

No. 847,862.

PATENTED MAR. 19, 1907.

W. R. WARREN.  
ROTARY KILN.

APPLICATION FILED MAR. 29, 1906.

Fig. 1.

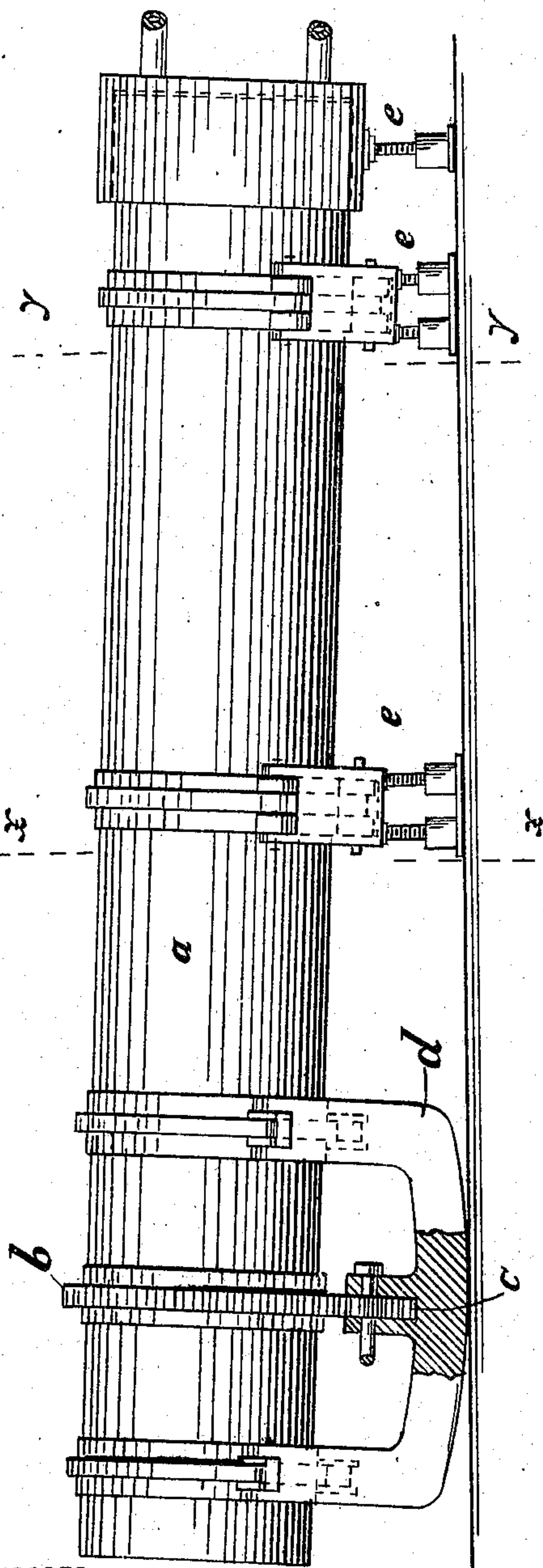


Fig. 4.

