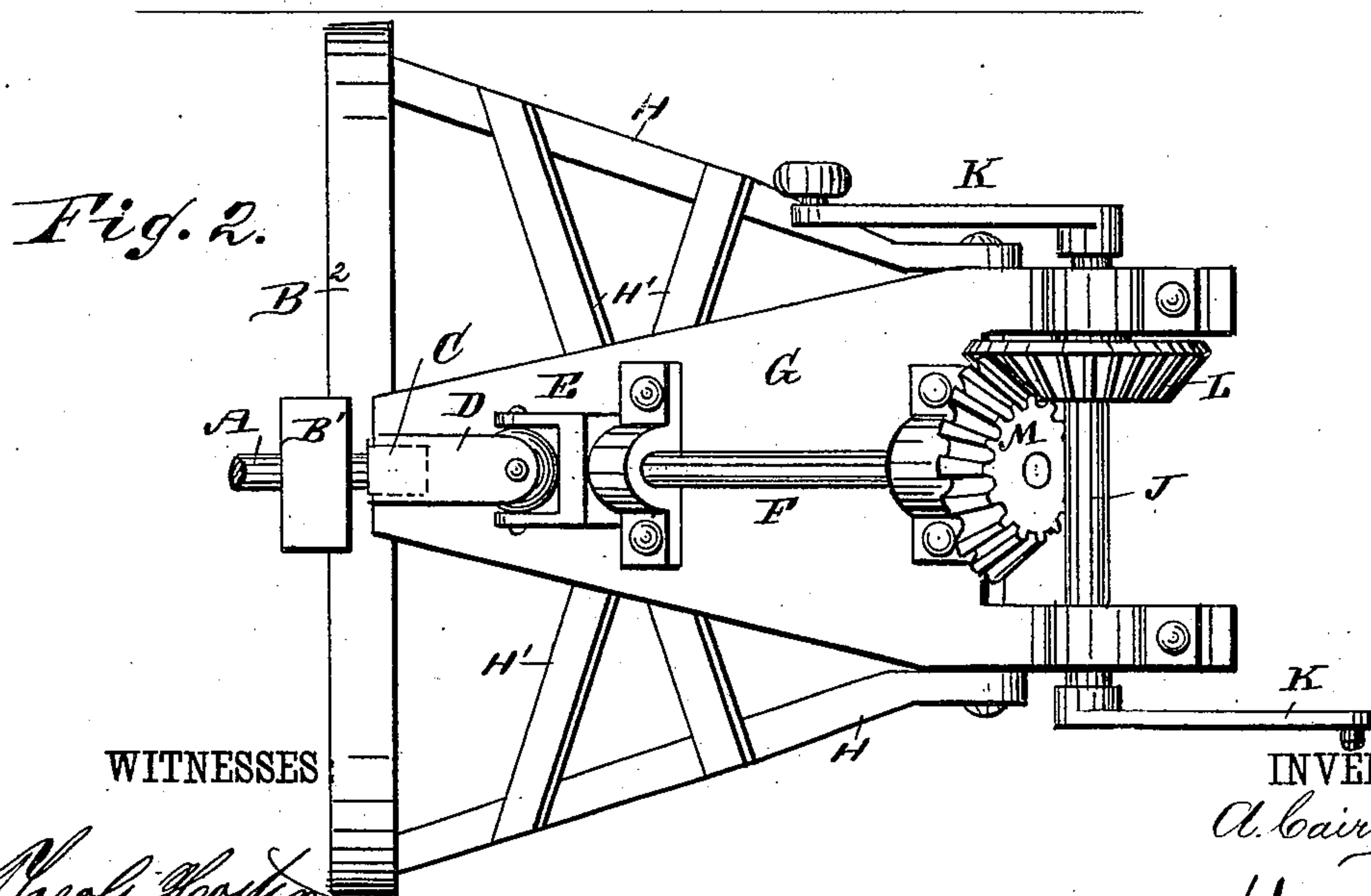
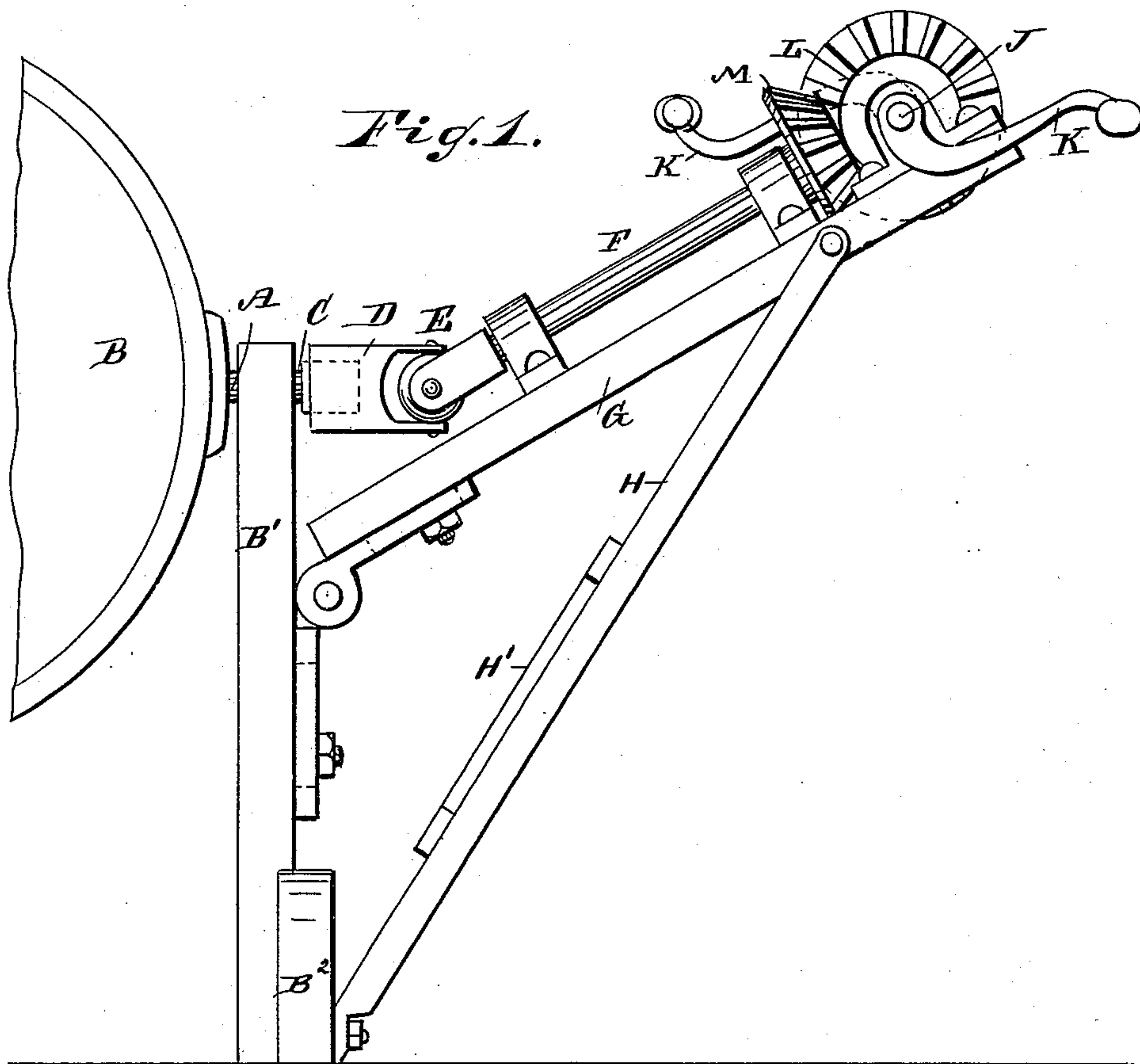


