

Z. HALL.
Anchors.

No. 144,901.

Patented Nov. 25, 1873.

Fig. 1.

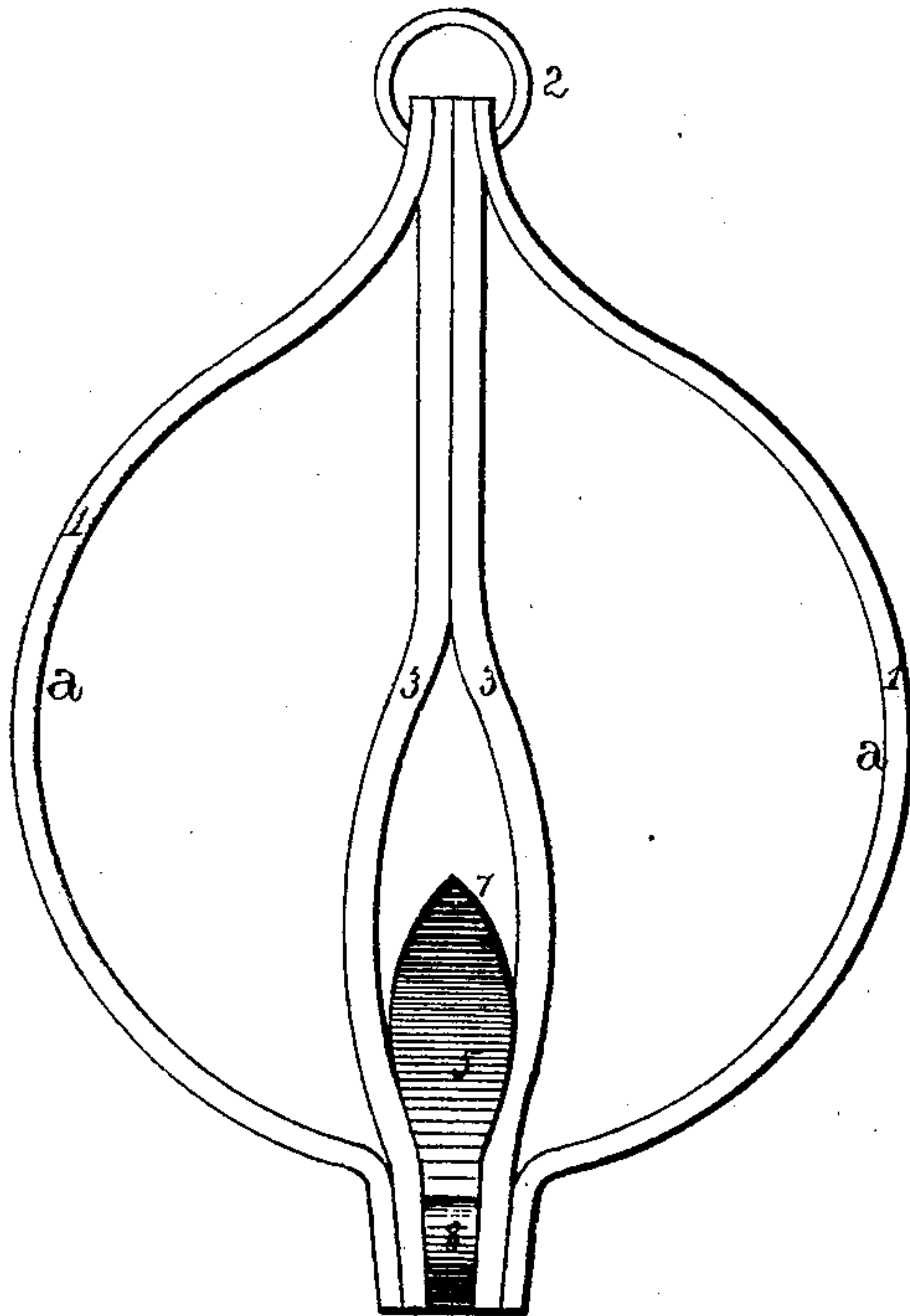
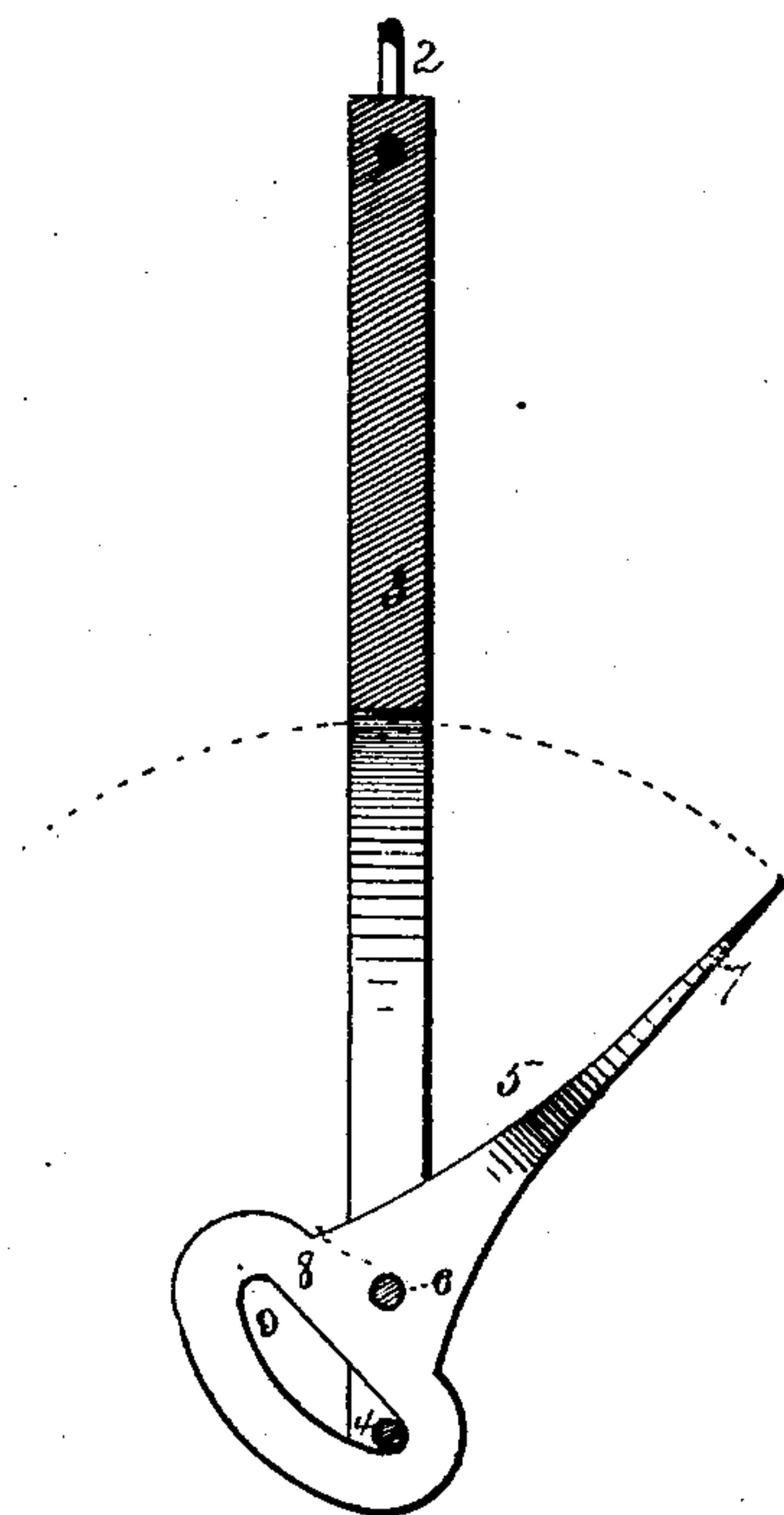


