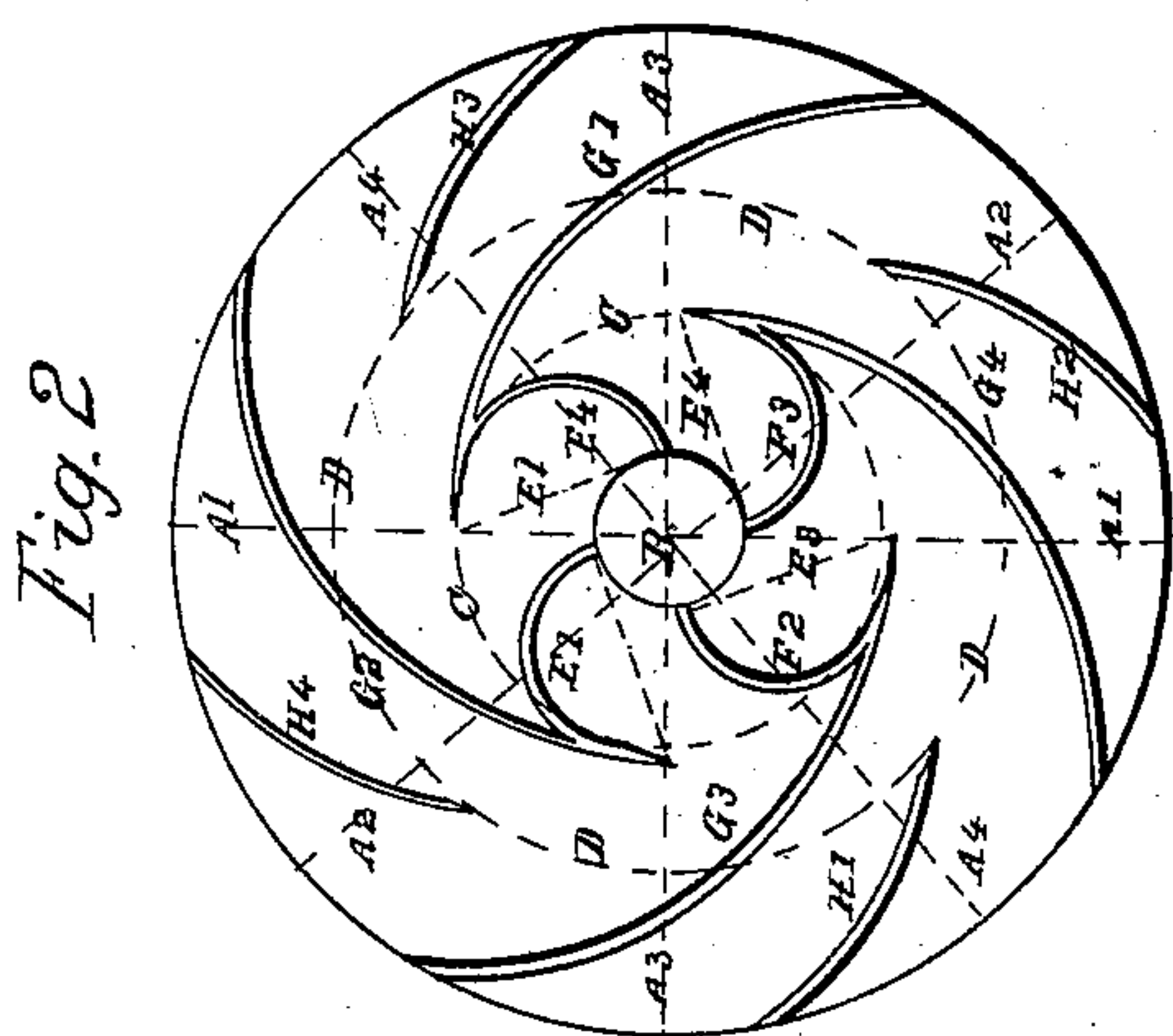
