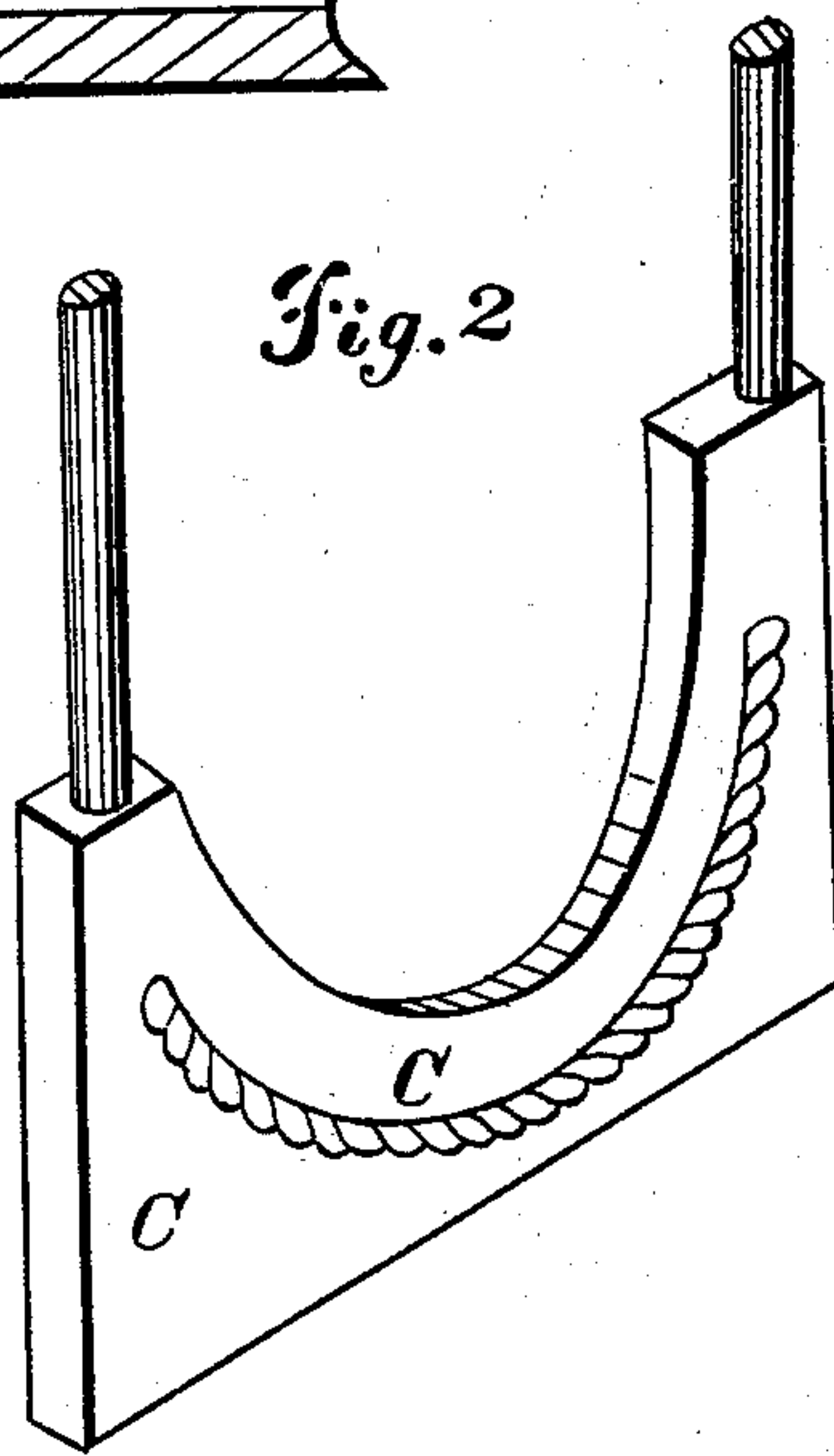
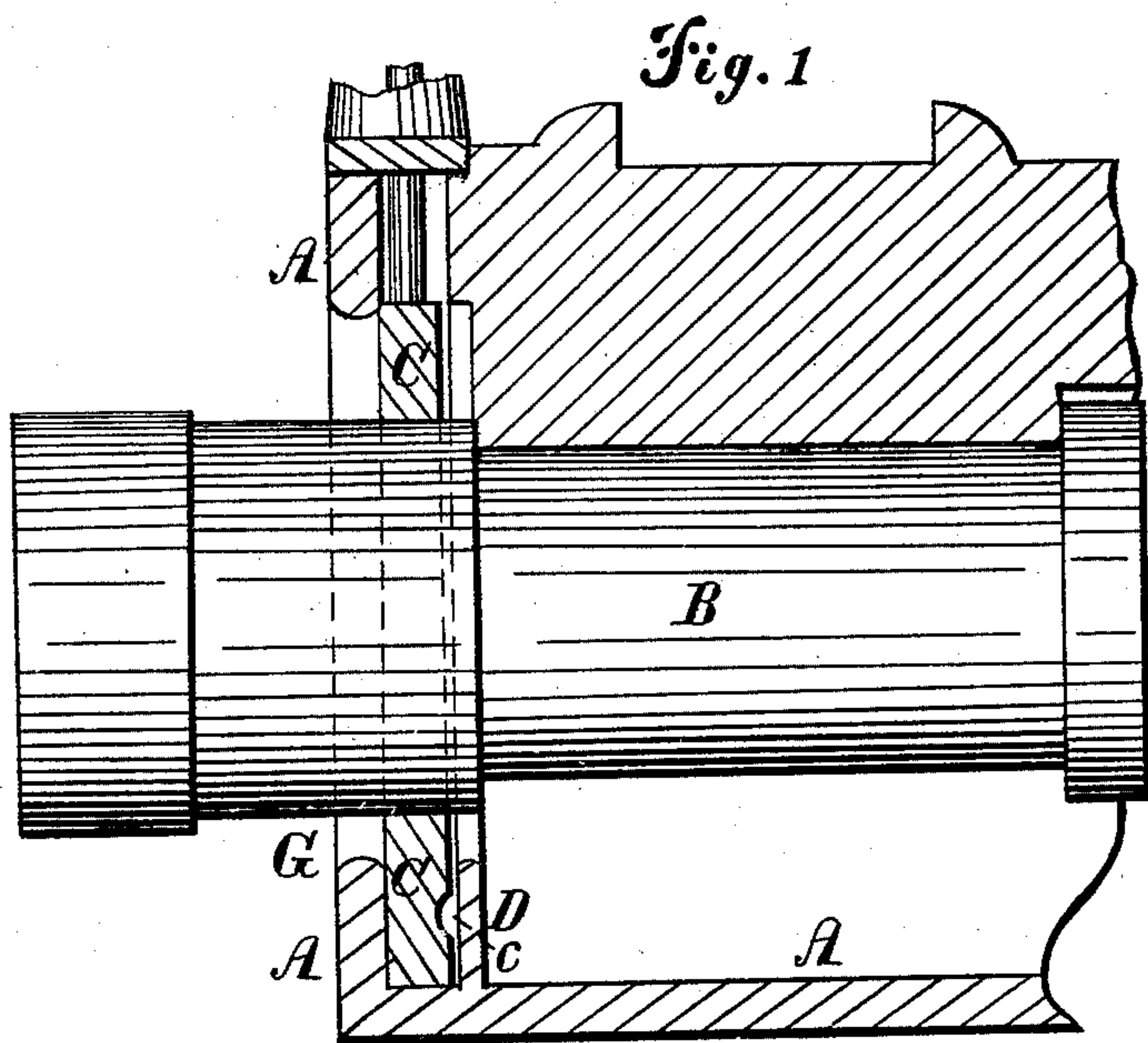