(No Model.)

A. CAIRNS.
CHURNING DEVICE.

No. 308,463.

Patented Nov. 25, 1884.



WITNESSES

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UNITED STATES PATENT OFFICE.

ALEXANDER CAIRNS, OF MOUNT HOPE, WISCONSIN.

CHURNING DEVICE.

SPECIFICATION forming part of Letters Patent No. 308,463, dated November 25, 1884.

Application filed May 6, 1884. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER CAIRNS, of Mount Hope, in the county of Grant and State of Wisconsin, have invented a new and Improved Churning Device, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved device for revolving the cream box or tub of churns, and also for revolving other bodies, such as grindstones, &c.

The invention consists in the combination, with a block adapted to be coupled to a pivot, of a revolving churn-box or other revolving object, of a shaft connected with the said block by a universal joint, and of a transverse shaft connected by gearing with the shaft connected with the said block, which transverse shaft has crank-handles at its ends. The apparatus is held on a suitable support or frame.

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

Figure 1 is a side view of my improved churn device. Fig. 2 is a plan view of the same.

The pivots A on the ends of the shaft of a revolving cream-box, B, are journaled in the upper ends of a standard, B', secured on a suitable base, B². One of the pivots is provided with a squared head, C, adapted to fit into the squared socket of a block, D, connected by a universal joint, E, with one end of a shaft, F, journaled in bearings on a swinging arm, G, hinged to the standard B', to the free end of which swinging arm braces H are pivoted, the lower ends of which are held to the corresponding ends of the base B², for the purpose of holding the free end of the arm G raised. The free end of the arm G is forked, and in the forked end of the said arm a transverse shaft, J, is journaled, which is provided at each end with crank-handle K. A bevel cog-wheel, L, mounted on the shaft J, en-

gages with a bevel cog-wheel, M, on the upper end of the shaft F. The braces H are united by crossed tie bars or rods H'.

By revolving the shaft J by means of its handles K the shaft F is revolved, which in turn revolves the cream box or tub A. Grindstones, washing-machines, tubs, mixers, &c., can also be revolved by means of my improved device more readily than by means of the usual crank, as both hands can be used on my improved device, and the operator can stand or sit in a more convenient position, and need not stoop or bend over.

It is evident that this device can be applied to the shaft of a dasher revolving in a stationary cream-box.

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

1. The combination, with a socketed block, D, constructed to be coupled with the shaft or pivots of a churn, of a shaft, F, connected with the said block by a universal joint, and mechanism, substantially as described, for revolving the said shaft, as set forth.

2. The combination, with the block D, of the shaft F, coupled with the same by a universal joint, the bevel cog-wheel M on the end of the shaft, the transverse shaft J, the bevel cog-wheel L on the same, and the crank-handles K on the ends of the shaft J, substantially as herein shown and described.

3. The combination, with the standard B', of the hinged arm G, the braces H, the shaft F, journaled on the wing G, the block D, connected by a universal joint with the shaft F, the bevel cog-wheel M on the shaft F, the transverse shaft J, the bevel cog-wheel L on the same, and the crank-handles K on the ends of the shaft J, substantially as herein shown and described.

ALEXANDER CAIRNS.

Witnesses:

RUFUS M. DAY,
JENNIE E. DAY.