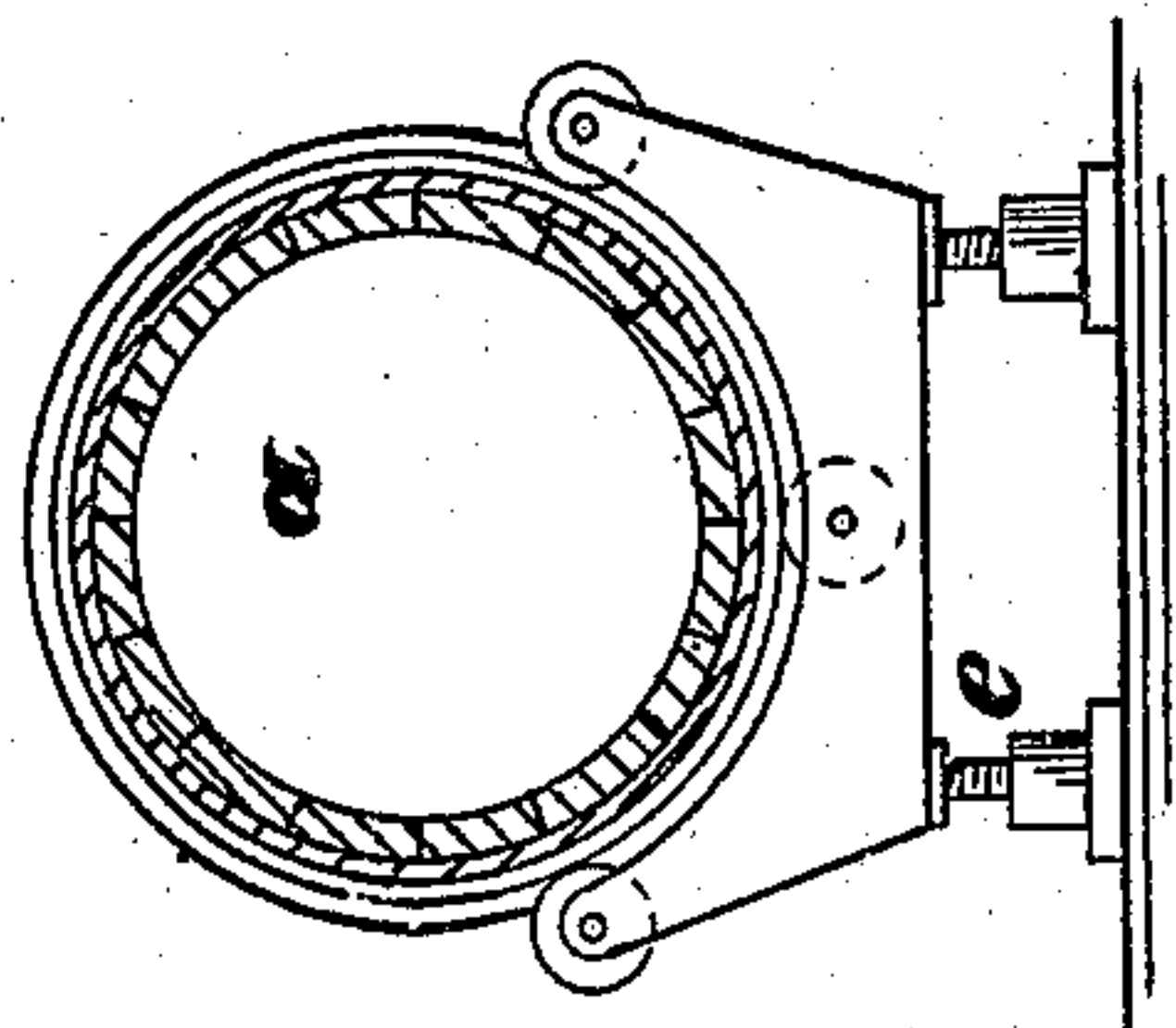


Fig. 3.

