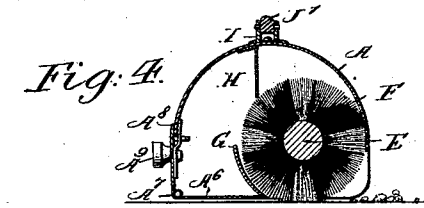
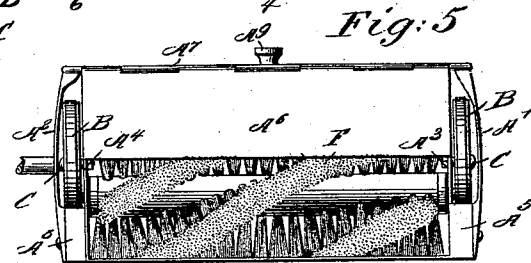
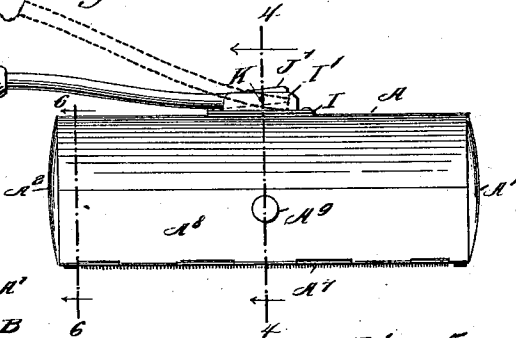
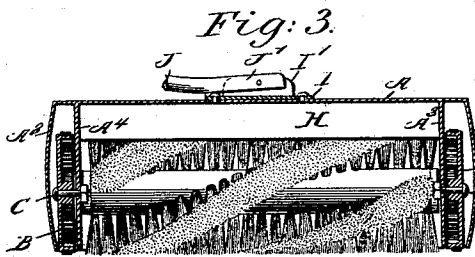
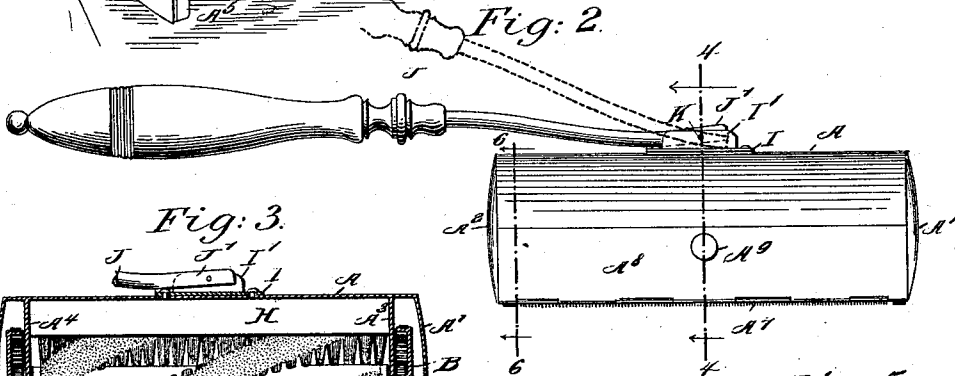
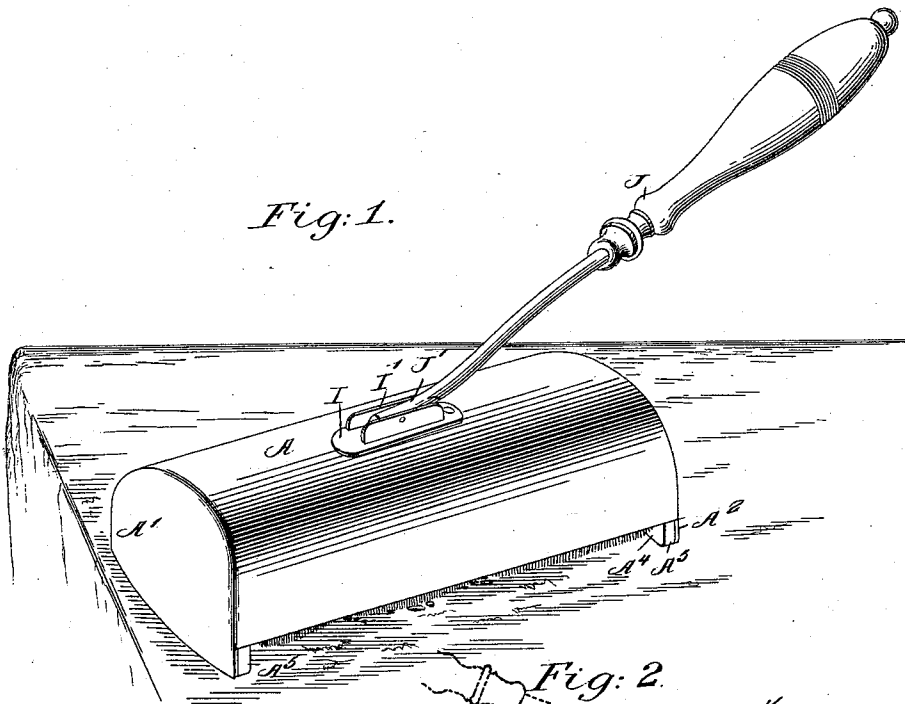


(No Model.)

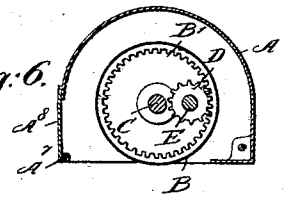
J. B. O. SHEVILL.
CRUMB REMOVER.