NATHANS & THORNTON.

Car Axle Box.

No. 77,831.

Patented May 12, 1868.



Witnesses:
Salom C. Kemm
Chas. A. Pettit

Inventor;
A. H. Nathan & M. Thornton
By Minn. H. C.
Attorneys.

United States Patent Office.

A. H. NATHANS AND MATTHEW THORNTON, OF MACON, GEORGIA.

Letters Patent No. 77,831, dated May 12, 1868.

IMPROVED CAR-AXLE BOX.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that we, A. H. NATHANS and MATTHEW THORNTON, of Macon, in the county of Bibb; and State of Georgia, have invented a new and improved Car-Axle Box; and we do hereby declare the following to be a full, clear, and exact description of the same, sufficient to enable those skilled in the art to which our invention appertains to make use of it, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a longitudinal vertical section of the axle-box, and

Figure 2, a perspective view of the packing-plate C, showing the particular feature which constitutes our invention.

This invention is an improvement upon the axle-box patented by D. H. Dotterer, April 3, 1866, and consists in so constructing the spring packing-plate, used in his invention, that the oil cannot escape from the box, whereby the value of the whole device is greatly enhanced.

In the drawings, A A represent the walls of the axle-box, and B the end of the car-axle in position in the box. C is the metallic spring packing-plate, that fits around the axle, just within the inner side of the box, to prevent the entrance of dust, &c. In the axle-box referred to, upon which this is an improvement, the plate C operates between a low partition, D, and, the inner wall of the box. It is found in practice, however, that the oil in the reservoir, E, will slop over the partition D, and, penetrating under and around the packing-plate C, will rise to the opening, G, in the inner wall of the box, in which the axle works, and will thence escape in large quantities, rendering the box an expensive one to use.

To obviate this defect, we construct the metallic packing-plate C with a curved packing, c, the ends of which rise above the ends of the partition D. This packing may be either on the inner or outer side of the plate C. If on the inner side, it operates against the outer wall of the partition D, and prevents the oil from working down under the plate C at all. If on the outer side, it operates against the inner side of the wall A, and prevents the oil which may slop over the partition D from rising between the wall A and plate C far enough to escape at the opening G.

Upon whichever side of the plate C it may be used, it prevents all escape of the oil under the plate, thereby rendering the box much more economical than before, besides keeping the axle better lubricated, and causing the whole apparatus to work with increased efficiency.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

The curved packing c, when arranged on the side of the plate C, in the manner and for the purposes specified.

A. H. NATHANS,
MATTHEW THORNTON.

Witnesses:

HENRY C. DAY,
J. B. LANIER.