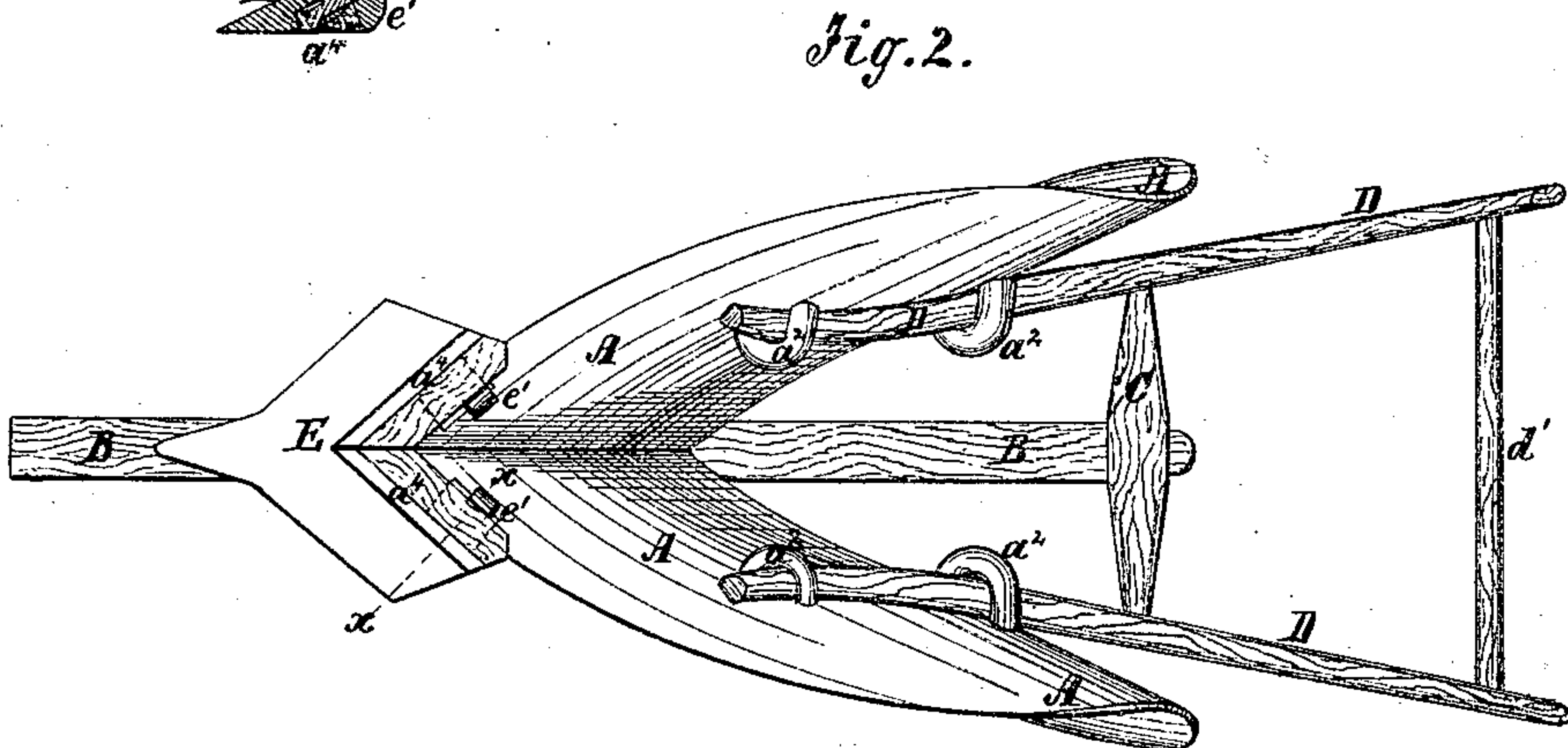
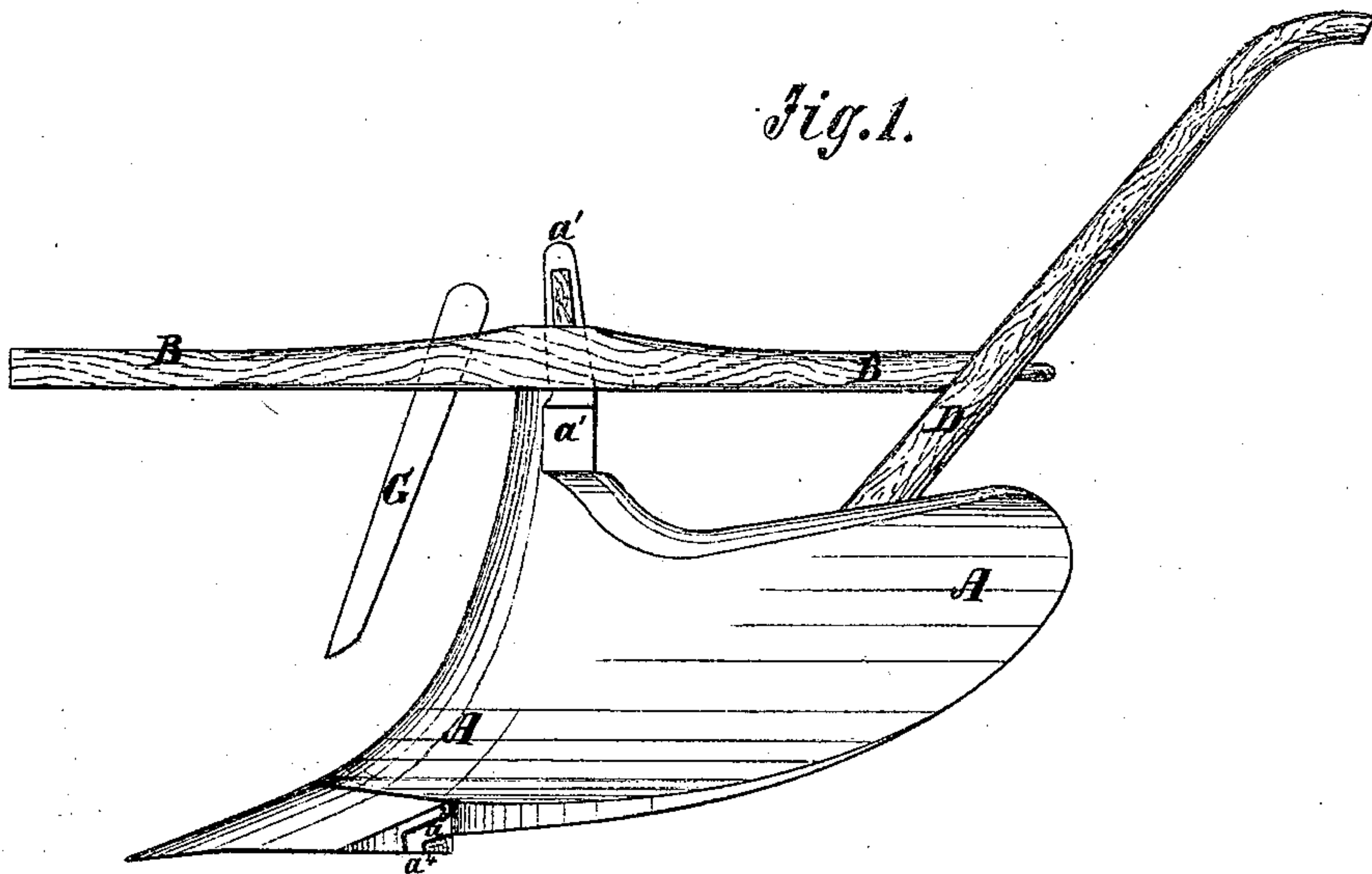


