

Mayer & Ruppenthal,
Globe Valve,
Nº 66,724, Patented July 16, 1867.

Fig. 1.

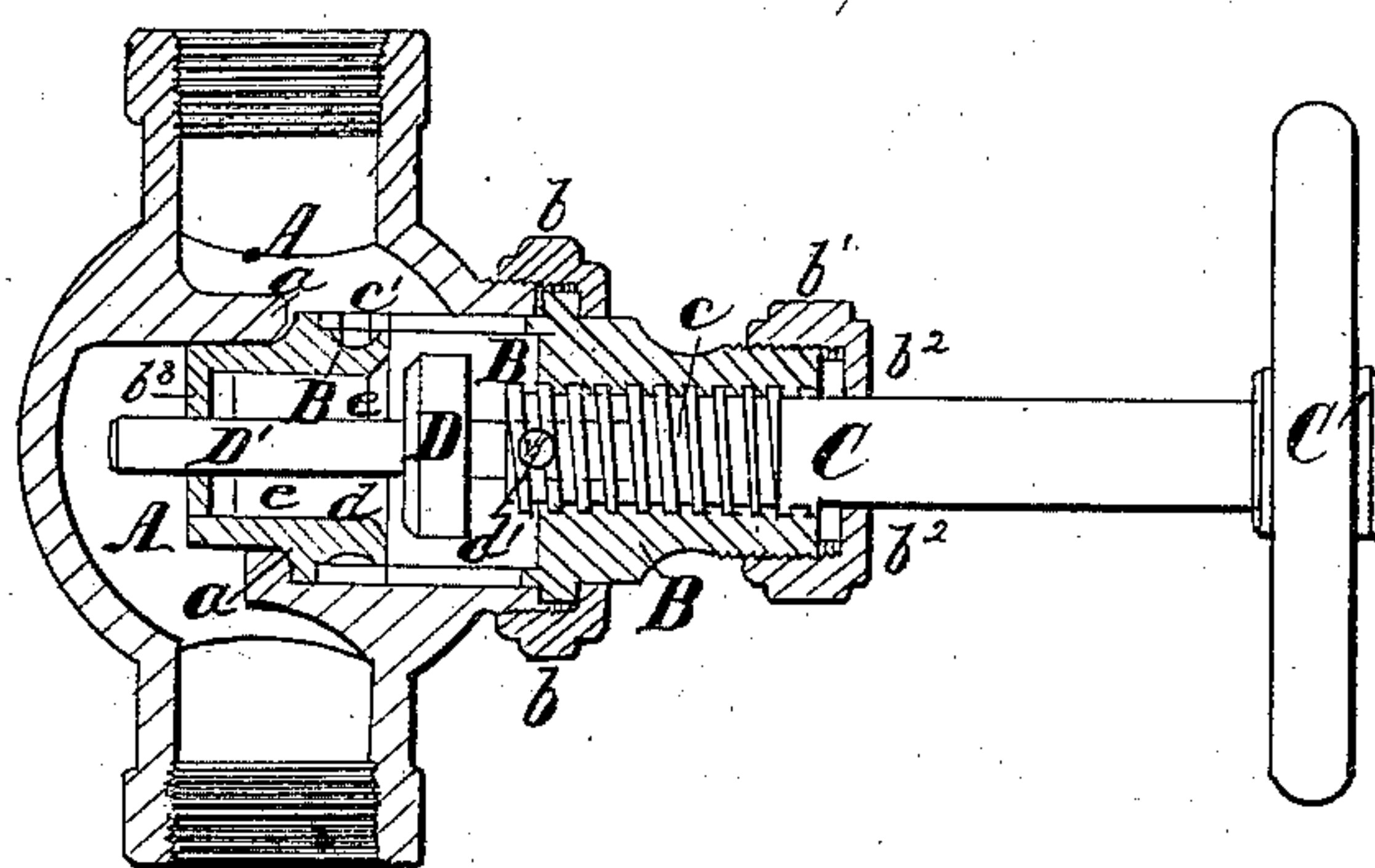


Fig. 2.

