

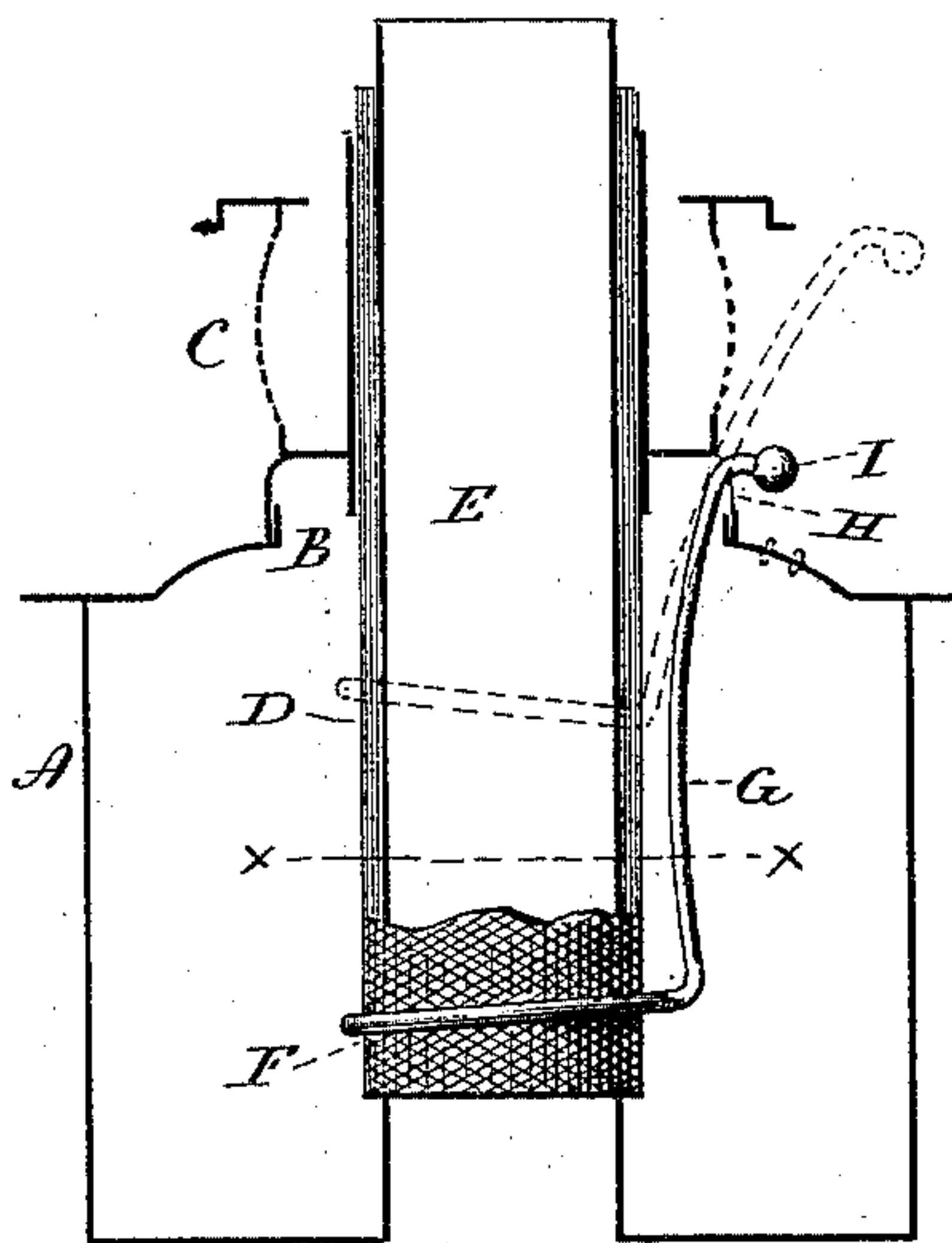
(No Model.)

