

W. McCROSSON.
Bit for Boring Metals.

No. 159,948.

Patented Feb. 16, 1875.

FIG. 1.

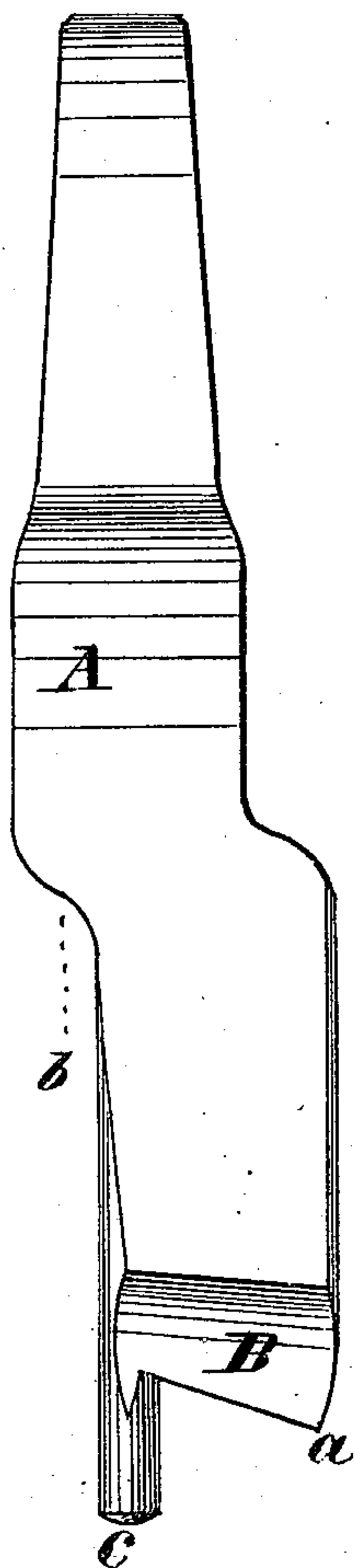


FIG. 2.

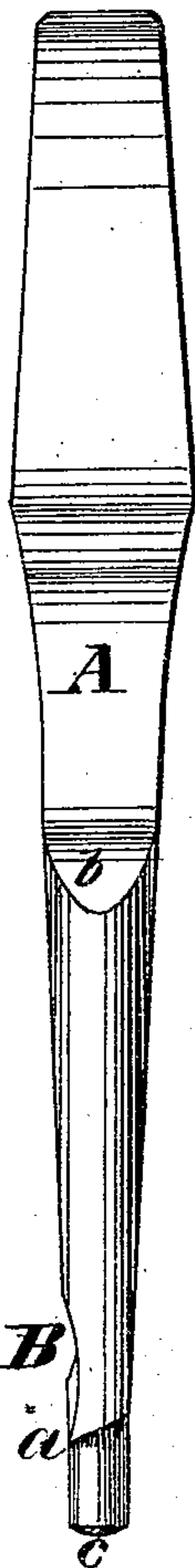


FIG. 3.