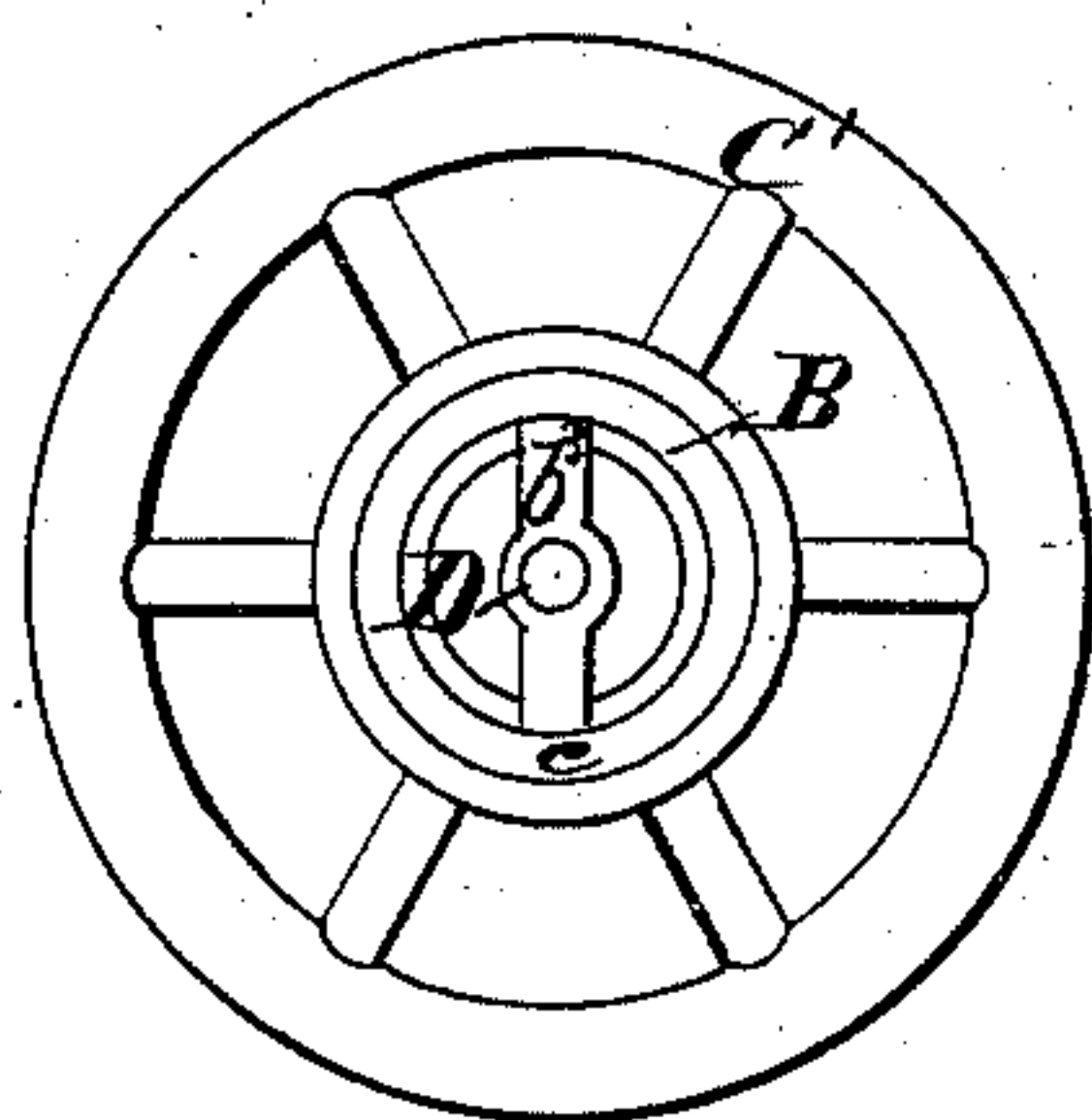
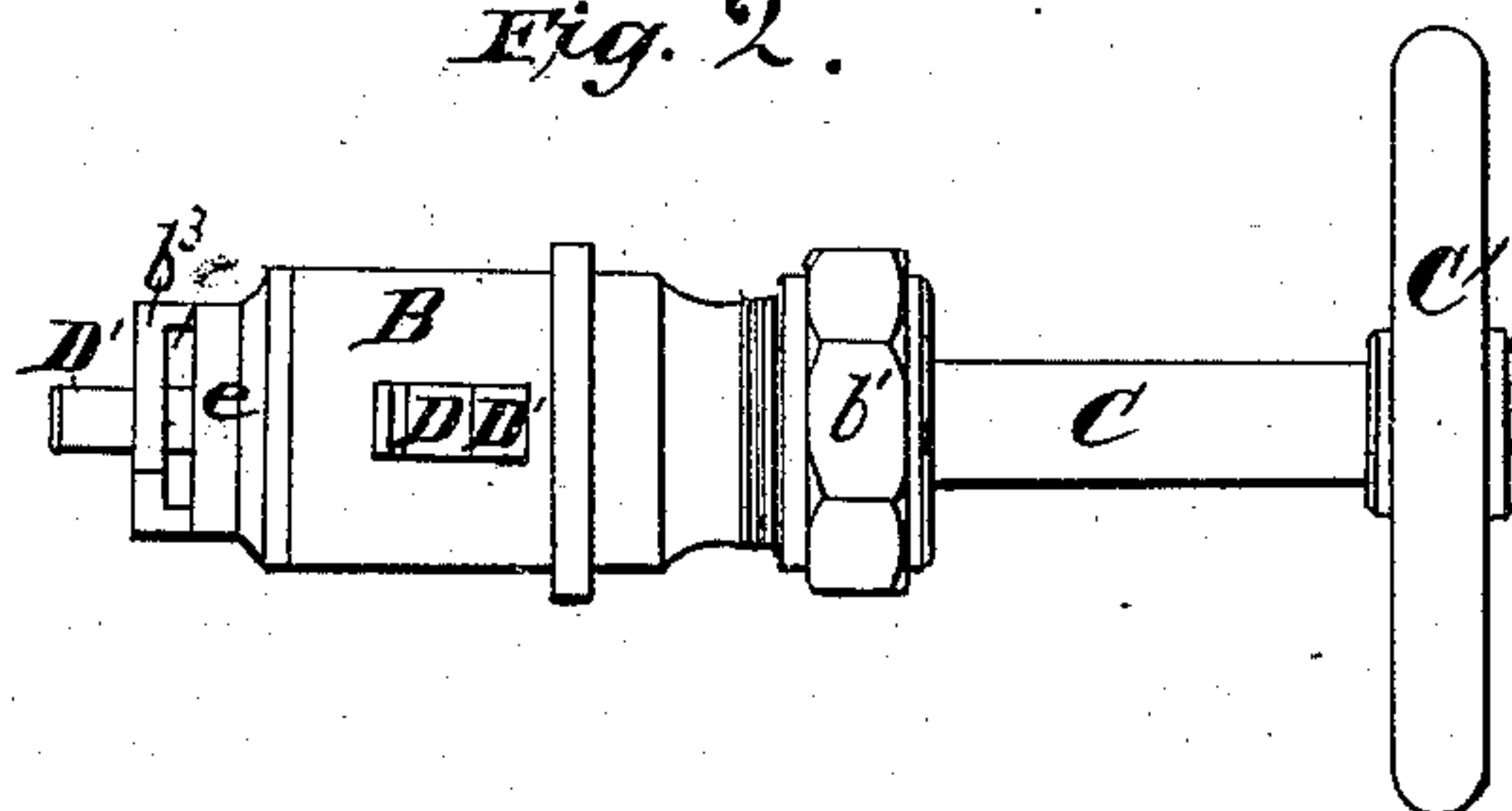