D. CULVER.

Improvement in Cultivator Plows.

No. 115,033.

Patented May 23, 1871.



Witnesses:  
A. Bonnichsen  
L. S. Mabee

Inventor:  
D. Culver  
PER *Mumford*  
Attorneys.

# UNITED STATES PATENT OFFICE.

DAVID CULVER, OF KINGSTON, PENNSYLVANIA.

## IMPROVEMENT IN CULTIVATOR-PLOWS.

Specification forming part of Letters Patent No. 115,033, dated May 23, 1871.

*To all whom it may concern:*

Be it known that I, DAVID CULVER, of Kingston, in the county of Luzerne and State of Pennsylvania, have invented a new and useful Improvement in Cultivator-Plow; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 is a side view of my improved plow. Fig. 2 is a bottom view of the same. Fig. 3 is a detail sectional view of the same taken through the line *x x*, Fig. 2.

Similar letters of reference indicate corresponding parts.

My invention relates to double mold-board cultivator-plows, which are run between rows to hill up crops at the last working, and my purpose is to enable them also to be used in turning out potatoes. The principle of my improvement consists in constructing them so as to lift and throw the furrow completely over, and expose to view on the top thereof all the roots and bulbs of the potato-plant.

I will now describe whatever is necessary to a full understanding of the construction of a plow containing my improvement, and then clearly point out in the claim the means wherein my invention is embodied; and it consists in the construction and combination of the various parts of the plow, as herein-after more fully described.

A are the two mold-boards of the plow, the line of division between which runs along the colter of the plow and through the center of the standard *a*<sup>1</sup>, the parts of which are cast solid with the said parts or mold-boards. The upper ends of the standard *a*<sup>1</sup> pass up through the beam B, to which they are secured by a key, as shown in Fig. 1. The rear end of the beam B is secured to a cross-bar, C, the ends of which are secured to the

handles D. The upper ends of the handles D are connected and held in their proper relative positions by a round, *d'*, and their lower ends are inserted in lugs or loops *a*<sup>2</sup>, cast solid upon the inner sides of the mold-boards A. The latter are hollowed or concaved on the sides to enable them to raise and turn each furrow flat and reverse its position entirely. The side edges are horizontally flanged to reach under the outlying tubers of the potato-plant, and insure their being lifted and fully exposed on the reversed soil. Upon the lower edge of the forward part of the mold-boards A are formed flanges *a*<sup>3</sup>, having downwardly-projecting flanges *a*<sup>4</sup> formed upon their forward edges. The flanges *a*<sup>3</sup> are slotted at or near their bases to receive the lugs *e'*, formed upon the lower side of the rear part of the point or shear E, which is made with two wings, as shown in Fig. 2. The point E thus locks the forward ends of the mold-boards A to each other. The lugs *e'* have shoulders formed upon the rear sides of their lower ends to overlap the under side of the mold-boards A along the rear side of the slots through said mold-boards. F are keys driven between the forward sides of the lugs *e'* and the rear sides of the flanges *a*<sup>4</sup>, to lock the point E and the forward parts of the mold-boards A to each other. G is a cutter, attached to the beam B in front of the point between the parts or mold-boards A to open the soil for the passage of the plow.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The double mold-board A A, concaved to turn a flat furrow on each side, and horizontally edge-flanged at the bottom to run under outlying tubers of the potato-plant, as described.

Witnesses: DAVID CULVER.  
SAMUEL C. PHILLIPS,  
R. H. TUBBS.