E. L. BRYANT.  
WICK RAISER FOR CENTRAL DRAFT LAMPS.

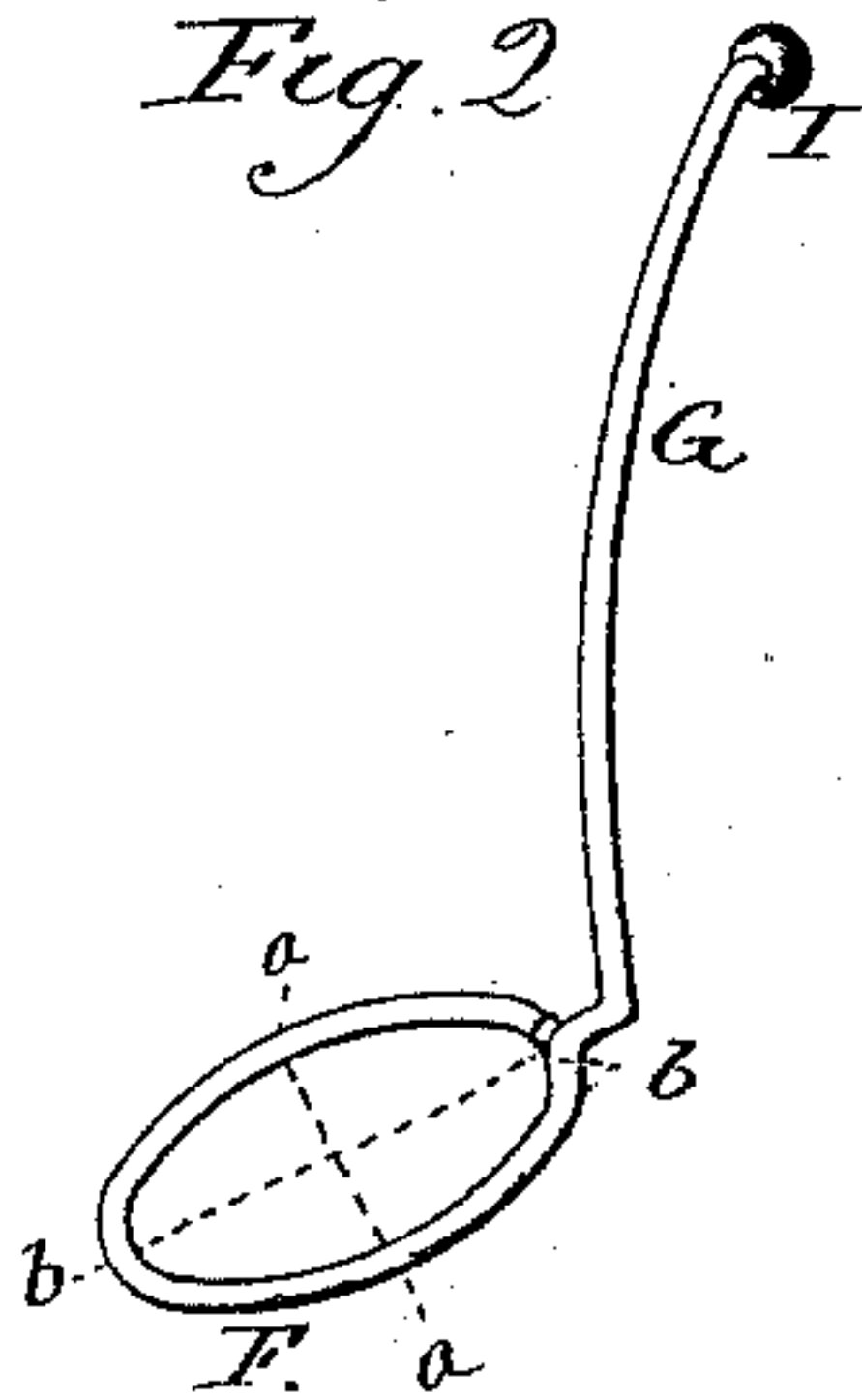
No. 409,910.

Patented Aug. 27, 1889.

