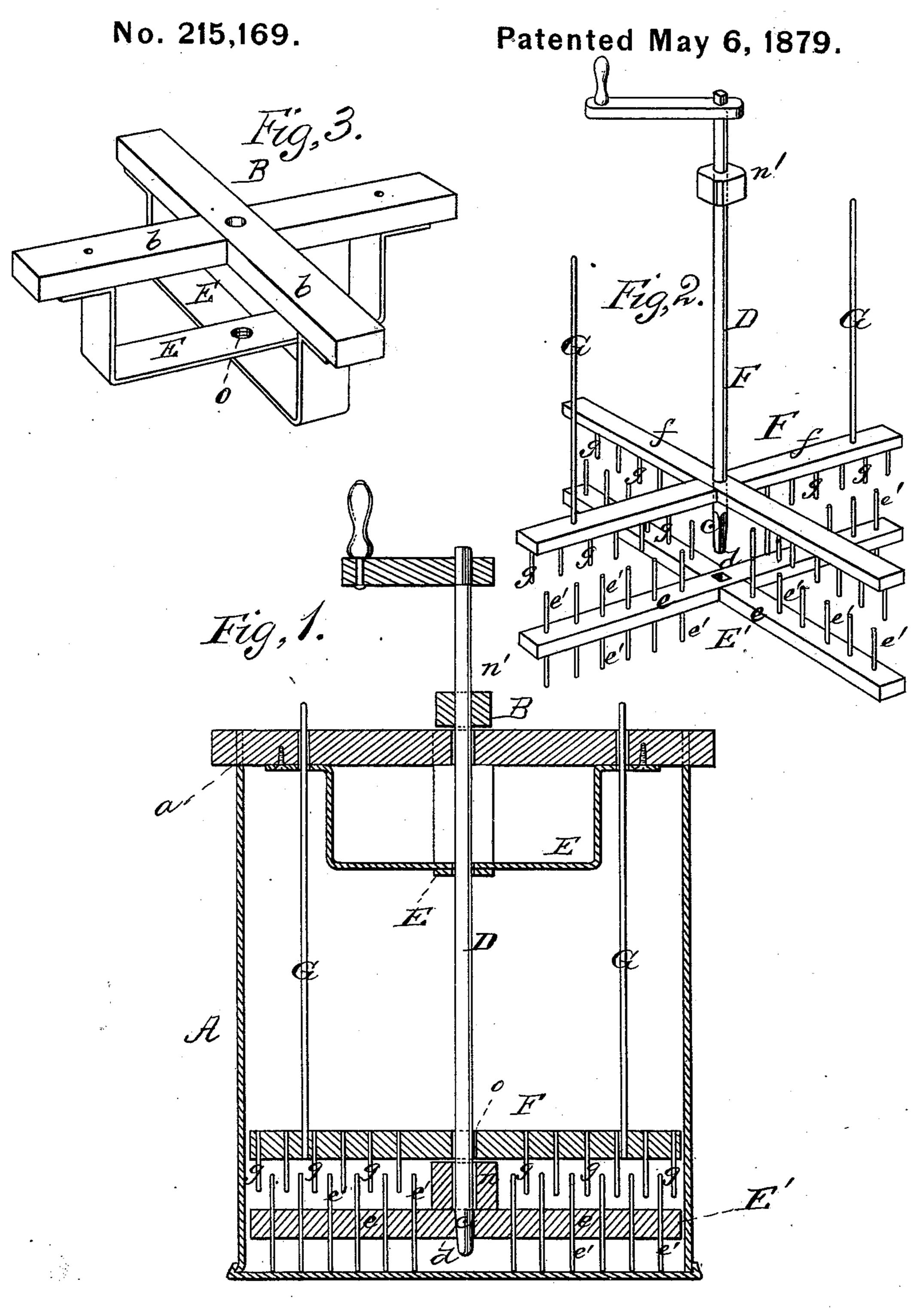
M. L. SCIVALLEY.

Mash-Tub.



WITNESSES Willette Inderson Frank J. Algasi Martin L. Scivalley by EW. anderson his ATTORNEY

UNITED STATES PATENT OFFICE.

MARTIN L. SCIVALLEY, OF WINCHESTER, TENNESSEE, ASSIGNOR OF ONE-HALF HIS RIGHT TO J. N. McCUTCHEON, OF SAME PLACE.

IMPROVEMENT IN MASH-TUBS.

Specification forming part of Letters Patent No. 215,169, dated May 6, 1879; application filed March 29, 1879.

To all whom it may concern:

Be it known that I, MARTIN L. SCIVALLEY, of Winchester, in the county of Franklin and State of Tennessee, have invented a new and valuable Improvement in Mash-Tubs; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a vertical central section of my inven-

tion; and Figs. 2 and 3 are details.

This invention has relation to improvements in means for making and stirring "mash" in distilleries; and the nature of the invention consists in combining with a tub and a platform extending across its mouth, and provided with crossed hanger depending from its under side, a rotary stirrer at the bottom of the tub, a shaft extending through the platform and hanger and secured to the said stirrer, a stationary stirrer on said shaft, and adjusting-rods extending upward from the fixed stirrer, and extending through the platform, as will be hereinafter more fully set forth.

In the annexed drawings, the letter A designates an ordinary mash-tub, made either of wood or metal, or of a combination thereof, and having in its upper edge the rectangular seats a, diametrically opposite each other, and designed to receive the correspondingly-shaped ends of a cruciform platform, B. This is usually formed of wooden beams b, halved into each other, and affording at their intersection an upper bearing for a shaft, D. This shaft has a lower bearing in the crossed hangers E, depending from the platform, and its lower squared end, c, is seated in a correspondinglyshaped socket, d, in a stirrer, E. This is composed of the crossed rake-heads e, and of the spaced tines or prongs e', extending through the heads and projecting equally above and below the same. F indicates a second stirrer, which is vertically adjustable, and composed

likewise of the crossed heads f, and provided on its under side with the teeth g. These alternate with those of the stirrer \mathbf{E}' .

As shown in Fig. 1, the shaft D extends through an orifice in the upper stirrer, F, the said orifice being sufficiently large to receive the shaft without binding. Extending upward from the ends of one or both of the crossarms of the stirrer F are strong metallic rods G, rigidly secured to the said arms, and sufficiently long to project through perforations in the platform aforesaid. These rods serve to guide the stirrer as it is adjusted vertically, and also hold it stationary.

The lower stirrer is usually firmly secured to the lower end of the shaft, with its teeth touching or barely clear of the bottom of the tub, and the upper stirrer is adjusted relative to it on the shaft by means of a nut, n, below the said stirrer, or by other equivalent means—as, for instance, a collar and set-screw. Both stirrers are raised to any desired position in the tub by means of a nut, n', applied upon

the shaft above the platform.

What I claim as new, and desire to secure

by Letters Patent, is—

In a mash-tub, the combination, with a tub and a platform extending across its mouth, and provided with a depending crossed hanger, E, of a shaft, D, extending through said platform and hanger, the stirrer E', having teeth e', and fixed on the end of said shaft, the vertically-adjustable stirrer F, having teeth g, arranged loosely on said shaft, and provided with the adjusting-rods G, extending through the platform, and the adjusting-nuts n n', respectively, below the stirrer F and above the platform, as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence

of two witnesses.

MARTIN L. SCIVALLEY.

Witnesses:

GEORGE R. MARTIN, GEORGE G. BROZELTON.