(No Model.) 2 Sheets—Sheet 1.

S. G. VOGELEY.

GLASS FINISHING MACHINE.

No. 558,536. Patented Apr. 21, 1896.

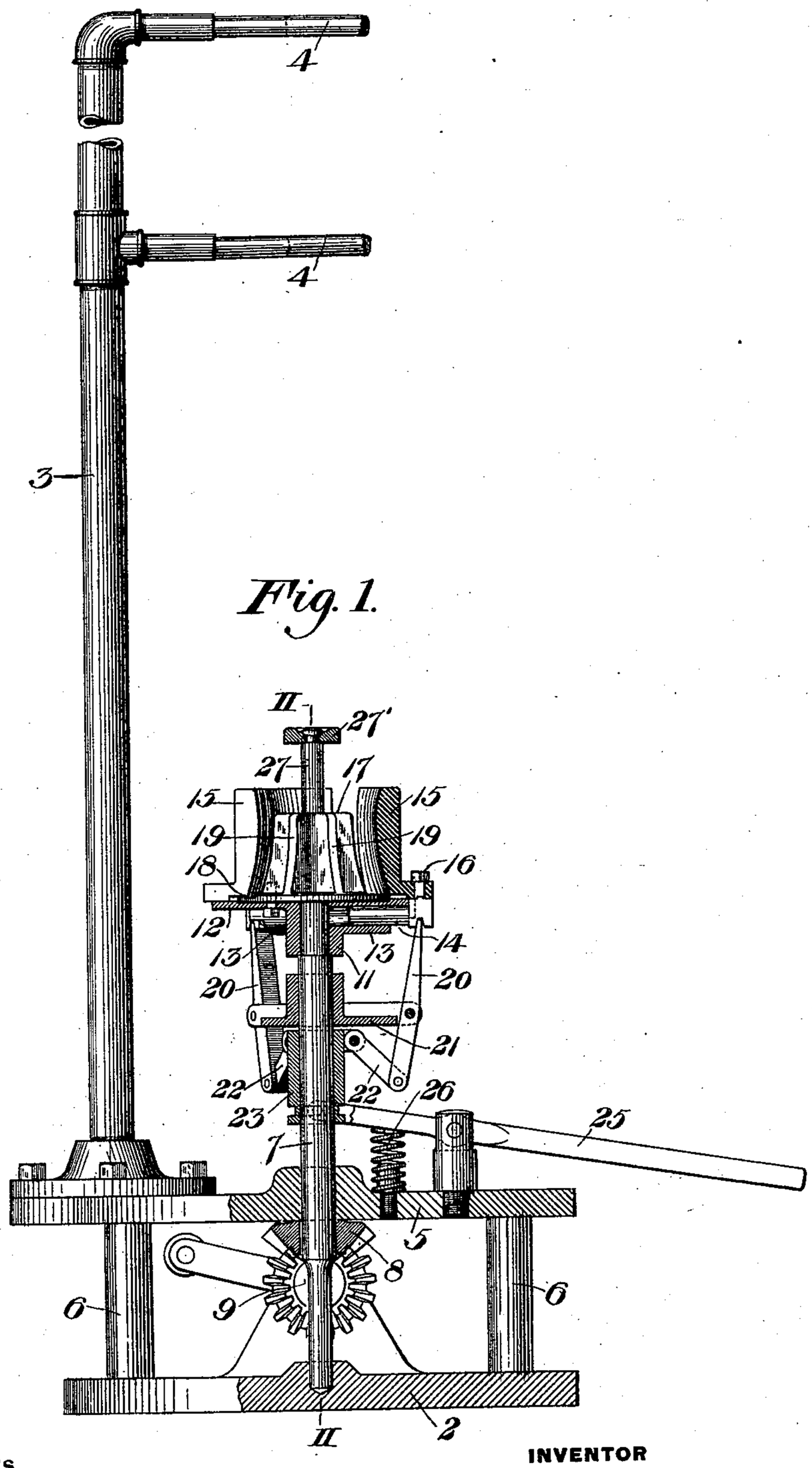

Fig. 1.

