

(No Model.)

G. SCHOCH.
MIXING MACHINE.

No. 512,332.

Patented Jan. 9, 1894.

Fig. 1.

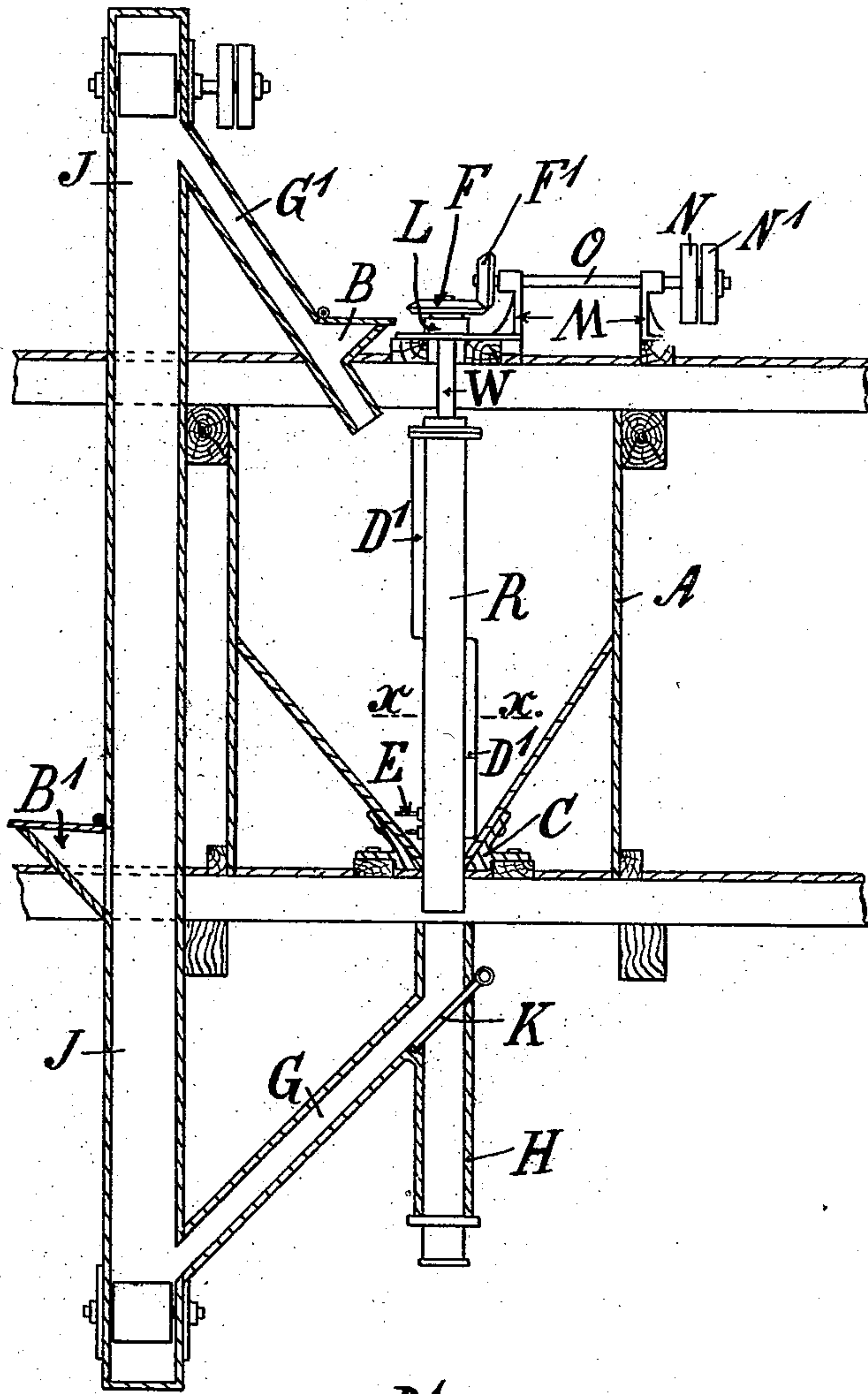


Fig. 2.

WITNESSES:

Wm. Schuly.
A. Joughmans

INVENTOR

Gottfried Schoch

BY Roeder & Briesen

ATTORNEYS.

UNITED STATES PATENT OFFICE.

GOTTFRIED SCHOCH, OF WÜLFLINGEN, SWITZERLAND.

MIXING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 512,332, dated January 9, 1894.

Application filed August 5, 1893. Serial No. 482,442. (No model.)

To all whom it may concern:

Be it known that I, GOTTFRIED SCHOCH, a citizen of Switzerland, residing at Wülflingen, canton of Zurich, Switzerland, have invented a new and Improved Mixing-Machine, of which the following is a specification.

The invention relates to improvements in mixing-machines, and it consists in a certain novel construction and combination of devices fully described hereinafter with reference to the accompanying drawings and specially pointed out in the claims.

In the drawings Figure 1 is a vertical section of the new mixing-machine, which works in a quick and very perfect manner. Fig. 2 is a horizontal section on the line $x-x$, Fig. 1, being drawn on a larger scale.

A vertical receptacle A gradually growing narrower toward the bottom, and open at the top only, is filled by means of a funnel B. The receptacle is supported at its lower end by a casting C, which serves as the lower bearing for a hollow vertical spindle R preferably placed in the center of the receptacle A. Spindle R is provided with longitudinal perforations D, on one side of which knives D' are arranged in such a manner, that by the turning of the hollow spindle R, they separate and convey into the spindle a more or less considerable layer of the contents of the receptacle A. The substances which are fed to this receptacle in whatever desired order and quantity are conducted into the hollow spindle R in the manner described and then fall out at the lower end after having been mixed together properly and in accordance with the several proportions of the ingredients filled in. When the slide valve K is shut, the mixed material passes through the channel G into an elevator J, which in turn lifts the material to and through a channel G' and the funnel B, so that it passes afresh into the receptacle A in order to be mixed again. The most perfect homogeneity of the mass by reason of the thorough distribution of the different substances is produced by often repeating this circuit.

By causing the material to leave the apparatus by way of the open slide valve K through the outlet-pipe H, the operation is finished.

The end W of the hollow spindle R is supported at its upper end by a bearing L. A bevel wheel F is fixed on the upper part of the shaft-end W, and the said bevel wheel F engages with a second wheel F' of the same kind, the latter being fixed on a horizontal axle O. The latter is provided with driving pulleys N N' and rests in bearings M.

The hollow spindle R is preferably supplied with stirring-arms E at its lower end.

The ingredients to be mixed may if desired be conducted through a funnel B' placed at the side of the casing of the elevator J.

Having thus described my invention, what I claim is—

1. In a mixing-machine the combination with a receptacle A, of a hollow spindle R provided with longitudinal perforations D and knives D' of a channel G, an elevator J and a return channel G' substantially as and for the purpose specified.

2. In a mixing-machine the combination with a receptacle A, of a hollow spindle R provided with longitudinal perforations D and knives D', of an outlet pipe H, a slide valve K, a return channel G, an elevator J and a channel G', substantially as and for the purpose specified.

3. In a mixing-machine the combination with a vertical hollow spindle R, provided with longitudinal perforations D, knives D' and stirring-arms E of bearings C and L, bevel wheels F F', an axle O, bearings M and driving pulleys N N' substantially as and for the purpose specified.

Signed at Zurich, Switzerland, this 14th day of July, 1893.

GOTTFRIED SCHOCH.

Witnesses:

H. LABHART,
P. GNADIG.