insert between them, near one end, the requisite quantity of bristles, whalebone, or other fibers or yielding substances to form a brush, and 30 then twist up the wires until the bristles or whatever materials the brush is made of are properly secured, in the well-known manner of making bottle-cleaning and other circular wire brushes, and which it is therefore unnecessary to describe further. The brush material is then at right angles to the axis of the 35 wires, and I next bend nearly or quite the whole of that portion of the wires embracing the bristles laterally back upon those portions of the wires containing no bristles, so that the 40 bristles radiate from a common center with the face of the disk parallel to the stem of the brush, thus effectually covering the latter for a distance equal to one-half the length of the bristles when viewed from the front, thus 45 forming a circular or disk-shaped brush of about one and one-eighth inch in diameter and about three-sixteenths of an inch thick, something like the sunflower in shape and in its

position on the stem. These brushes, when so 50 formed, are secured to the cylinder-lags as follows: Holes are bored in the lags C, in which are inserted the stems of the brushes, the ends of which are bent at right angles, as shown in Fig. 3 and in dotted lines in Fig. 1, so as to 55 turn under the lag, and then staples D are inserted in the lag—one over each bent end—whereby the brushes are securely and rigidly fastened and prevented from turning in the lag, which turning, if allowed, would defeat 60 the object of my invention. After the brushes are fixed in the lags the latter are secured to the cylinder E in such a manner as to have the flat sides of the brushes substantially parallel with the longitudinal axis of the cylinder E 65 and at right angles to the sides of the saws F. As in these brushes the flexible material radiates from the center of the stem, (no matter how irregularly, the more so the better,) I obtain a very effective brush with the least 70 amount of bristles, or whatever material may be employed, for by my invention a majority of the bristles or fibers perform effective and actual service in brushing the saws of the gins in which they operate, and they are therefore 75 especially adapted for discharging all the lint therefrom, as well as any accumulating gummy matter which is always found in saw-gins when in use.

I am aware that cylindrical brushes formed 80 of bristles held in wires have before been used in ginning cotton, as shown in the Patent No. 296,659; but mine essentially differs from those, for in that case each brush presents an inch or more of a solid perpendicular brush 85 to act against the saws, which construction required that the ends of the wires holding the bristles should project beyond the end of the brush, which ends were apt to catch and hold the lint, and the large body of bristles in 90 the brush acted in the same way, instead of rapidly throwing it off, so that the style of brush referred to, although appearing all right in theory, proved to be quite the reverse in practical operation. My brushes, however, 95 being simple disks, and having no large body of bristles and no projecting wire ends to catch and hold the lint, have been found in actual

practice to not only perfectly free the saws from lint and gummy matter, but to immediately throw off the lint, so that the ginning process is rapid, continuous, and without stop-
5 page to clear the saws.

What I claim as new is—

1. A cotton-gin brush of disk-like form having all its brushing material radiating from a common center, and having its flat face parallel
10 with its stem, substantially as described.
2. In a cotton-gin, and in combination with

the saws thereof, a brush of disk-like form arranged with its flat face substantially at right angles to the sides of the saws, substantially as described.

In testimony whereof I affix my signature, in presence of two witnesses, this 17th day of November, 1886.

CHARLES W. BRIGG.

Witnesses:

E. NELSON,
J. B. T. THORNTON.

15