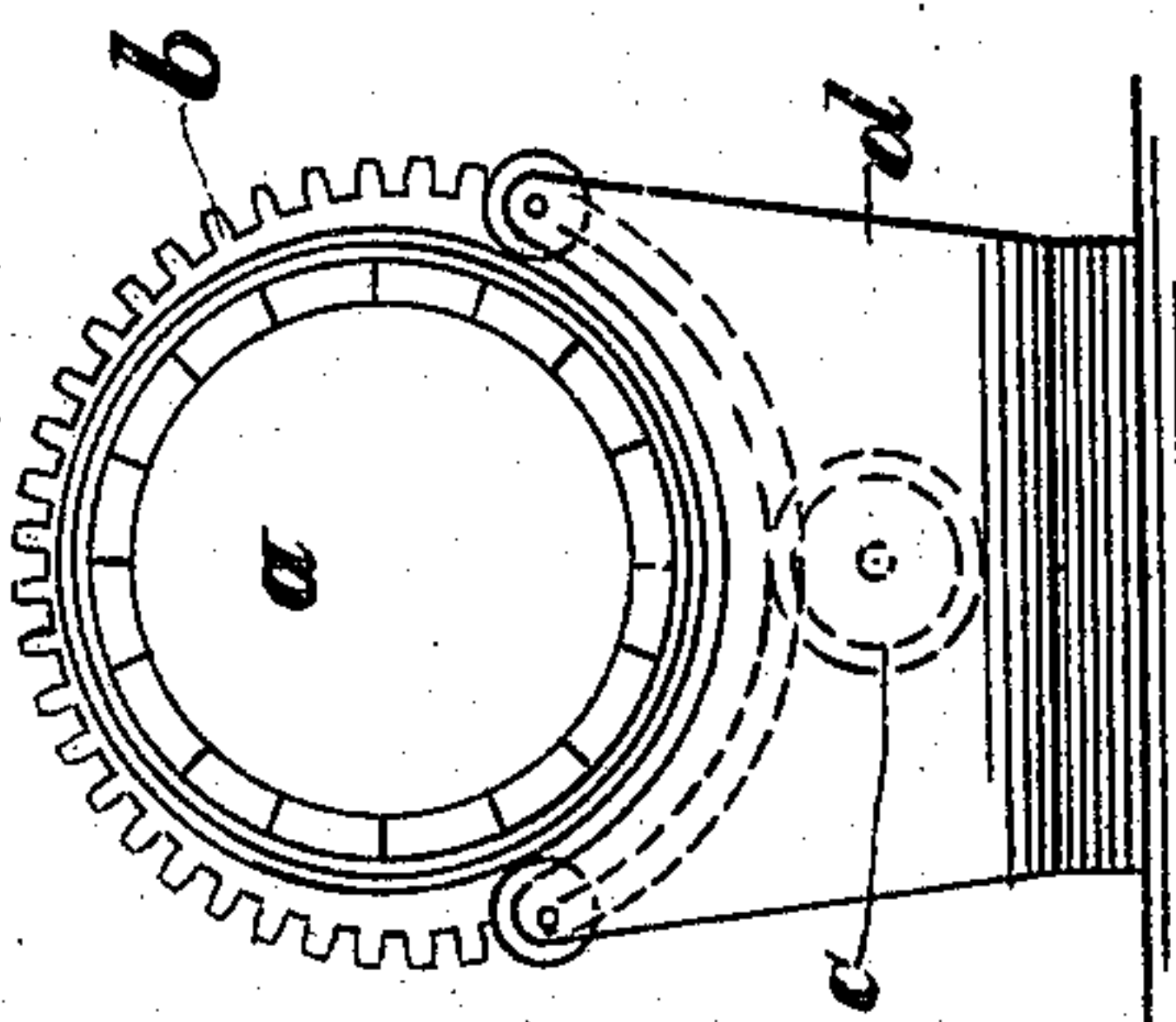
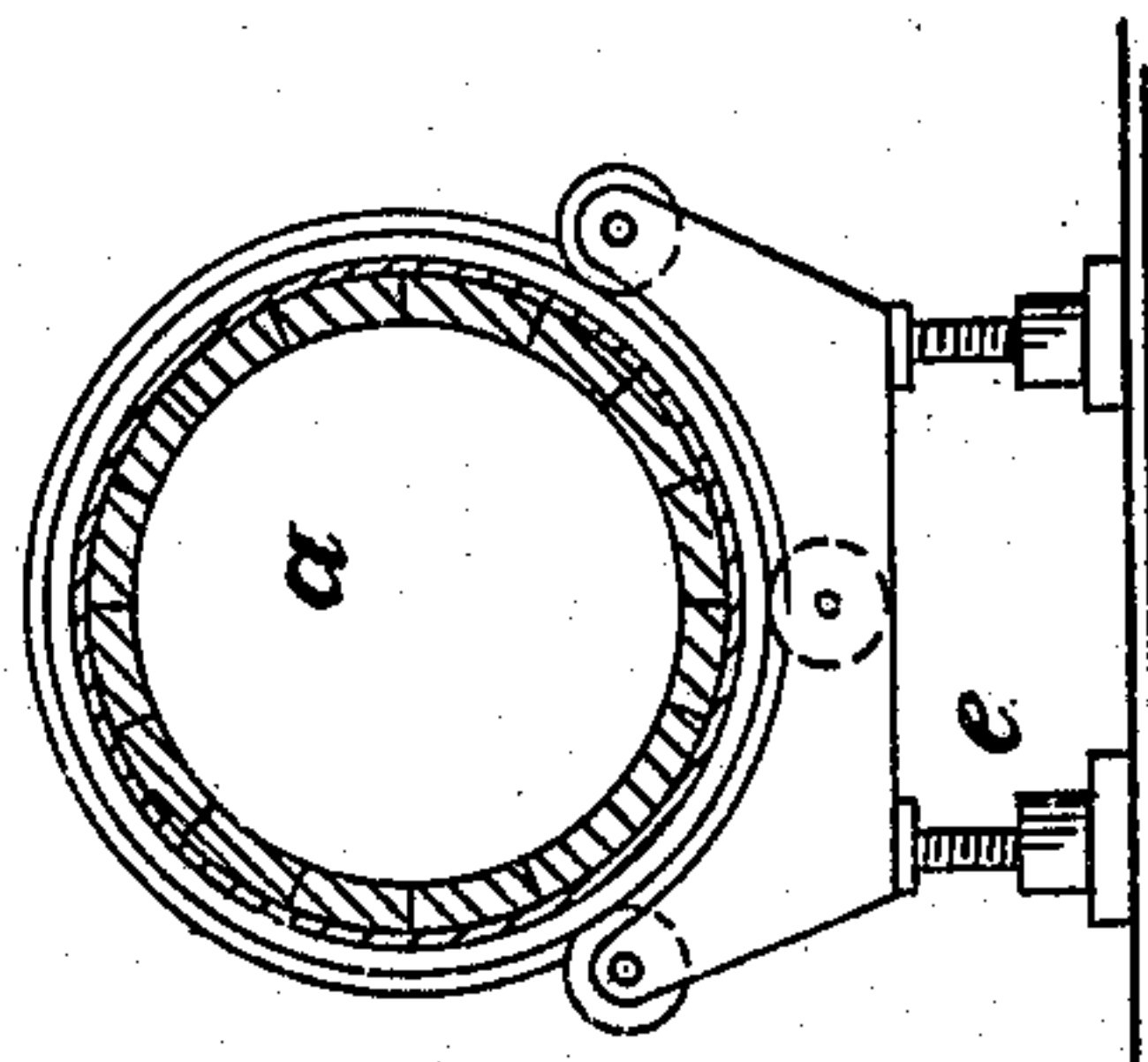