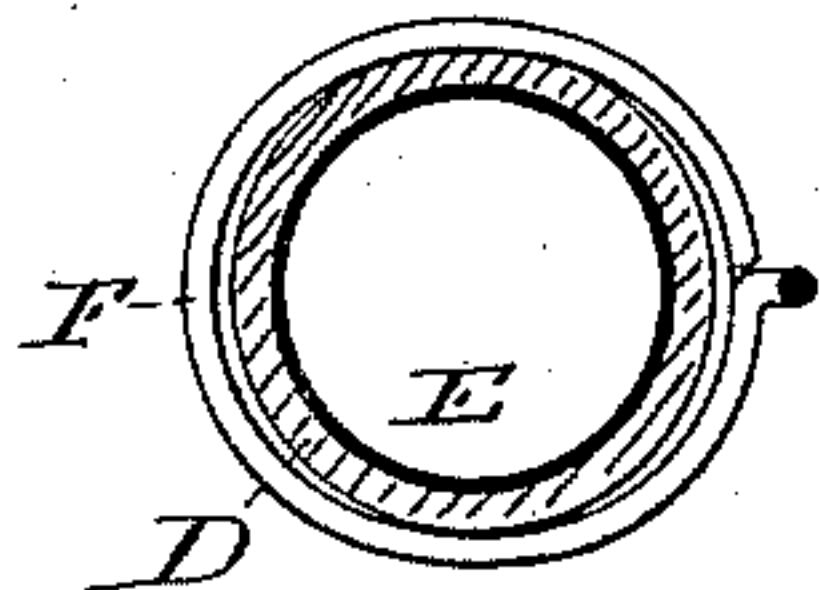
*Fig. 1*



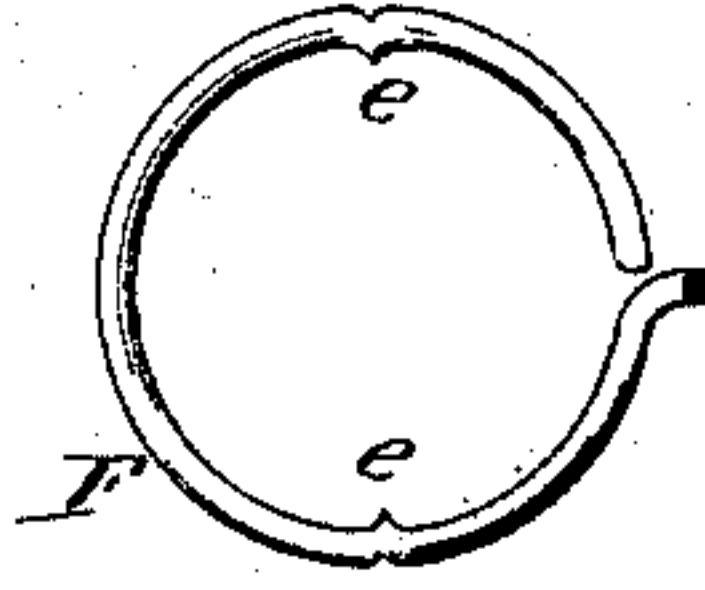
*Fig. 2*



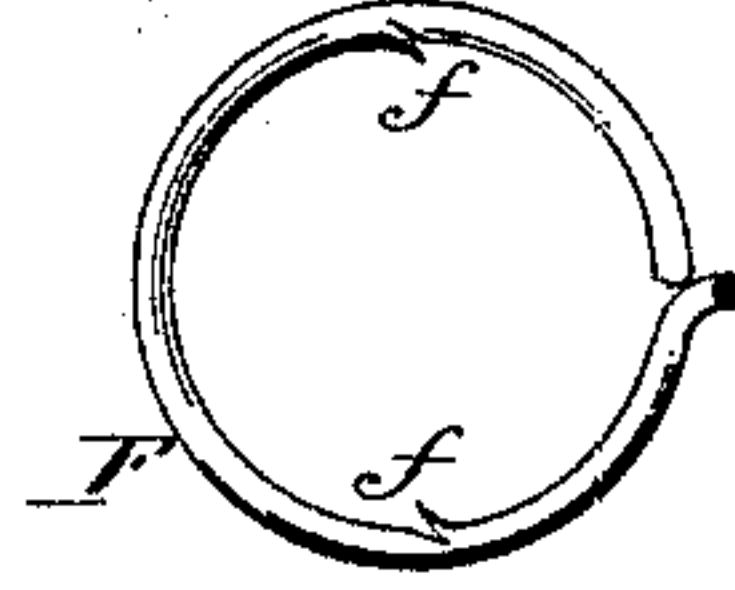
*Fig. 3*



*Fig. 4*



*Fig. 5*



Witnesses:  
J. A. Humway  
Fred C. Bailey

Edson L. Bryant  
By Atty. Inventor.  
Wm. C. Smith

# UNITED STATES PATENT OFFICE.

EDSON L. BRYANT, OF ANSONIA, CONNECTICUT, ASSIGNOR OF ONE-HALF TO  
WALLACE & SONS, OF SAME PLACE.

## WICK-RAISER FOR CENTRAL-DRAFT LAMPS.

SPECIFICATION forming part of Letters Patent No. 409,910, dated August 27, 1889.

Application filed May 13, 1889. Serial No. 310,558. (No model.)

*To all whom it may concern:*

Be it known that I, EDSON L. BRYANT, of Ansonia, in the county of New Haven and State of Connecticut, have invented new Improvements in Wick-Raisers for Central-Draft Lamps; and I do hereby declare the following, when taken in connection with accompanying drawings, and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a sectional view of the fount and burner, with a side view of the wick-adjuster; Fig. 2, a perspective view of the wick-adjuster detached; Fig. 3, a transverse section through the wick-tube on line  $x x$ , showing top view of the wick-adjuster ring; Figs. 4 and 5, modifications.