WITNESSES

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Fig. 2.

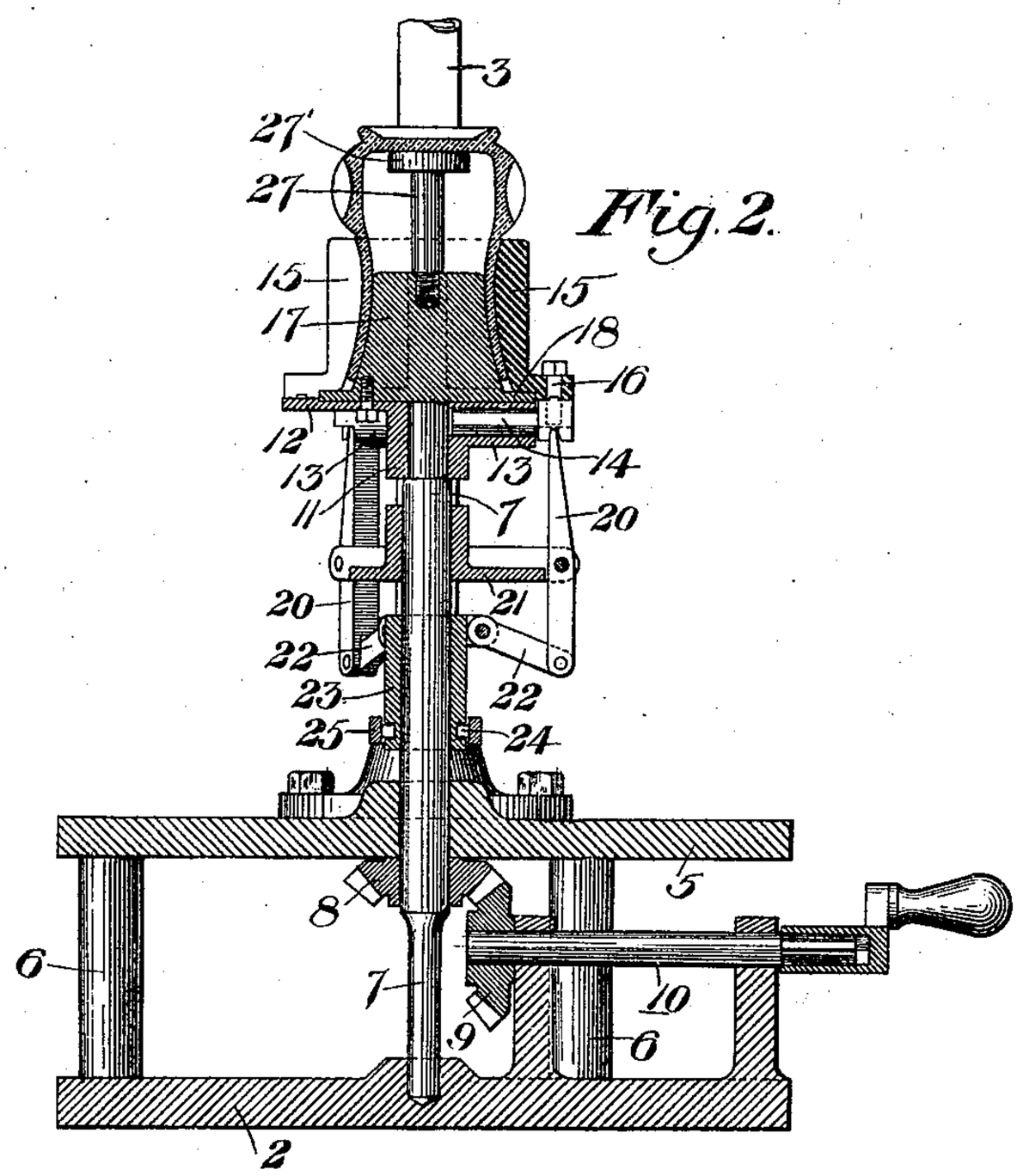
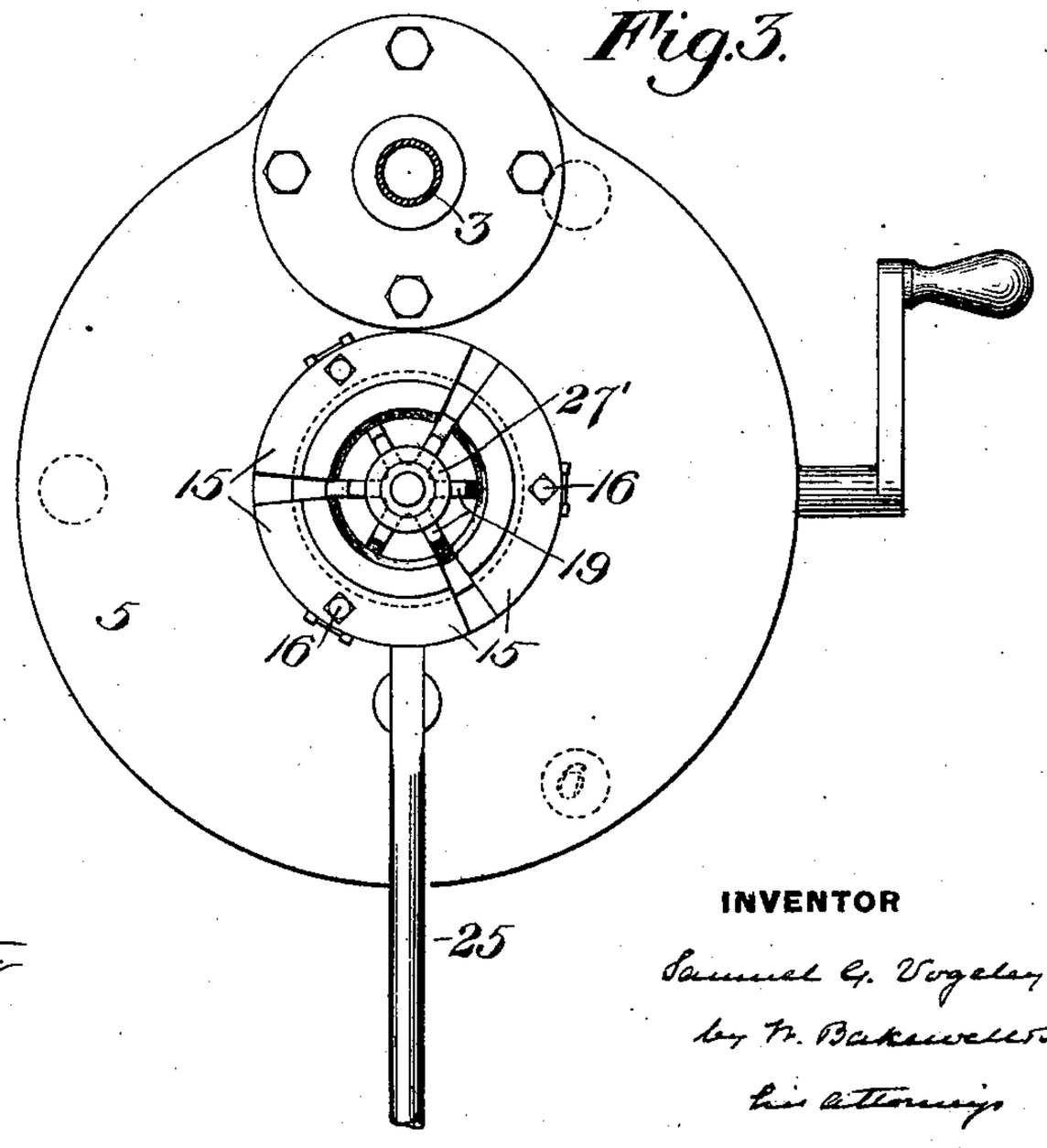


