

J. J. ROBINSON.
Rotary Churn-Dasher.

No. 164,215.

Patented June 8, 1875.

Fig. 1

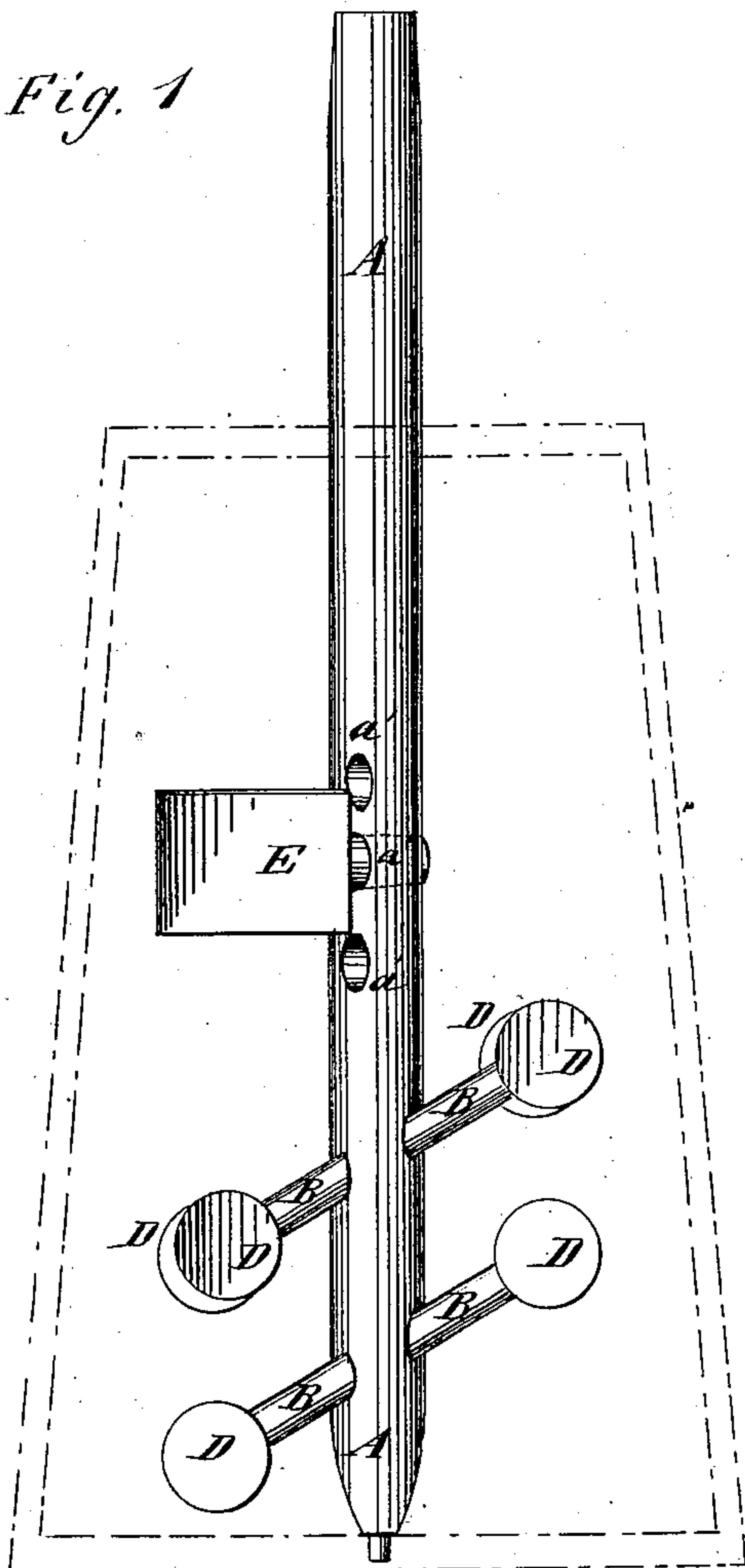
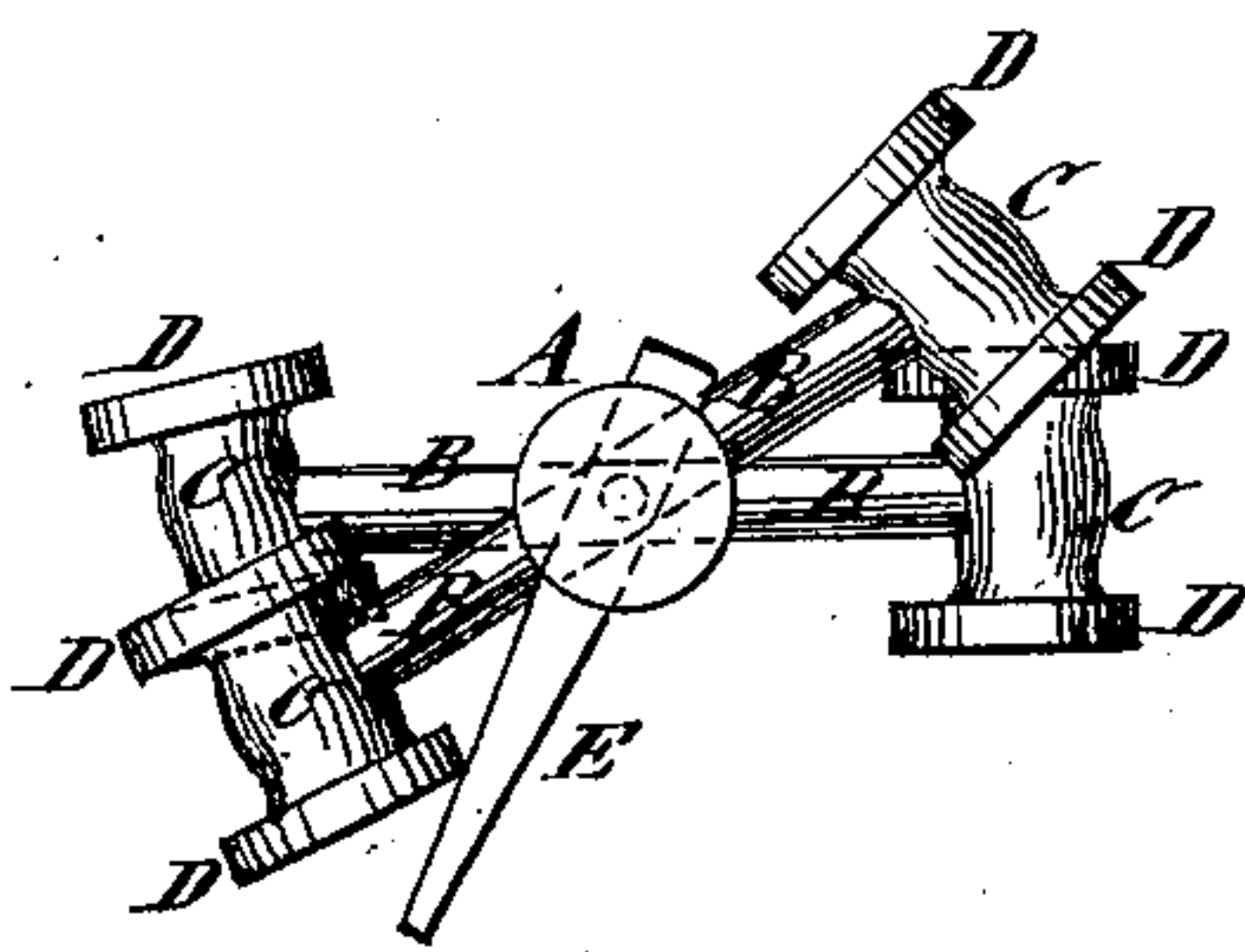