Fig. 3.

Witnesses:
Thomas J. Burridge
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Inventor:
E. L. Mayer
J. Ruppenthal
By their Attys
M. Randolph & Co.

United States Patent Office.

EMIL C. MAYER AND JACOB RUPPENTHAL, OF ST. LOUIS, MISSOURI.

Letters Patent No. 66,724, dated July 16, 1867.

IMPROVEMENT IN GLOBE-VALVES FOR STEAM ENGINES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that we, EMIL C. MAYER and JACOB RUPPENTHAL, of the city and county of St. Louis, and State of Missouri, have invented a new and useful Improvement in Globe-Valves; and we do hereby declare that the following is a full and clear description thereof, reference being had to the accompanying drawings, and to the letters of reference thereon.

The nature of this invention consists in the arrangement of a cylindrical valve-case, fitted within the globe, so as to be removable for the purpose of grinding in the valve, which has its seat within the said movable case, the object being to remove the valve-case and reset the valve without disconnecting the globe from the pipe.

To enable those skilled in the art to make and use our improved globe-valve, we will proceed to describe its construction and operation.

Figure 1 of the drawings is a sectional elevation of a globe and its valve attachments.

Figure 2 is an elevation of the valve-case and its stem, with hand-wheels.

Figure 3 is a front end elevation of the parts shown in fig. 2.

The globe A is of the usual construction, and has a seat at *a* for the bearing of the valve-case B, which is to be screwed down tightly on to it by means of the cap-nut *b*. A packing-nut, *b'*, screwed to the end of the case B, forces the packing *b''* so tightly to the valve-stem C as to prevent leakage between those parts. The stem C has screw-threads *c*, which fit into the threads of female screws in the outer end of the case B, and it is operated by means of the hand-wheel C'. The valve D is securely fixed to the rod D', one end of which is attached to the inner end of the rod or stem C, while its other end slides through an orifice in the bar *b''*, which is a part of the case B. The valve D has its seat at *d*, and as its rod is attached to the stem C, by means of the rivet or screw *d'*, it is opened or closed by the operation of the wheel C', in the usual manner. The end of the case B, which is represented by the letter *e*, is removable by the detachment of the screw *e'*, and when the nut *b* is removed the whole case B may be taken out, and then, by removing the screws *d'* and *e'*, the parts may be so disconnected as to allow the valve D to be re-ground to fit its seat *d* without disconnecting the globe from its pipe.

We are well aware that recent improvements have been made in globe-valves for this same purpose, but in them an additional nut has to be used at the back side of the globe, and consequently it is not so cheap or convenient as the present valve.

As the seat at *a* is not disturbed by currents passing over it it will not need re-grinding.

Having described our invention, what we claim is—

The valve-case B and the valve D, when combined with the globe A in the manner and for the purpose set forth.

In testimony of which invention we hereunto set our hands in presence of—

E. C. MAYER,
JACOB RUPPENTHAL.

Witnesses:

M. RANDOLPH,
S. M. RANDOLPH.