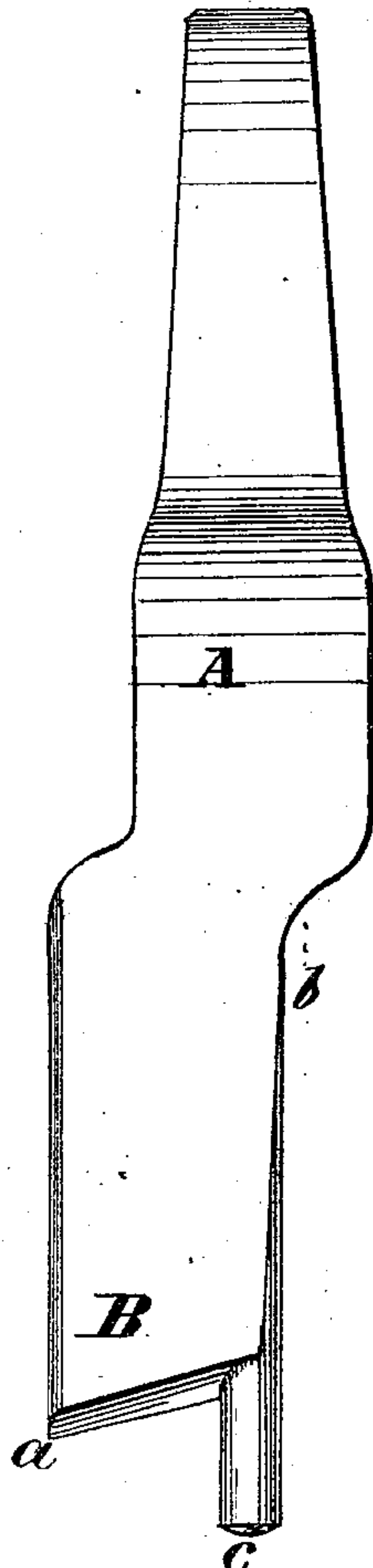
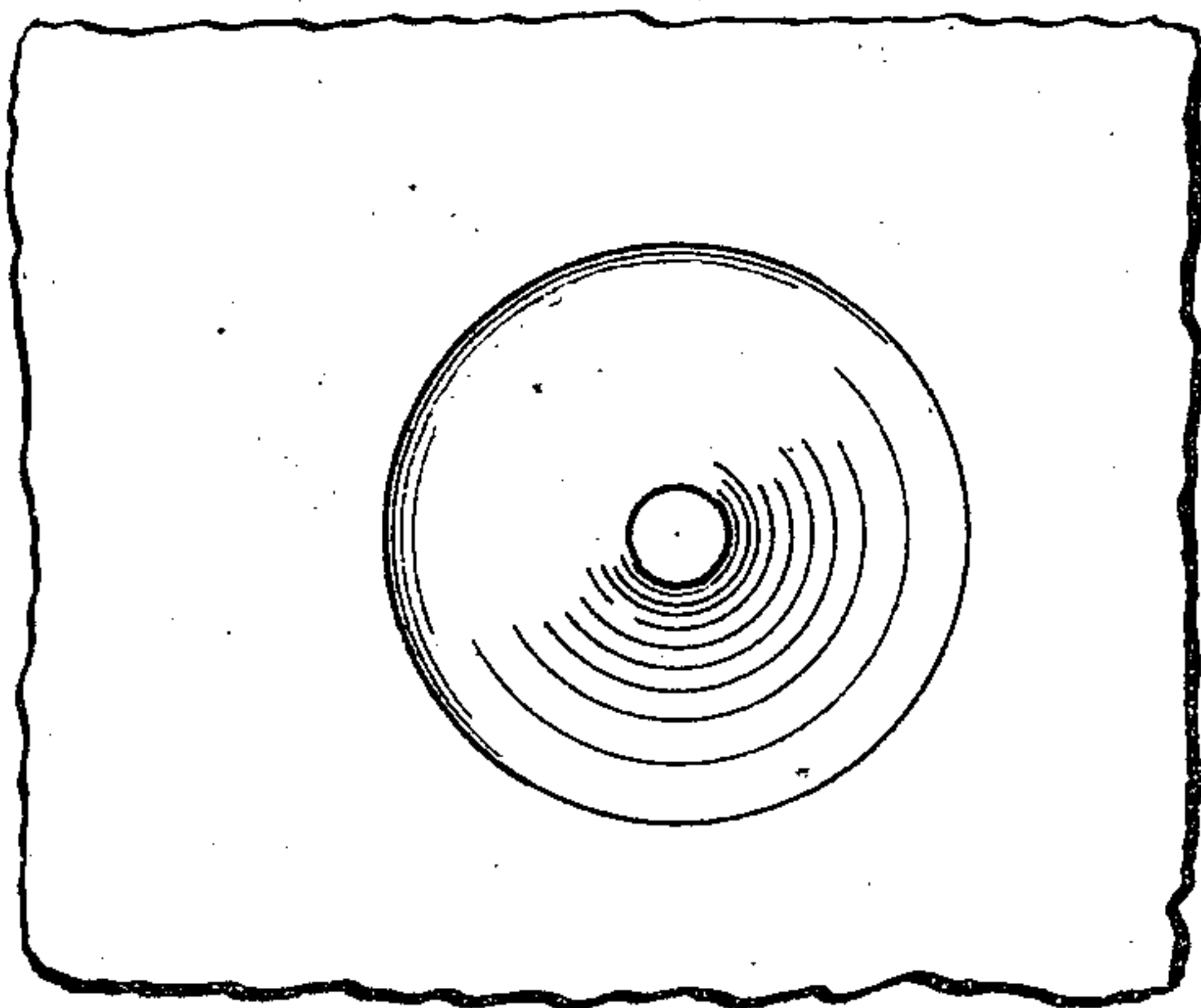


FIG. 4.



WITNESSES

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IMPROVEMENT IN BITS FOR BORING METALS.

Specification forming part of Letters Patent No. 159,948, dated February 16, 1875; application filed
December 24, 1874.

To all whom it may concern:

Be it known that I, WILLIAM McCROSSON, of the city and county of Philadelphia, and State of Pennsylvania, have invented a new and useful Improvement in Bits; and I do hereby declare the following to be a clear and exact description of the nature thereof, sufficient to enable others skilled in the art to which my invention appertains to fully understand, make, and use the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figures 1 and 3 are side views of the device embodying my invention. Fig. 2 is an edge view thereof. Fig. 4 is a view illustrating the operation of the tool.

Similar letters of reference indicate corresponding parts in the several figures.

My invention consists in a bit which is serviceable for enlarging openings and cutting washers.

Referring to the drawings, A represents the body of the tool, and B the bottom cutting-edge thereof. C represents the point, which is arranged at one side of the lower end of said body A, and projects beyond the cutting-edge B; but in order that the point C shall act as an axis, the body A is bent or extended laterally, as at *b*, so that the point C occupies the central position of the tool. The cutting-edge B extends from its outer end in an upwardly or diagonal direction. The point C enters an opening in the metal previously

drilled, and guides the tool in its subsequent operation. When the outer end *a* of the diagonal cutting-edge B reaches the metal it cuts thereinto. As the tool advances and cuts through the metal a disk is removed from the latter equal to twice the width of the space of a line drawn from the center of the point C to a perpendicular line let fall from the point *a* of the cutter B, whereby a large opening has been made, or there is an enlargement of the small opening previously produced, the removed disk constituting a washer. It will also be seen that, by the point occupying a position at one side of the body A, the tool may be produced at a great saving of material and time.

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

The improved drilling-tool herein described, the same consisting of the body A, with lateral extension *b*, the guiding-point C at one side of the lower portion of the body, and a single cutting-edge, B, laterally thereto, said edge extending upwardly from the outer end *a*, all constructed and operating as set forth, and for the purpose specified.

WM. ^{his} + McCROSSON.
mark.

Witnesses:

SALLIE DUGAN,
JOSEPHINE M. GRAHAM.