

Whitlock & Toan,

Making Sheet-Metal Vessels.

N^o 38,616.

Patented May 19, 1863.

Fig. 2

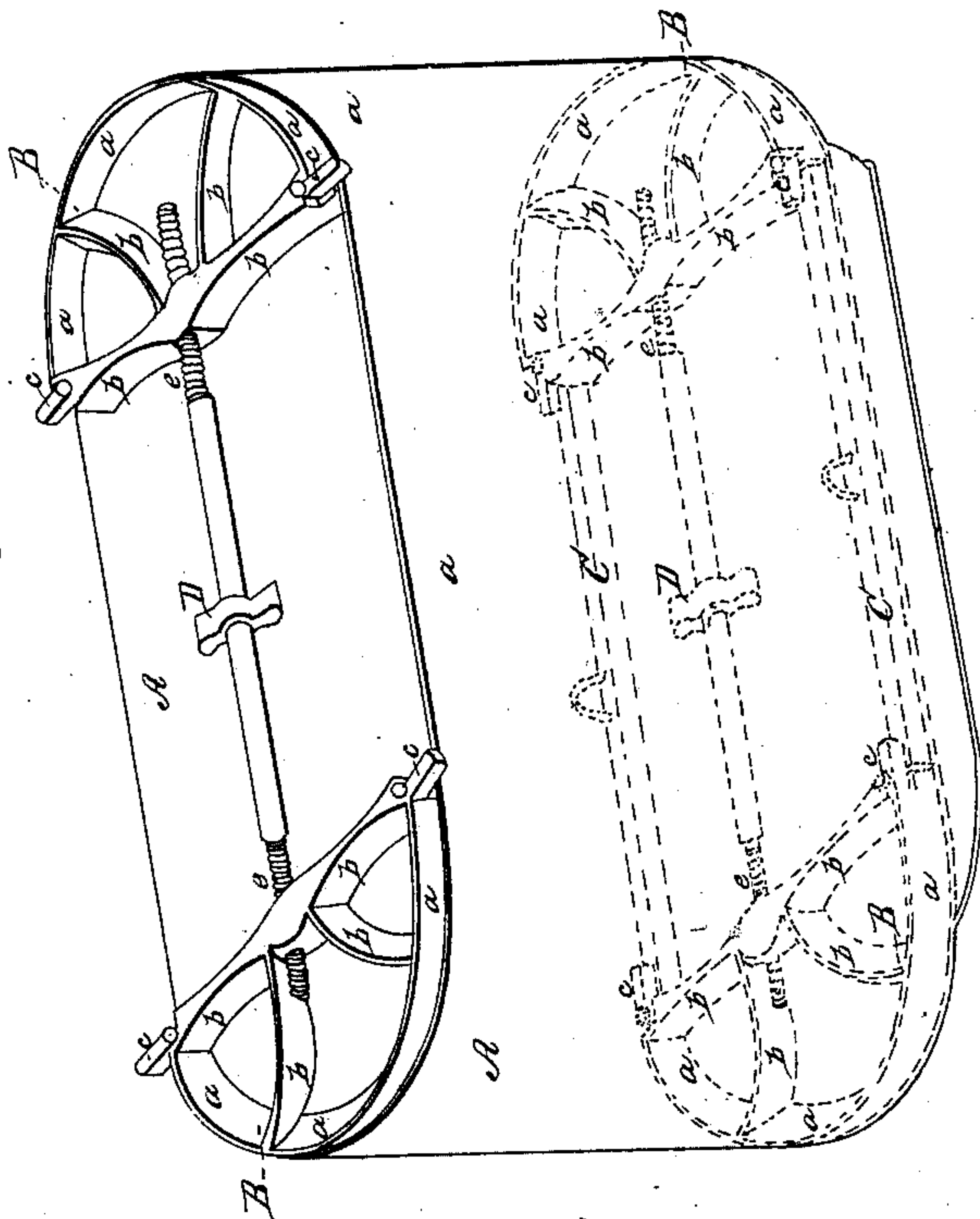
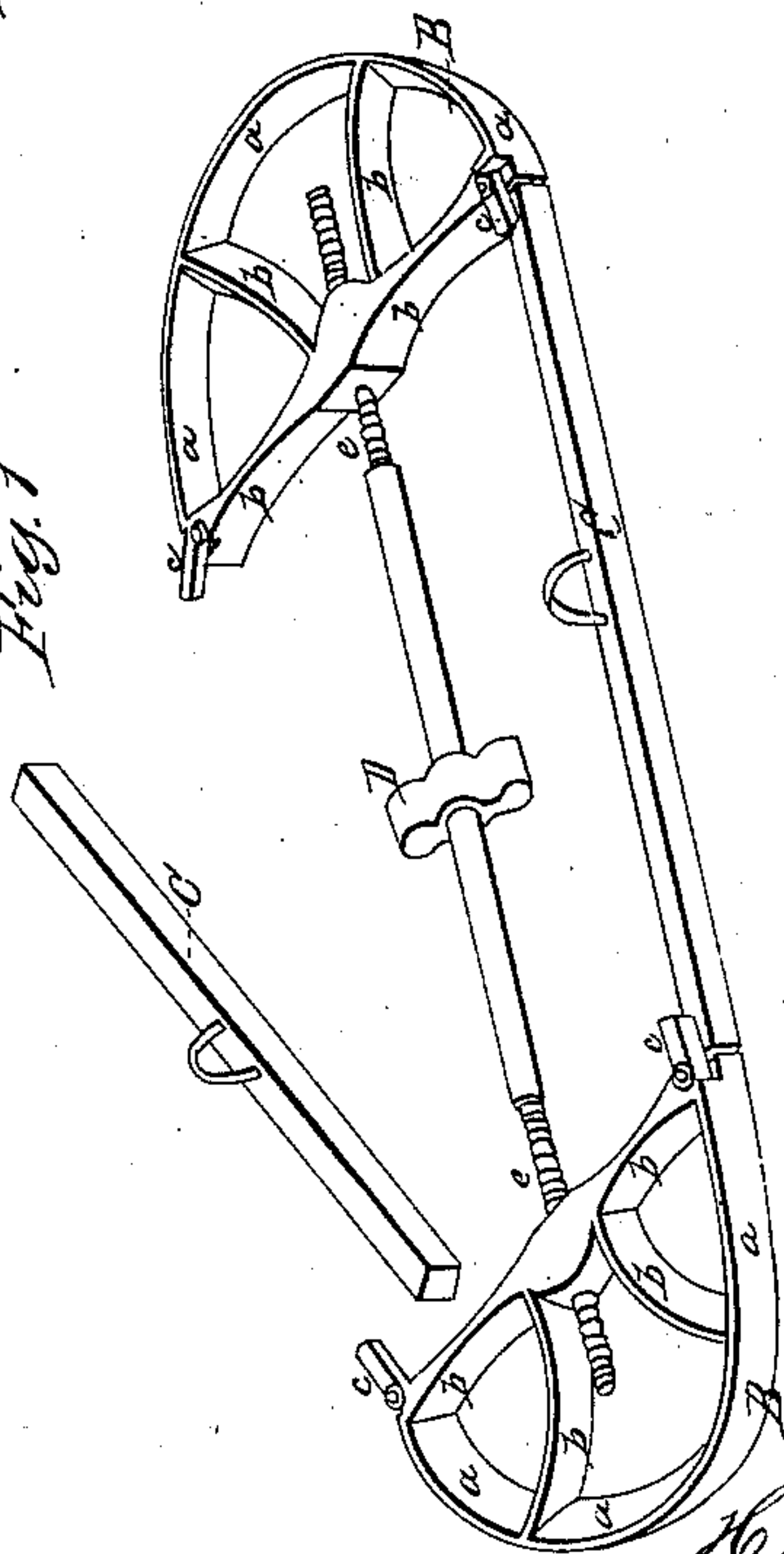


