

*J. Trees,
Water Wheel,*

N^o 6,115.

Patented Feb. 13, 1849.

Fig: 2.

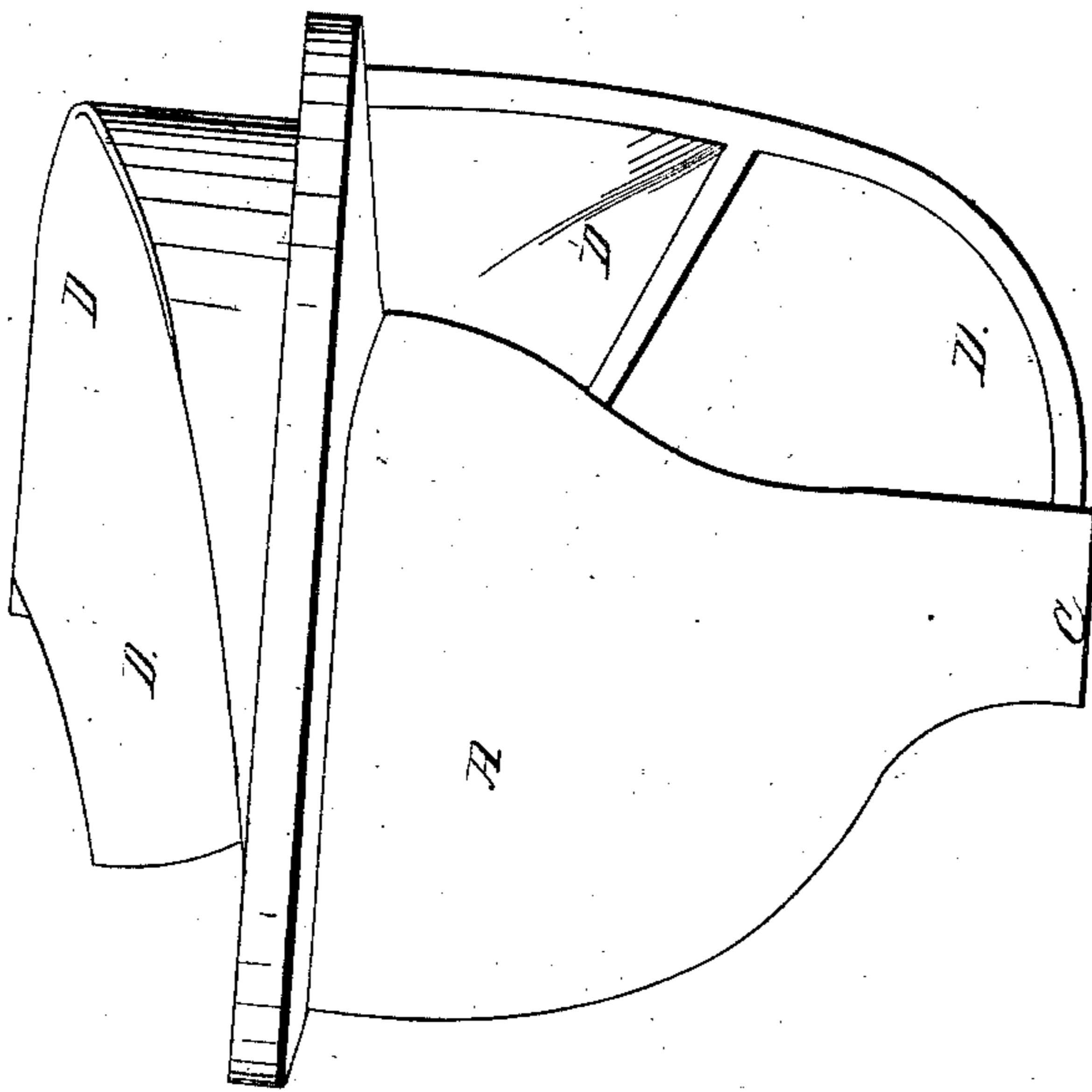
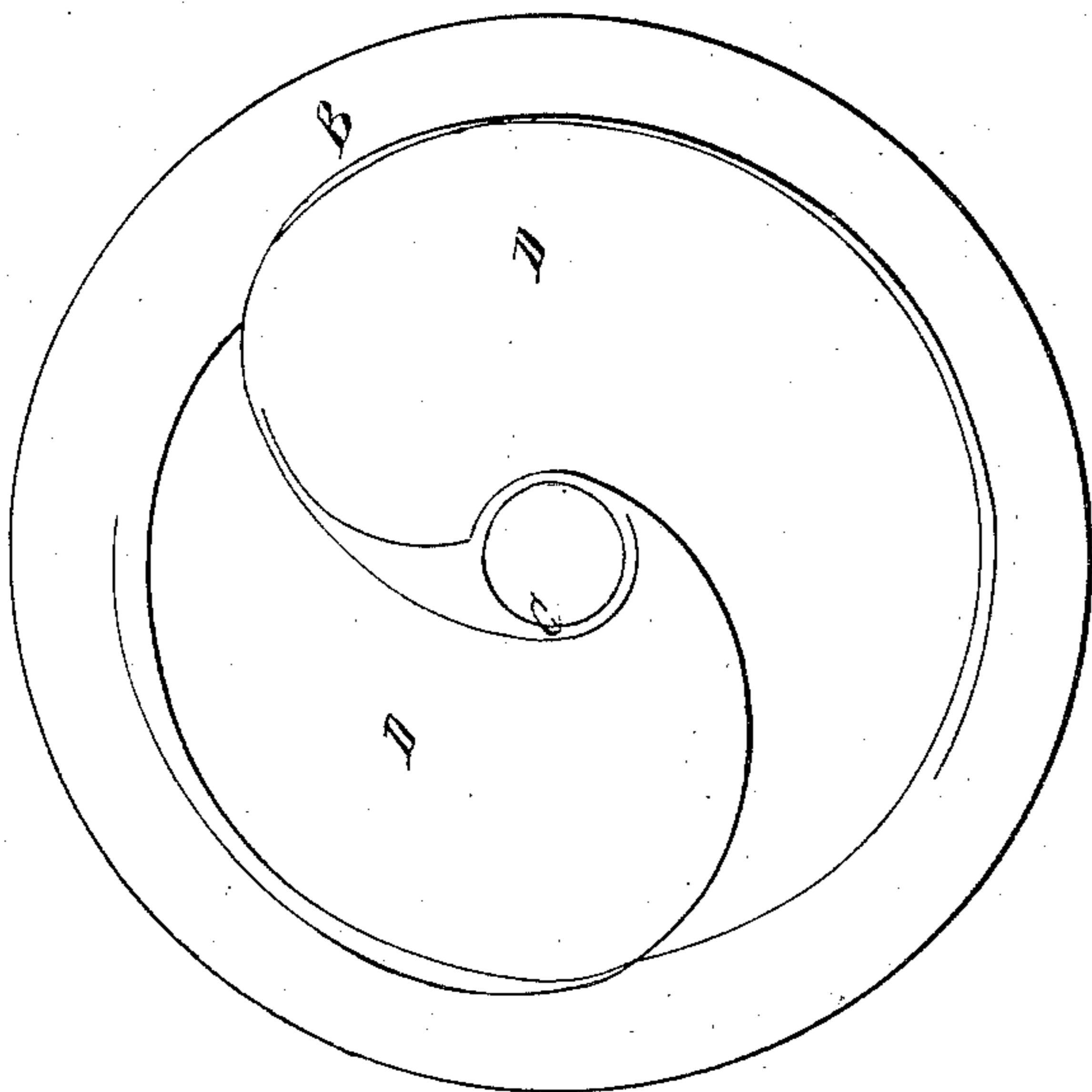