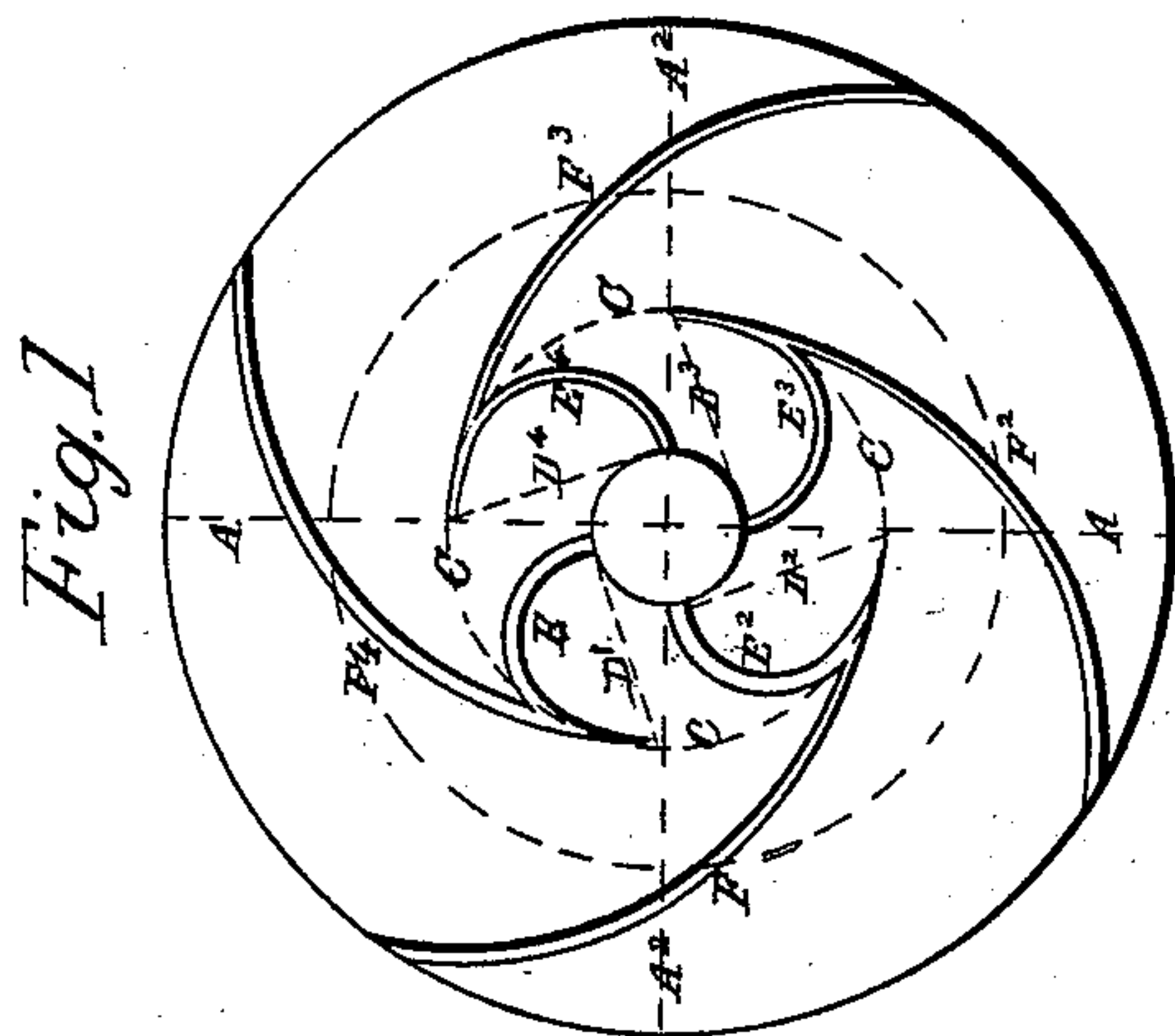