This invention relates to an improvement in wick-adjusters for that class of lamps in which the wick is of tubular shape arranged in the fount around a tube, open from below to admit air through the tube and wick to the flame at the top of the wick-tube, commonly called "central-draft lamps," and particularly to that class of adjusting devices in which a rod is arranged to work outside the burner and in connection with the wick, and so that by lifting the rod to draw it from the fount the wick will be raised or pressed downward, and will correspondingly lower the wick, the object being a simple and effective construction; and it consists in the construction as hereinafter described, and particularly recited in the claims.

A represents the fount, having a central opening B in the top, and over which opening the burner C is arranged in the usual manner.

D represents the wick, surrounding the central air-tube E, and so as to slide up and down thereon, as usual in this construction of lamps.

The wick-adjuster is made from a single piece of wire. At the lower end the wire is bent into ring shape F of slightly elliptical form, its diameter on the line  $a$  being somewhat less than the external diameter of the wick when arranged upon the central tube.

The longer diameter on the line  $b$  is greater than that of the diameter  $a$ . From one side of the ring on the longer diameter the wire extends up to form the lifting-rod G. This is curved and so that its upper end may pass through an opening H in the burner above the neck, or through any other convenient point, so that the outer end may form a handle I, by which the rod may be raised or lowered.

The wick is placed upon the central tube in the usual manner. Then the wick-adjuster is set in place, the ring F passing over the wick, and so that its shorter diameter will impinge closely upon the wick to grasp the wick between the opposite points on the shorter diameter and the inner tube with sufficient force that when the ring is raised or lowered the wick will move with it. The wick and wick-adjuster are thus arranged before the burner is applied. Then the burner is set in place, first passing the hole H over the outer end or handle I of the rod G, and when the burner is in place, as seen in Fig. 1, this opening through the burner serves as a guide for the rod. The rod G is curved, as shown, and so that as it rises it swings outward through its opening and away from the burner, as seen in broken lines, Fig. 1. In this swinging movement of the rod the lifting-ring F turns upon the wick, its opposite bearings on the wick serving as pivots for such turning, so that the ring will assume different planes according to the position of the ring with relation to the support for the rod, and as seen in broken lines, Fig. 1. The longer diameter of the ring D permits this play of the ring on the wick.

I have thus far described the ring as made of elliptical shape, so as to produce the longer diameter in the plane of the lifting-rod, in order that the points at the shorter diameter may bear directly upon the wick and without forcible contact on the longer diameter; but the same result will be attained by making the ring of a complete circle and of a diameter corresponding to the longer diameter required for the wick-raising ring, and then indenting it at opposite points, as represented at  $e$ , Fig. 4, so as to shorten the diameter be-



tween those points to produce the before-mentioned bearing upon the wick; or the shortening of the diameter may be produced, as seen in Fig. 5, by making a cut into the  
5 ring upon the inside at opposite points, so as to turn a tongue, as *f*, inward, to take its bearing upon the ring. This also produces substantially the elliptical internal shape of the ring.

10 By this construction the wick-adjuster may be made complete from a single wire without joints or connecting devices. It is removable entirely from the fount with the wick, yet when in place is supported and guided for  
15 proper operation.

It will be understood that while the adjuster is adapted to be made (and I prefer to make it) from a single piece of wire because of its cheapness and durability, it may be  
20 made from other metal. In any case there is substantially the same simplicity and cheapness of construction with convenience in operation, and the lifter as it rises moves away from the burner, so as to avoid the heat of  
25 the burner in handling.

While I prefer the opening through the burner, as I have described, as the guide for the rod, it will be evident that it may pass through an opening prepared for it in the  
30 fount, as indicated in broken lines, Fig. 1.

I claim—

1. The herein-described wick-adjuster for central-draft lamps, consisting of a ring to surround the wick, the diameter of the ring in one direction somewhat less than the ex- 35 ternal diameter of the wick as it stands upon the tube, and the diameter of the ring at right angles to the said less diameter somewhat greater than the said diameter of the wick, and the ring constructed with a curved rod in the 40 plane of its longer diameter, extending upward and through a suitable guide outside the burner, substantially as described.

2. A wick-adjuster for central-draft lamps, consisting of the ring F, somewhat less in 45 diameter in one direction than the external diameter of the wick as it stands upon the tube, and the diameter of the ring at right angles to the less diameter somewhat greater than the said diameter of the wick, and hav- 50 ing a rod G extending therefrom in the plane of the longer diameter, the said rod and ring made from a single piece of wire, substantially as described.

EDSON L. BRYANT.

Witnesses:

JOHN E. EARLE,  
FRED C. EARLE.