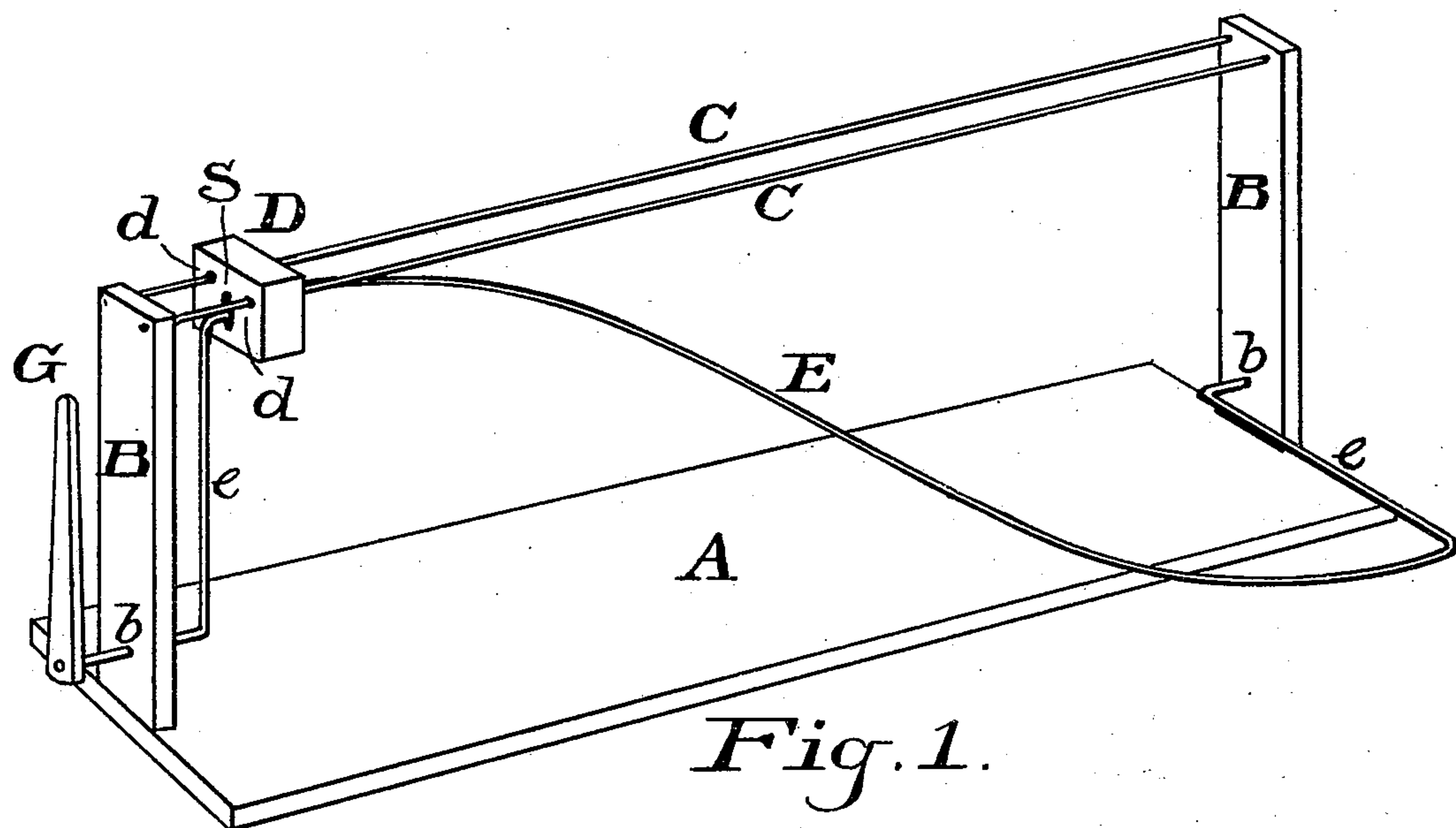
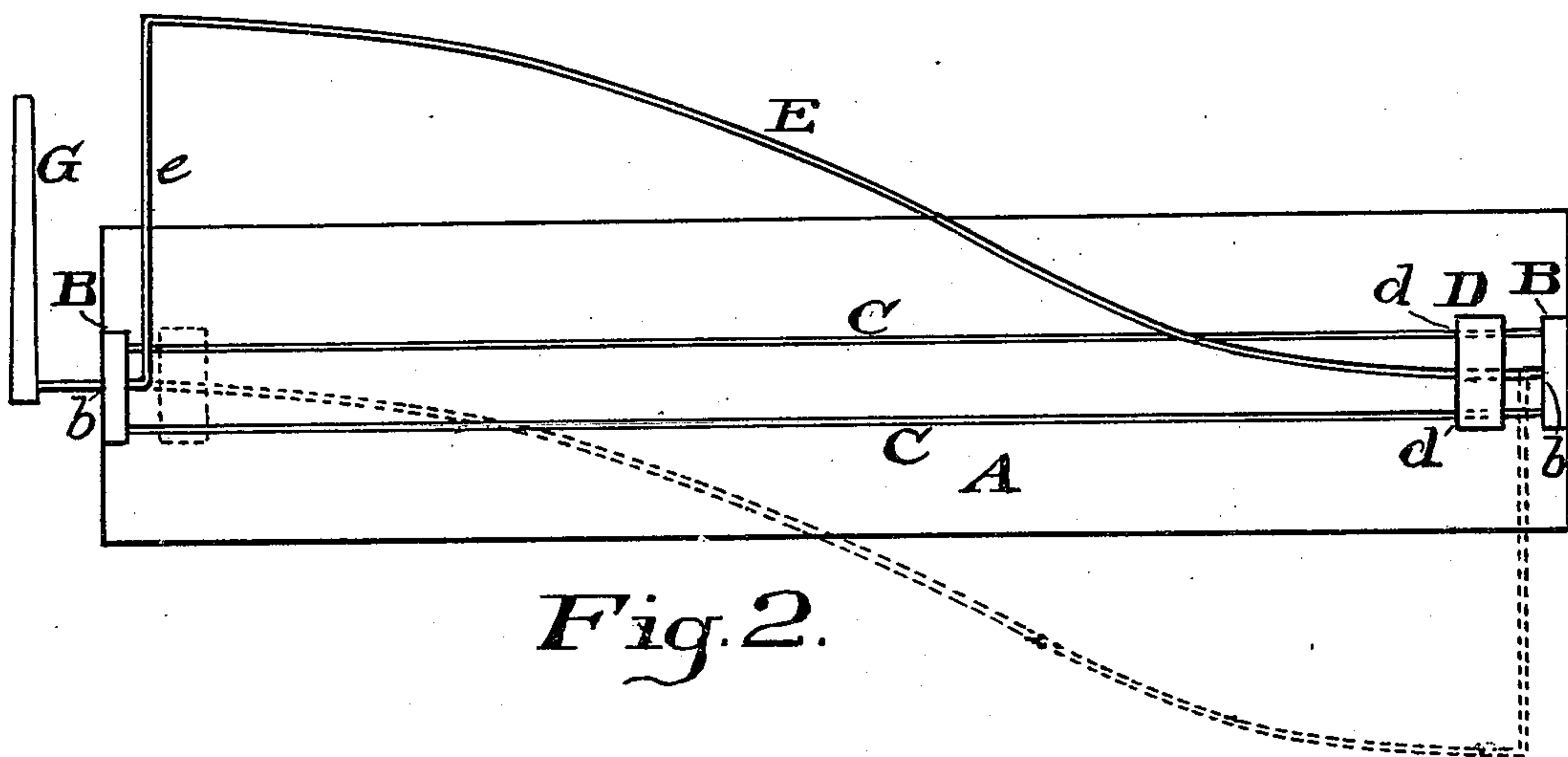