J. A. Wilson,
Millstone Dress.
N^o 20,601. Patented June 15, 1858.



UNITED STATES PATENT OFFICE.

JNO. A. WILSON, OF DOVER, NEW JERSEY.

HULLING-STONE DRESS.

Specification of Letters Patent No. 20,601, dated June 15, 1858.

To all whom it may concern:

Be it known that I, JOHN A. WILSON, of Dover, in the county of Morris, in the State of New Jersey, have invented a new and Improved Method of Dressing Millstones for the Purpose of Hulling Rice and all Grains Having a Hull or Husk; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

Figure 1st is a plan of the runner stone inverted. Fig. 2d is a plan of the bed stone.

The runner, Fig. 1st is 36 inches in diameter and after being dressed to a smooth plain surface perfectly out of wind is laid out and the cut or dress generated as follows. First, draw two straight lines (A^1 and A^2) intersecting each other at right angles at the center of the stone. Second, describe a circle of 3 inch radius (B) for eye of stone. Third, describe a circle of 8 inch radius (C). Fourth, draw a straight line (D^1) from the intersection of circle B with radius A^1 to the intersection of circle C with radius A^2 . Draw 2d, 3d and 4th in like manner. Fifth, bisect line D^1 and describe arc of circle (E^1). Contract dividers $\frac{3}{8}$ of an inch and describe corresponding circle which will show size and shape of first discharging furrow. 2d, 3d and 4th are generated and described in like manner. Sixth, extend dividers 16 inches and place each foot at intersection of radial line A^1 with circle C and describe first retaining furrow (F^1) from said intersection to skirt of stone. Contract dividers $\frac{5}{8}$ of an inch and describe corresponding line which will indicate shape and width of retaining furrows. Construct 2d, 3d and 4th in like manner.

The bed Fig. 2d is 36 inches in diameter and after being prepared as described in Fig. 1st is laid out as follows. First, draw four straight lines (A^1 , A^2 , A^3 , A^4) intersecting each other in the center at octangles. Second, describe a circle $2\frac{1}{2}$ inch radius (B) for eye circle. Third, describe a circle of 8 inch radius (C). Fourth, describe a circle of 12 inch radius (D). Fifth, draw straight line (E^1) from intersection of circle B with radius A^1 to intersection of radius A^3 with circle C . Draw 2d, 3d and 4th in like manner. Sixth, bisect line E^1 and describe arc of circle (F^1), contract dividers $\frac{1}{2}$ inch and describe corresponding circle which will show shape and size of first discharging furrow. Construct 2d, 3d and 4th in like manner. Seventh, extend dividers 16 inches and

place each foot at intersection of radial line A^1 with circle C and describe arc of circle (G^1) to right hand. Contract dividers $\frac{3}{8}$ of an inch and describe corresponding line which will indicate shape and width of first retaining furrow. Construct 2d, 3d and 4th in like manner. Eighth, continue dividers 16 inches apart and place one point on intersection of line A^2 with circle C and describe segment of circle (H^1) from circle D to skirt of stone. Contract dividers $\frac{3}{8}$ of an inch and describe corresponding line for breadth of furrow. Construct 2d, 3d and 4th in like manner.

Should the stones used be of greater or less dimensions than 36 inches diameter then of course the various circles and arcs of circles must be proportionably increased or reduced.

All furrows must be dressed a true gage or arc of circle; those in runner $\frac{1}{4}$ inch deep and those in bed $\frac{1}{8}$ inch deep.

The two stones run parallel at from $\frac{1}{4}$ to $\frac{3}{8}$ inch apart. The grain being fed through the eye of the runner is thrown instantly from the center of the stones by the centrifugal force greatly assisted by the discharging furrows in the runner and bed until it reaches circle C where it is partially arrested and retarded by the retaining furrows of runner and bed until it reaches a radius of 12 inches at circle D when it is subjected to an additional similar retarding operation until it is fully scoured and hulled, in this manner obviating the long known difficulty of hulling stones clogging at the eye and carrying the grain instantly to the outer part or periphery of the stone and retaining it there where the stones have most power of operation and also equalizing the distribution of the grain over the stones, thereby effectually obviating all liability of the grain breaking by being overcrowded.

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

The manner of generating and constructing furrows in hulling stones for the purpose of equalizing the distribution of the grain over the surface of the stones so as to prevent clogging at the eye and retaining the grain on the periphery of the stone until perfectly hulled as is above substantially set forth and described.

JOHN A. WILSON. [L. S.]

Witnesses:

F. S. FREEMAN,
GEO. B. SANFORD.