Fig. 1



Witnesses;
E H Reese
C C Bruck

Inventors;
Horace Ball Whitlock
Charles E Toan

UNITED STATES PATENT OFFICE.

HORACE B. WHITLOCK AND CHAS. E. TOAN, OF PLYMOUTH, INDIANA.

IMPROVEMENT IN FORMING AND DOUBLE-SEAMING STOVE-BOILERS.

Specification forming part of Letters Patent No. 38,616, dated May 19, 1863.

To all whom it may concern:

Be it known that we, HORACE B. WHITLOCK and CHARLES E. TOAN, of Plymouth, in the county of Marshall and State of Indiana, have invented a new and useful Machine for Forming and Double-Seaming Stove-Boilers; and we do hereby declare that the following is a full and exact description. (See drawings accompanying this specification.)

The machine consists of two solid iron semi-circles, *a a a*, with braces and cross-pieces *b b b*, connected by an iron rod, *D D*, with right-and-left screw *EE* cut at the ends, which pass through the middle of the cross-pieces, the nuts for the screws being cut in the cross-pieces. At the ends of the cross-pieces are notches, into which the side stays fit. The side stays, *C C*, are two solid bars of iron, the out and lower sides smooth and straight, and the ends made to fit the notches in the cross-pieces, and of any required length. At the end of the cross-pieces are movable buttons *c c*, which serve to hold the side stays in their places when the machine is being used in forming the bottom curves of the boiler and turning the double seam, and as rests when the machine is being used in forming the curves of the top of the boiler. All the members of the machine are to be made large and heavy enough to be hammered upon without bending or breaking.

Figure No. 1 represents the machine with one side stay in its place. Fig. No. 2 represents the position of the machine and manner of using it while forming the top of the boiler.

The movable buttons should be turned out so as to rest on the top of the boiler and hold the machine from slipping inside. The thumb-screw is then turned until the half-circles are pressed firmly against the ends of the boiler. The tin and wire are thus held in proper shape, and by using the machine as a "stake" or "anvil" the curves of the ends of the boiler are perfectly formed without any difficulty and much quicker than by the ordinary method. Fig. No. 3 shows the position of the machine in the bottom of the boiler and manner of using it. Screw the half-circles firmly against the ends of the boiler, put in the side stays, and turn the movable buttons so as to hold them in their places. The bottom curves of the boiler can then be formed as the top, and the double outsideseam can be smoothly and evenly turned, the machine acting as and being used in the place of a stake or rest.

The inventors claim the above-described machine to be an entirely new and original invention for the uses and purposes above specified, except the right-and-left extension-screw, and they claim the application of the same or its equivalent for the uses and purposes above specified as their own invention.

In witness whereof we have hereunto set our hands and seals this 2d day of April, 1863.

HORACE BALL WHITLOCK. [L. S.]
CHARLES E. TOAN. [L. S.]

Attest:

C. H. REEVE,
C. C. BUCK.