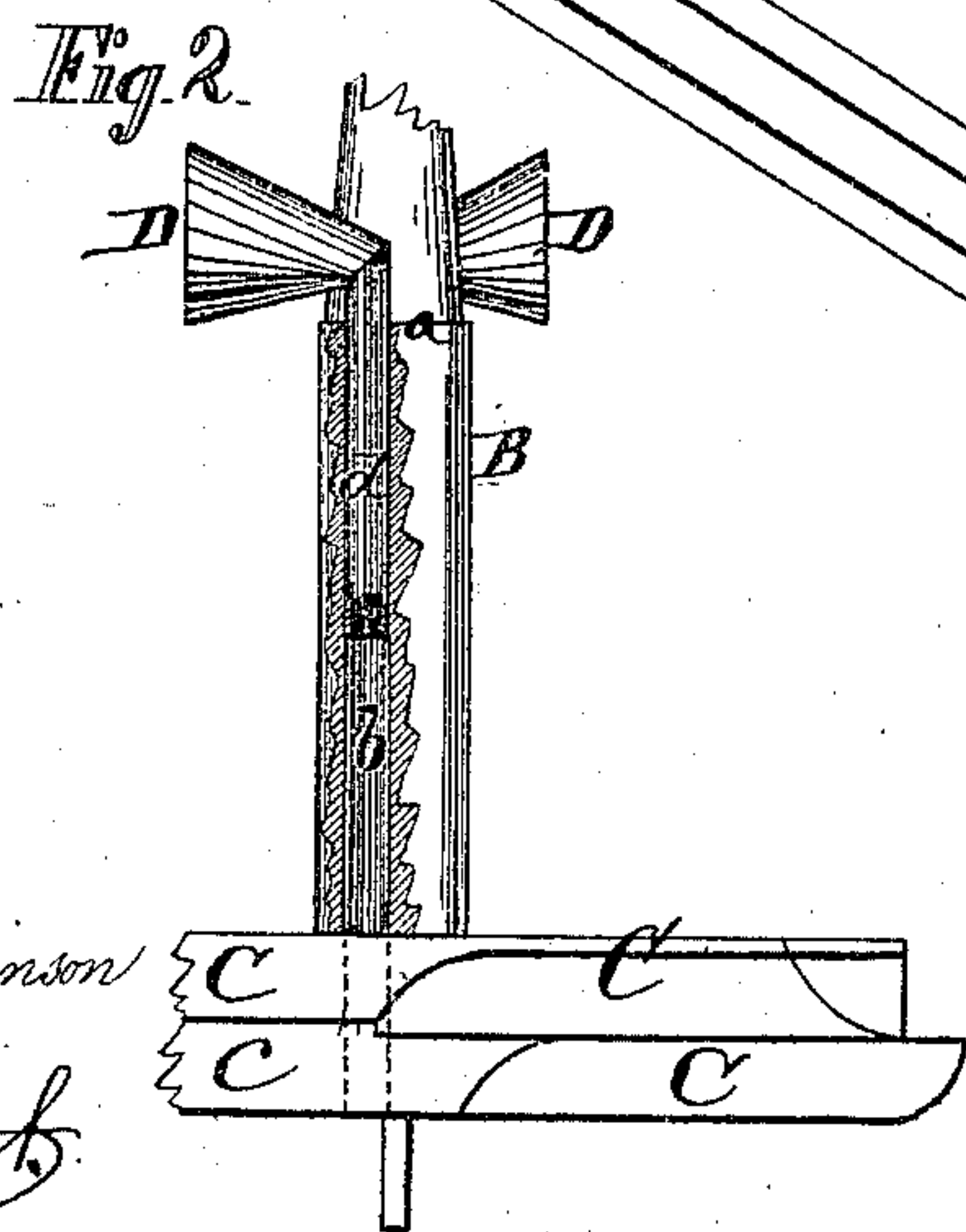
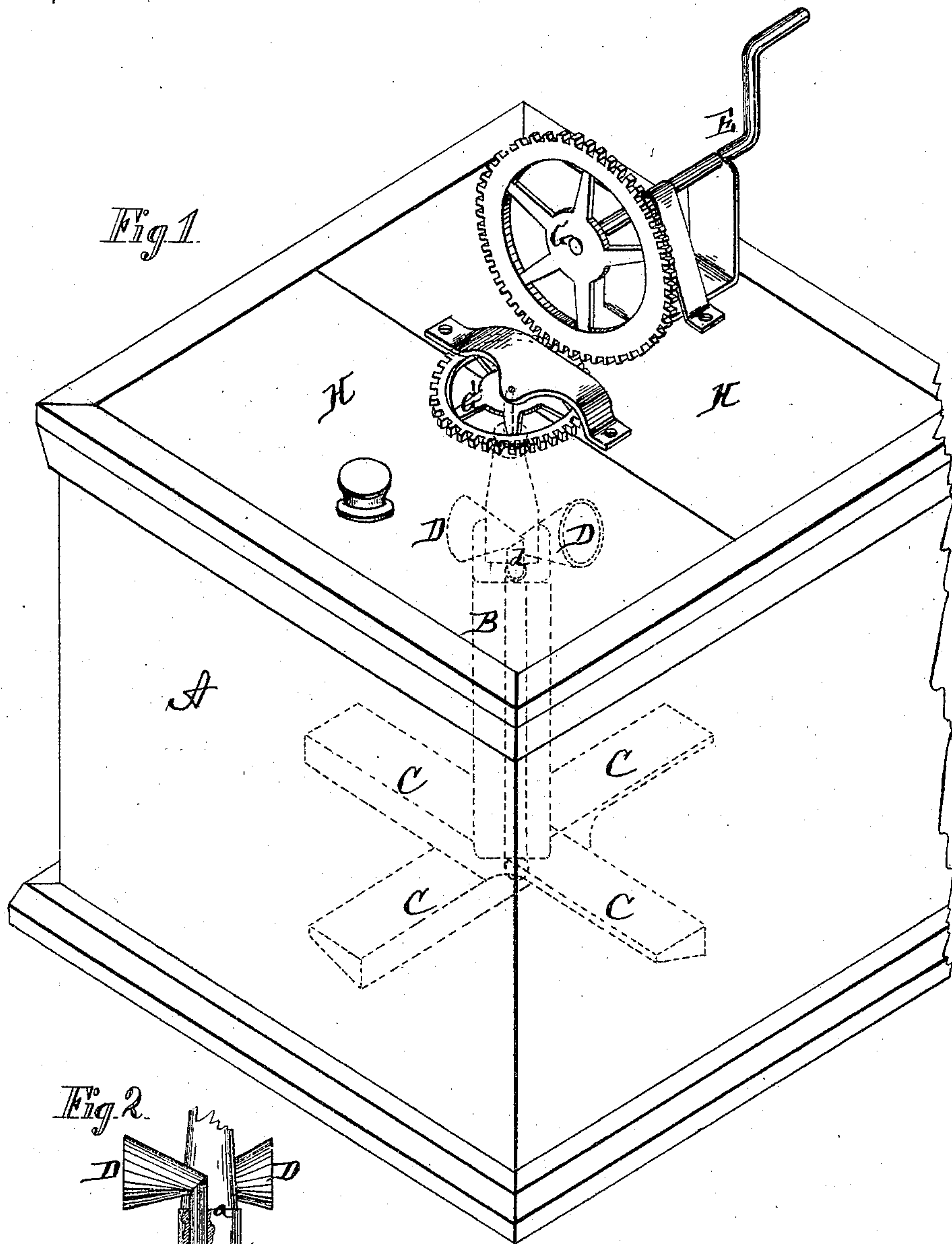


