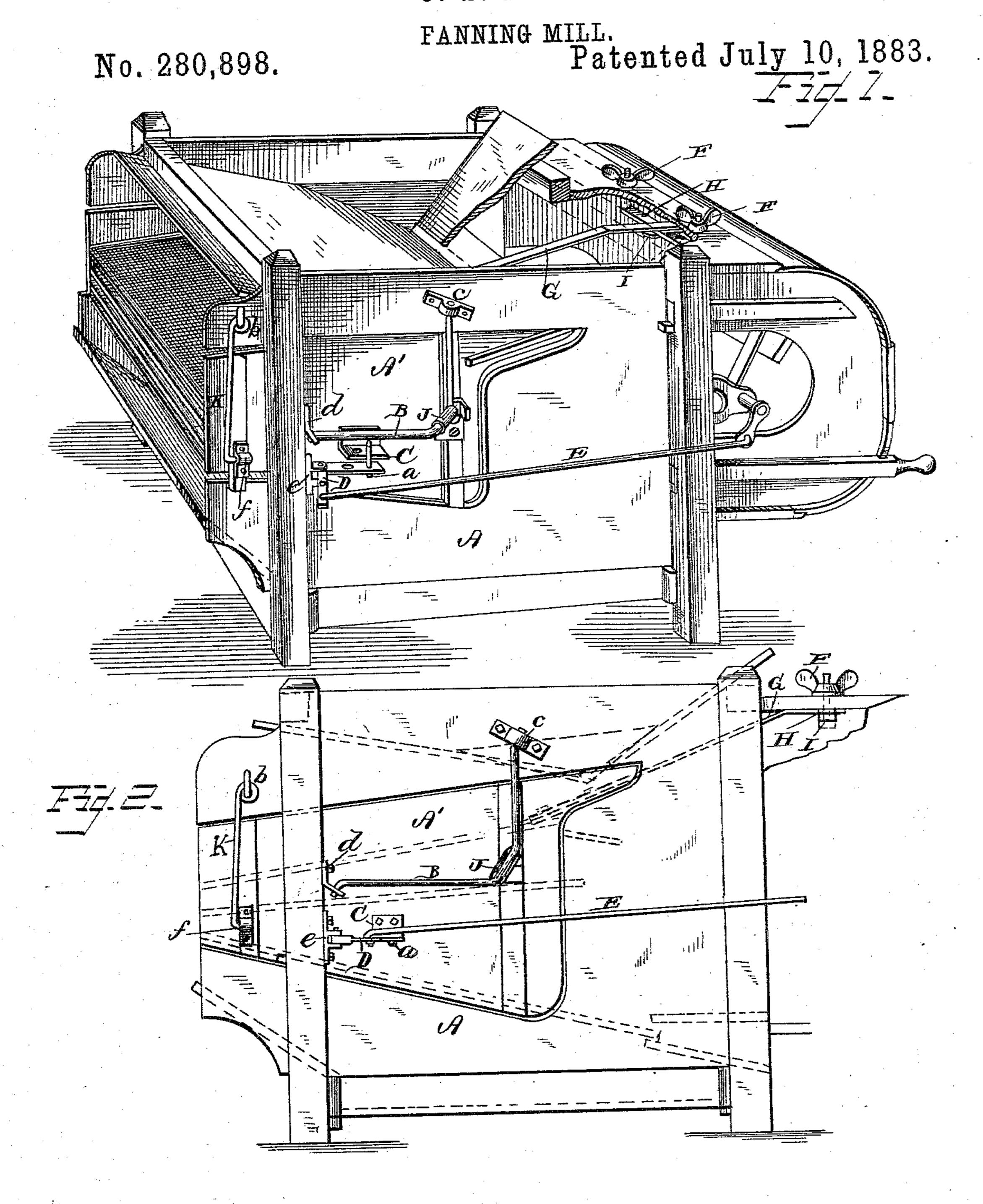
## C. S. BEEBE.