No. 665,612.

Patented Jan. 8, 1901.

R. B. LUCAS.  
MECHANICAL MOVEMENT.  
(Application filed Mar. 19, 1900.)

(No Model.)



Witnesses.

Geo. B. Tibbitts

Chas. L. Hooker

Inventor

Robert B. Lucas

per Geo. W. Tibbitts  
Attorney.

# UNITED STATES PATENT OFFICE.

ROBERT B. LUCAS, OF CLEVELAND, OHIO.

## MECHANICAL MOVEMENT.

SPECIFICATION forming part of Letters Patent No. 665,612, dated January 8, 1901.

Application filed March 19, 1900. Serial No. 9,344. (No model.)

*To all whom it may concern:*

Be it known that I, ROBERT B. LUCAS, a citizen of the United States of America, and a resident of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Mechanical Movements, of which the following is a specification.

This invention relates to mechanical movements, having for its object to produce a long and rapid movement from a short movement; and the invention consists in the new, simple, and peculiar construction and arrangement of the elements comprising the device, substantially as hereinafter described, and pointed out in the claim.

The accompanying drawings illustrate the principle involved in my invention and the simple method of applying or adapting means for producing the results, in which—

Figure 1 is a perspective view of a device embodying my invention. Fig. 2 is a top or plan view of the same, showing the two positions of the main element in the device assumed in the operations of the same in producing the results.

A represents a base for supporting the working parts, which may be in a horizontal or vertical position, as desired. B B are posts or arms extending from said base, and C C are two rods having their ends secured in and near the ends of said posts or arms and parallel to each other and but a short distance apart.

D is a block, which may be round, square, oblong, or any other suitable shape, having two holes *d d*, through which the rods C C are inserted and upon which said block rides in the operations of the device.

E is the operating-lever, consisting of a long rod having its ends bent at right angles to its length to form two arms *e e'* of equal length

and having its main portion between said arms bent or twisted in a curved line, so as to make said arms stand or lie at an angle of about forty-five degrees, more or less, as may be desired, to each other, as represented in Fig. 1. The inner ends of said arms are journaled in bearings *b b* in the posts B B, near the base A. Through the central part of block is made a slot *s*, through which the said lever E is inserted, as seen in Fig. 1. On the protruding end of one of the journals of said lever E is attached a crank-arm F, or in lieu thereof a segment of gear, to which power is to be applied for operating the lever E.

The working of this device is as follows: The parts being in position shown in Fig. 1, the crank F is turned down into a horizontal position, as seen in Fig. 2. This gives the lever E a quarter-turn on its bearings, and it pushes or conveys the block D rapidly along on the rods C C to the position shown in Fig. 2, thus producing the long-distance movement of the block by a short movement of the crank or gear. The block is as quickly returned to its first position by a reverse movement of the crank or gear.

Having described my invention, what I claim is—

The herein-described mechanical movement, comprising the base A, posts or arms B B, rods C C, supported by said posts or arms, movable block D mounted on said rods C C, the lever E journaled in the posts B B and passing through the block D, and the crank G, constructed to operate substantially as described.

Signed by me at Cleveland, Ohio, this 12th day of March, 1900.

ROBERT B. LUCAS.

Witnesses:

GEO. W. TIBBITTS,  
CHARLES L. STOCKER.