Fig. 3.



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UNITED STATES PATENT OFFICE.

SAMUEL G. VOGELEY, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR TO THE UNITED STATES GLASS COMPANY, OF SAME PLACE.

GLASS-FINISHING MACHINE.

SPECIFICATION forming part of Letters Patent No. 558,536, dated April 21, 1896.

Application filed September 6, 1894. Serial No. 522,240. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL G. VOGELEY, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Glass-Finishing Machines, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation, partly in section, of my improved finisher. Fig. 2 is a vertical cross-section on the line II II of Fig. 1. Fig. 3 is a top plan view.

My invention relates to the tools for finishing hollow glassware, and is designed to produce a machine which shall shape the article to the desired form without the use of skilled labor, which can be readily adjusted for different sizes and forms, and which produces articles of uniform shape and size.

In the drawings, 2 represents a base having an upright standard 3, provided with forked guides 4, which serve to center the snap-rod and hold it in place. A plate 5 is supported above the base upon posts 6, and through this plate passes the vertical shaft 7, having the bevel-wheel 8, intermeshing with a bevel-wheel 9 upon the hand-shaft 10. Secured to the shaft 7 at its upper end by a collar 11 is a disk 12, having upon its lower face integral radially-extending portions 13, which are bored out to receive posts 14, having at their outer ends heads to which the former-sections 15 are secured by tap-bolts 16. To the upper face of the disk 12 is secured the internal former 17, having a flat base 18 and radial vertical flanges 19, the edges of which are shaped to conform to the desired shape of the article.

The former-sections 15, of which I show three, though any desired number may be employed, bear upon the outer flat portion of the upper face of the base 18, and are thereby held in position in their radial movements.

To move the former-sections, I provide recesses or grooves on the under faces of the heads of the radially-extending posts 14, and into these recesses extend the upper ends of levers 20, fulcrumed to a flanged collar 21, secured to the shaft and actuated by pivoted links 22, connecting them to a sliding collar 23 upon the shaft. The collar 23 is provided with an annular groove, into which project pins 24 upon a forked hand-lever 25, which is normally held in raised position by a spring 26.

To support the glass blank in place over the former, I provide the vertical pin 27, carrying at its upper end the flat revoluble disk 27′, upon which the base of the article rests, as in Fig. 2.

The operation is apparent. The snap is placed within the forked guides 4, with the blank resting upon the roller 27′. The shaft 10 is then revolved, and on forcing down the lever 25 the forming-sections move in and with the inside former give the article the desired shape. I coat the sections with paste before the operation, in order to give a smooth surface to the glass and prevent its scratching it.

The advantages of the invention are numerous. The forming-sections inclosing the main portion of the article give an even regular surface thereto. The roller gives a stationary surface for the bottom of the article, preventing its scratching. The attachment of the sections is a great improvement, as they may be easily slipped into place and are given a firm bearing upon the disk.

The machine is simple, compact, and easily operated, and is quickly adapted to different sizes and shapes by removing the head and substituting another therefor.

The disk 27′ may be rigid with the vertical shaft and rotate therewith, or may consist simply of the upper end of the interior former or support, the essential point being the supporting of the blank by means of its base resting thereon.

I claim—

1. A glass-finisher comprising a rotary plate carrying a central projecting support whose outer end contacts with the inner face of the base of the inverted blank and carries such blank, said plate having exterior radial movable formers, and means for moving the formers inwardly to press the blank into shape; substantially as described.

2. A glass-finisher, comprising a revoluble plate carrying an interior former, provided with a support upon which the base of the

blank rests, arc-shaped former-sections movable radially upon the plate, and a lever arranged to move said sections; substantially as and for the purposes described.

3. A glass-finisher, comprising a base having a standard provided with guides for the snap-rod, a revoluble plate carrying an internal former, and arc-shaped sections radially movable upon said plate; substantially as described.

4. A glass-finisher comprising a revoluble plate, a projecting support upon the outer end of which the base of the article rests, mounted on the said plate and freely rotatable in a plane substantially parallel with said plate, in combination with exterior radially-movable formers arranged to press the blank into shape, substantially as described.

In testimony whereof I have hereunto set my hand.

SAMUEL G. VOGELEY.

Witnesses:
W. B. CORWIN,
C. BYRNES.