Fig: 1



UNITED STATES PATENT OFFICE.

JAMES TREES, OF SALEM, PENNSYLVANIA.

IMPROVEMENT IN WATER-WHEELS.

Specification forming part of Letters Patent No. 6,115, dated February 13, 1849.

To all whom it may concern:

Be it known that I, JAMES TREES, of Salem township, in the county of Westmoreland and State of Pennsylvania, have invented a new and useful Reaction Water-Wheel, called "Trees's Improved Water-Wheel," which is described as follows, reference being had to the annexed drawings of the same, making part of this specification.

Figure 1 is a top view of the wheel. Fig. 2 is a side elevation.

Similar letters in the several figures refer to corresponding parts.

This wheel A is cast of a conchoidal form resembling a conch, or more nearly that species of shell called the "dolium shell" in conchology, having a circular rim B around its upper or larger end and a vertical core C or central tube surrounded by two spiral buckets D D, that start from the open side of the shell, the one at the lower or smaller end and the other near the middle of the outlet, and wind spirally around the central core to the upper end thereof and rising above the same

about one-third the diameter of the wheel, each bucket being of a width to reach from the inner surface of the shell to the outer surface of the core.

The water is applied to the wheel either vertically or horizontally by means of any convenient arrangement of forebay or water-chamber containing a sufficient head of water to turn the wheels with the required force or power.

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

Making the shell A of the wheel of the peculiar form described and represented, in combination with the circular plate B, central core C, and spiral buckets D D, discharging on the same side of the shell, arranged and operated in the manner and for the purpose herein set forth.

JAMES TREES.

Witnesses:

WM. P. ELLIOT,

L. WASHINGTON, Sr.