No. 536,050.

Patented Mar. 19, 1895.



WITNESSES:
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UNITED STATES PATENT OFFICE.

JAMES B. O. SHEVILL, OF NEW YORK, N. Y.

CRUMB-REMOVER.

SPECIFICATION forming part of Letters Patent No. 536,050, dated March 19, 1895.

Application filed September 20, 1894. Serial No. 523,622. (No model.)

To all whom it may concern:

Be it known that I, JAMES B. O. SHEVILL, of the city, county, and State of New York, have invented a new and Improved Crumb-Remover, of which the following is a full, clear, and exact description.

My invention is an improvement in that class of crumb-removers for table use which are provided with a revoluble brush arranged in front of a crumb-receiving pocket, or compartment.

My device comprises a longitudinally-slotted casing, which incloses the brush, together with its operating gearing, and a handle which is pivoted to the top of the casing and arranged in alignment with it, and likewise so constructed as to provide stops that limit the vertical movement or oscillation of the handle, relative to the casing, as hereinafter more fully set forth.

The invention consists of certain parts and details and combinations of the same, as will be fully described hereinafter and then pointed out in the claim.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of the improvement. Fig. 2 is a rear side elevation of the same. Fig. 3 is a sectional side elevation of the same. Fig. 4 is a cross section of the same on the line 4—4 of Fig. 2. Fig. 5 is an inverted plan view of the same; and Fig. 6 is a transverse section of the same on the line 6—6 of Fig. 2.

The improved crumb remover is provided with a casing A, made approximately semi-circular in cross section, as indicated in Fig. 4, the casing having the ends A', A² and transverse partitions A³, A⁴ arranged near the said ends A', A² respectively, so as to form compartments therewith for the driving mechanism of the remover. The partitions A³, A⁴ are connected to the ends A', A² at their bottom parts, by the plates A⁵, as plainly indicated in Fig. 5, and the said partitions are rigidly connected with each other at their ends and at their bottom edges by the bottom plate A⁶. See Fig. 5. On the rear edge of the latter is hinged at A⁷ a door A⁸, provided with a suitable catch A⁹ for locking the said door

to the rear end of the casing, and permitting opening of the said door to remove the crumbs gathered by the brush, as hereinafter more fully described.

In the spaces between the partitions A³, A⁴ and the ends A', A² of the casing A are arranged driving wheels B, preferably covered at their peripheries by a rubber band which extends upon the rim of the wheels and below the surface of the bottom plate A⁶, to support the casing above the table cloth, over which the remover is moved to gather up the crumbs.

The wheels B are journaled on studs C, supported in the partitions A³, A⁴ and each of the wheels B is formed with an internal gear B' in mesh with a pinion D secured on the respective outer ends of the shaft E, of the revoluble brush F, said shaft E being journaled in the partitions A³, A⁴. The brush F has its bristles preferably set spirally on the hub of the brush, as is plainly illustrated in Figs. 3 and 5, but I do not limit myself to this special construction of the revoluble brush.

By forming an opening in the casing in front of the lower part of the brush and by cutting away part of the lower front edge of the casing and part of the bottom, the said revoluble brush readily engages, sweeps up and removes the crumbs in the path of the casing, as the latter is wheeled over the table cloth. By the arrangements described, no additional trailing or supporting wheels are required.

The brush sweeps the crumbs upward over the curved bottom plate A⁶ (Fig. 4), into the pocket in rear of the latter, and any crumbs adhering to the brush are removed by the scraper, H, attached to the top of the casing, A.

The attachment and arrangement of the handle J, are as follows: The handle is pivoted to the top of the casing, in alignment with it, and projects beyond one of its ends, so that it may be conveniently grasped and held for the purpose of manipulating the crumb-remover proper.

The inner end of the handle shank, J', is slightly curved, and pivoted between lugs that project from a plate, I, attached to the top of the casing at a point equidistant from the ends of the same. The pivotal point is slightly removed from the end of the shank, J', and also from the plate, I, so as to provide

a narrow space between the latter and the shank. It is apparent that, by this construction and arrangement, the vertical movement or oscillation of the handle, J, relative to the casing, A, is limited by contact of the shank with said plate, I, at a point on each side of the pivot. Thus, the upward movement of the handle, J, is limited by contact of its free end with said plate, as shown by dotted lines 5 Fig. 2, and its downward movement is limited by contact of the body of the shank with said plate, on the inner side of the pivot, as shown by full lines, Fig. 2. Practically, therefore, the movement of the handle and casing relative to each other is limited by stops arranged 10 adjacent to the pivot of the former.

The crumb-remover may be swept over a table like the hand-brush commonly used, without any difficulty in keeping the casing and brush in contact with the cloth or other surface; and, when the device is lifted from the table, it may be held and carried horizontally, 20

that is to say, without danger of tilting vertically—which would permit dislodgment and escape of at least some portion of the crumbs 25 held in the pocket.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

The combination, with a casing, having a 30 pocket and longitudinal base opening, and a revoluble brush and gearing contained in said casing, of the handle, pivoted to lugs attached to the top of the casing and arranged in alignment with it, the pivotal point being removed 35 from the free end of the handle shank, as shown, whereby the vertical movement of the handle relative to the casing is limited as specified.

JAMES B. O. SHEVILL.

• Witnesses:

B. W. BOWEN,
A. S. PIDDING.