Fig. 2



WITNESSES:

C. Nevada
A. F. Terry

INVENTOR:

Jas. J. Robinson
 BY *Mumford*

ATTORNEYS.

UNITED STATES PATENT OFFICE.

JAMES J. ROBINSON, OF GIBSON CITY, ILLINOIS.

IMPROVEMENT IN ROTARY CHURN-DASHERS.

Specification forming part of Letters Patent No. **164,215**, dated June 8, 1875; application filed April 10, 1875.

To all whom it may concern:

Be it known that I, JAMES J. ROBINSON, of Gibson City, in the county of Ford and State of Illinois, have invented a new and useful Improvement in Churn-Dasher, of which the following is a specification:

Figure 1 is a side view of my improved churn-dasher. Fig. 2 is a top view of the same.

Similar letters of reference indicate corresponding parts.

The object of this invention is to improve the construction of the churn-dasher for which Letters Patent No. 51,354 were issued to me December 5, 1865, so as to make it simpler in construction, cheaper in manufacture, more effective in operation, more easily operated, and cause it to gather the butter quicker and more thoroughly.

The invention consists in a churn-dasher in which bars provided at their ends with cross-bars and disks are attached to the shaft in an inclined position, and are so arranged that the upper cross-bar and disks of each lower bar may be upon a level with the lower cross-bar and disks of the next upper bar; and in the combination of the adjustable gathering-board with the dasher-shaft, provided with the bars, the cross-bars, and the disks, as hereinafter fully described.

A is the dasher-shaft, upon the lower end of which is a pivot, to work in a step or socket in the center of the bottom of the churn, and which is designed to be driven by gear-wheels, in the manner of ordinary rotary dashers. Through the lower part of the shaft A are formed a number of inclined holes, at different

distances from the lower end of said shaft A, through which are passed a number of bars, B. To the ends of the bars B are attached short cross-bars C, having disks D formed upon or attached to their ends. The bars B are so arranged that the upper cross-bar and disks C D of each lower bar B may be at the same level as the lower cross-bar and disks C D of the next upper bar B.

By this construction a less number of the bars, cross-bars, and disks B C D will be required to produce the same effect than when the bars B are horizontal, as in Letters Patent No. 51,354. This construction makes the cost of manufacture less, and also lessens the labor of operating the dasher.

In the upper part of the shaft A is formed a number of holes, *a'*, at different heights, to receive the shank of the board E, so that the board E may be moved up or down, to adjust it according to the amount of milk in the churn.

The board E, as the shaft A is slowly revolved, quickly gathers the butter into a compact mass.

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

The combination of shaft A, oblique bars B, cross-bar C, and disks D, constructed and arranged substantially as and for the purpose specified.

JAMES J. ROBINSON.

Witnesses:

D. P. HUFFMAN,
G. W. HINTHORN.