Fig. 2.



WITNESSES.

Wm. Johnson
H. P. Kendig.

INVENTOR.

Zebina Hall
per
J. A. Lehmann.
att'y

UNITED STATES PATENT OFFICE.

ZEBINA HALL, OF DENNIS, MASSACHUSETTS.

IMPROVEMENT IN ANCHORS.

Specification forming part of Letters Patent No. **144,901**, dated November 25, 1873; application filed August 7, 1873.

To all whom it may concern:

Be it known that I, ZEBINA HALL, of Dennis, in the county of Barnstable and State of Massachusetts, have invented certain new and useful Improvements in Anchors; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

The nature of my invention relates to an improvement in anchors; and it consists in a wide circular frame, having cross-bars across its center, between which the fluke is pivoted, so that it will vibrate back and forth through about a quarter of a circle, the motion being limited by a circular slot in the end of the fluke, as will be more fully set forth hereafter.

The accompanying drawings represent my invention. *a* represents a wide circular frame, composed of the two curved bars 1, united together at top and bottom, and which is provided with the ring 2 in its upper end, by which it is attached to the chain. Across the center of this frame there are two bars, 3, having their ends held between the curved bars 1, and which have an elliptical opening formed between them, near their lower ends, through which the fluke 5 plays back and forth. The fluke is pivoted between the bars 3, at the point 6, and consists of the sharp-pointed blade 7, which catches in the ground so as to hold the ship, boat, net, or other device fastened to it, and the broad flat end 8, having the

circular slot 9 cut through it, which fits over the pin 4. The slot is so formed as to allow the point of the fluke to extend outward from either side of the frame *a* at an angle of about forty-five degrees. By means of the cross-bars and their peculiar formation, and the broad flat end of the fluke, the fluke is rigidly braced upon both sides against all side twists and strains, and is made much stronger than it can be made in any other manner.

It is well known that an anchor having a circular frame and a single-pointed fluke which will close up into the frame so as to take up but little room on shipboard, has long been sought, for reasons which are perfectly obvious.

I am aware that no one of the devices which I employ are new in themselves, and it is only when combined together, as here shown and described, that I claim them.

Having thus described my invention, I claim—

The circular frame *a*, having the cross-bars extending across its center, between which the single-pointed fluke 5 7 8 is pivoted so as to play back and forth, the fluke having a circular slot, 9, cut through its end so as to limit its movement, substantially as specified.

In testimony that I claim the foregoing I have hereunto set my hand this 2d day of August, 1873.

ZEBINA HALL.

Witnesses:

SETH TOBEY,
LUTHER HALL.