C. E. KIMBALL.

Sewing-Machine Brakes.

No. 138,897. Patented May 13, 1873.

Fig. 1.

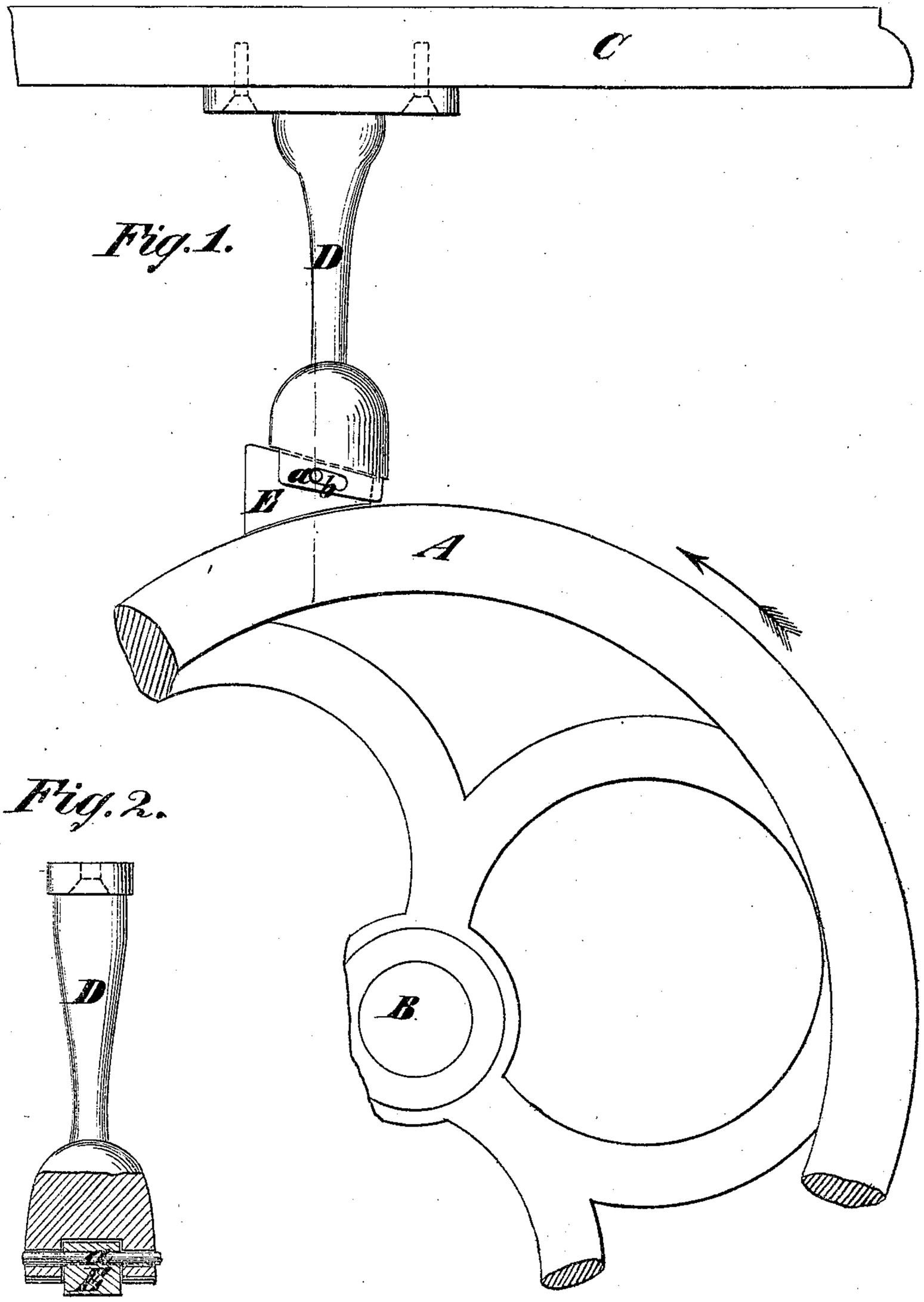

Fig. 2.

Witnesses
John Becker.
Fred Haynes

Charles E. Kimball
per Bonnell Allen
Attorneys

UNITED STATES PATENT OFFICE.

CHARLES E. KIMBALL, OF NEW YORK, N. Y.

IMPROVEMENT IN SEWING-MACHINE BRAKES.

Specification forming part of Letters Patent No. **138,897**, dated May 13, 1873; application filed March 10, 1873.

To all whom it may concern:

Be it known that I, CHARLES E. KIMBALL, of the city, county, and State of New York, have invented an Improved Sewing-Machine Brake, of which the following is a specification:

This brake consists of a stationary hanger, a wedge fitted thereto made of India rubber or other elastic material, or faced with the same, and a pin fitting a slot in the hanger and retaining the wedge therein, the whole being applied to a sewing-machine in such position relatively to its fly-wheel that when the latter rotates in the wrong direction the wedge is wedged between it and the hanger and stops the wheel; but when the wheel is turning in the proper direction the wedge in nowise interferes with it.

In the accompanying drawing, Figure 1 is a side view of a portion of the fly-wheel of a sewing-machine, showing my improvement applied, and Fig. 2 is a sectional view of the brake taken transversely through the wedge.

Similar letters of reference indicate corresponding parts in both figures.

A represents the fly-wheel of a sewing-machine, and B the shaft thereof, and C the table of the machine. D is the hanger before mentioned. It is furnished on the upper end with a flange which is secured by screws to the under side of the table C, and likewise is provided at the lower end with a bifurcated boss or socket which receives the wedge E. This hanger is arranged over the periphery of the fly-wheel A, a little back of its center, and the recess in its socket inclines downward in a forward direction. The wedge E is made of India rubber or other elastic material, or inelastic material faced with India rubber or the like. It tapers toward the front of the machine, and the degree of its taper corresponds approximately to the inclined top of the recess in the hanger and the adjacent portion of the wheel. The wedge is retained within the hanger by means of a pin, *a*, which projects into slots *b b* in the sides of the hanger socket, said slots being inclined to correspond with the inclination of the top of the socket.

Should the wheel be rotated in the wrong direction, the wedge E is dragged forward by contact with the periphery of the wheel, and is wedged between the wheel and the hanger, and thereby the wheel is stopped. When running in the proper direction the wheel is wholly unaffected by the wedge, as the latter of course remains back in the hanger, as shown in Fig. 1 of the drawing.

This brake is very simple in its construction, and is not liable to get out of order; moreover, it is very effective for the purpose for which it is designed; much better, indeed, than when a roller or ball is used, because there is a larger amount of surface presented, and sliding friction is created instead of rolling friction.

What I claim as my invention, and desire to secure by Letters Patent, is—

The stationary hanger D, the wedge E fitted thereto, made of elastic material or faced therewith, the pin *a*, and the slot *b*, the whole combined and arranged for application in relation to the fly-wheel of a sewing-machine, substantially as and for the purpose set forth.

CHAS. E. KIMBALL.

Witnesses:
HENRY T. BROWN,
MICHAEL RYAN.