WITNESSES F. L. Ourand Melles INVENTOR

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CHARLES S. BEEBE, OF RACINE, WISCONSIN.

## FANNING-MILL.

SPECIFICATION forming part of Letters Patent No. 280,898, dated July 10, 1883.

Application filed May 26, 1883. (No model.)

To all whom it may concern:

Be it known that I, CHARLES S. BEEBE, of Racine, in the county of Racine, and in the State of Wisconsin, have invented certain new and useful Improvements in Fanning-Mills; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to fanning-mills; and it consists in certain improved mechanism to wherewith the shoe that carries the screen is supported and shaken, as will be fully described hereinafter.

In the drawings, Figure 1 is a perspective view of a machine embodying my invention with a part of the top thereof broken away,

and Fig. 2 is a side view.

The main object of my invention is to provide in one machine mechanism for hanging the shoe so that it can be adjusted to shake 20 bodily from side to side, or to oscillate on an arc of a circle. The former is styled in the trade the "body" shake, and the latter the "flirt" shake; and hence in this application I show and describe the devices for producing both 25 the body and flirt shake, because all my machines are made to embody both and to change from one to the other; but as I have already filed an application on the 7th day of December, 1881, wherein I have claimed the mech-30 anism for producing the body shake, I claim in the present application only the construction requisite for the production of the flirt shake.

A is the casing of a fanning-mill, and A' the shoe. I provide the shoe on each side with lugs J and f to receive hangers B and K, and on one side of the shoe, in addition to the lugs J f, I provide the shoe with an elbow-plate, C, and connect it by a staple, a, with the bell-tached to the frame.

The fan-wheel is revolved by any convenient means and is connected to the lever D by a rod, E. A bar, G, is fastened to the shoe 45 A' at its front end and midway between its sides, and the front end of this bar projects forward and up against the top of the casing A and into a staple, H, which is provided with a groove, I, and the ends of which staple 50 are screw-threaded and project up through the top of the casing to receive set-nuts F F. To

give the shoe the body shake, set-nuts F F are loosened to allow the staple H to drop down away from the top of the casing, as shown in Fig. 1. This leaves bar G free to slide from 55 one end to the other of the staple H. The hangers B are then caught over lugs J and hangers K in lugs f. The shoe will now be supported evenly on each side of the elbowplate C, and, as it is connected with the fan- 60 wheel crank by elbow-lever D and rod E, each revolution of the crank will throw the shoe from one side to the other of the casing and back again, and in these reciprocations the front and rear of the shoe will both travel to- 65 gether at right angles to the length of the casing. Now, to change the shake from body to the flirt, hangers B are withdrawn from the lugs J, so as to let the weight of the body of the shoe rest entirely upon the hangers K and 70 bar G, and the staple H is tightened up against the casing, as shown in Fig. 2, so as to confine the end of bar G in groove I, which groove, while it is sufficiently large to permit the bar to oscillate in it, will hold it against 75 lateral play. Therefore, if the fan-wheel be turned, it will cause the rear of the shoe to vibrate in the arc of a circle of which a vertical line drawn through the groove I of the staple H is the center, and thus will be pro- 80 duced the flirt shake.

The hangers B, I have shown swiveled in inclined bearings in the lugs  $c\,d$ , attached to the top and sides of the frame of the mill. The hangers K are suspended from lugs b, secured 85 to the rear end of the frame.

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

The combination, in a fanning-mill, of the 90 casing, screen-shoe, bar G, adjustable staple H I F, hangers K, lugs f and b, plate C, bell-crank lever D, and crank-rod E, substantially as set forth.

In testimony that I claim the foregoing I have 95 hereunto set my hand, on this 4th day of May, 1883, in the presence of two witnesses.

CHARLES S. BEEBE.

Witnesses:

S. C. YOUT, LOUIS YOUT.