Fig. 2.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

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## ROTARY KILN.

No. 847,862.

Specification of Letters Patent.

Patented March 19, 1907.

Application filed March 29, 1906. Serial No. 308,790.

*To all whom it may concern:*

Be it known that I, WILLIAM R. WARREN, a citizen of the United States, residing at Manhattan borough, in the county and State of New York, have invented new and useful Improvements in Rotary Kilns, of which the following is a specification.

This invention relates to a kiln which can be tilted or adjusted to desired angle and the tilt or inclination varied or set without stopping the rotation or operation.

This invention is set forth in the following specification and claims and illustrated in the annexed drawing, in which—

Figure 1 is a side elevation of a kiln embodying this invention. Fig. 2 is a section along  $x x$ , Fig. 1. Fig. 3 is an end view of Fig. 1. Fig. 4 is a section along  $y y$ , Fig. 1.

The kiln is shown with gear-ring  $b$  and driving wheel or gear  $c$ . A tilting or rocking support  $d$  is made to support portions of the kiln.

Screw supports or jacks  $e$  at suitable points along the kiln can be adjusted to vary the inclination or tilt thereof. As the kiln is tilted the support  $d$  is likewise rocked, and engagement of the driving parts is maintained. The operation or rotation is thus not interfered with by the tilt or adjustment.

By means of this invention it is possible to vary from time to time the rate of speed of material passing through the kiln.

The rocking support shown adjacent to the fuel-inlet extremity of the kiln is of material

advantage in permitting the kiln to be set up in any locality without requiring preliminary preparation of a base or foundation construction or a pivot-bearing support. The rocking of the kiln produces very little movement at the point where the driving-kiln  $c$  is located, so that a belt-and-pulley connection actuating the gear  $c$  will not be disarranged. It will also be observed that the inlet end of the kiln remains at a uniform level to maintain communication with the stationary feed means or hopper.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A kiln having a rocking support at the inlet or supply end, the latter end remaining at a uniform level.

2. A kiln having driving or rotating means, a rocking support at the supply end, the supply end of the kiln remains at a uniform level, and means for tilting or adjusting the inclination of the kiln.

3. A kiln having driving or rotary means, a rocking support at the inlet or supply end of the kiln, and screws for adjusting the remaining portion of the kiln to vary the inclination of the latter.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

WILLIAM R. WARREN.

Witnesses:

EDWARD WIESNER,  
GEORGE HULSBERG.