CHRISTIAN & BEACH.
Improvement in Churns.

No. 130,477.

Patented Aug. 13, 1872.



Witnesses:
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UNITED STATES PATENT OFFICE.

JOHN B. CHRISTIAN AND JAMES P. BEACH, OF HAMBURG, IOWA.

IMPROVEMENT IN CHURNS.

Specification forming part of Letters Patent No. 130,477, dated August 13, 1872.

To all whom it may concern:

Be it known that we, JOHN B. CHRISTIAN and JAMES P. BEACH, of Hamburg, in the county of Fremont and in the State of Iowa, have invented certain new and useful Improvements in Churns; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, and to the letters of reference marked thereon making a part of this specification.

The nature of our invention consists in the construction and arrangement of a "churn", as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which our invention appertains to make and use the same, we will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a perspective view of our churn, and Fig. 2 is a side view, part in section, of the dasher.

A represents a box of any suitable dimensions, in the center of which is an upright piece, B, provided with a journal at each end. At the lower end of this upright piece or shaft B are secured the dashers C C, which are arranged in the form of a cross, at right angles with each other. The under side of each dasher is beveled and made convex, as shown. The upper end of the shaft B is cut smaller, so as to leave shoulders or off-sets *a* on two sides, and from each of the same a passage, *b*, leads vertically downward through the shaft and the centers of the dashers, as

shown. In the upper end of each passage *b* is inserted a removable tube, *d*, having a funnel, D, formed on or attached to its upper end, said funnel being placed at right angles with the tube, as shown in Fig. 2. By this means, when the churn is in operation, air will be forced down under the dashers. These tubes extend only partially down the shaft, and can be extracted for cleansing, or for the purpose of replacing by new tubes and funnels whenever they get corroded or otherwise out of condition for effectual use.

The churn-dashers are operated by means of a crank-shaft, E, upon which is a cog-wheel, G, gearing with a similar wheel, G', on the upper journal of the center shaft B, all arranged on top of the lids H H of the box A.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

The dashers C C, constructed as described, with beveled convex under surfaces, in combination with the central vertical shaft B having passages *b b*, removable tubes *d d*, and funnels D D, all substantially as and for the purposes herein set forth.

In testimony that we claim the foregoing we have hereunto set our hands this 2d day of April, 1872.

JNO. B. CHRISTIAN.
JAMES P. BEACH.

Witnesses:

T. R. STOCKTON,
J. Y. SMITH.