

(No Model.)

W. A. WREN.
MACHINE FOR BENDING IRON.

No. 275,741.

Patented Apr. 10, 1883.

Fig. 1

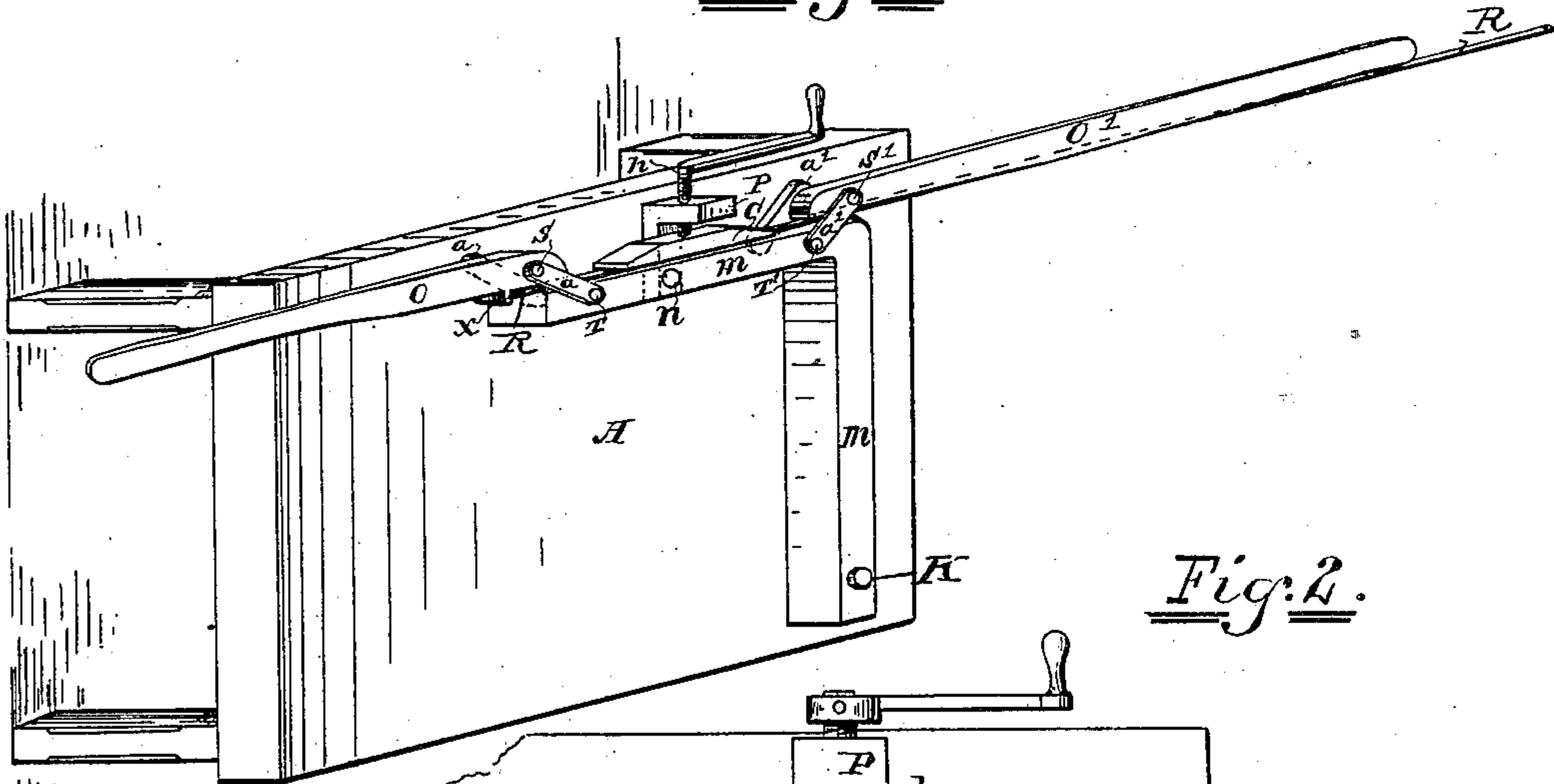
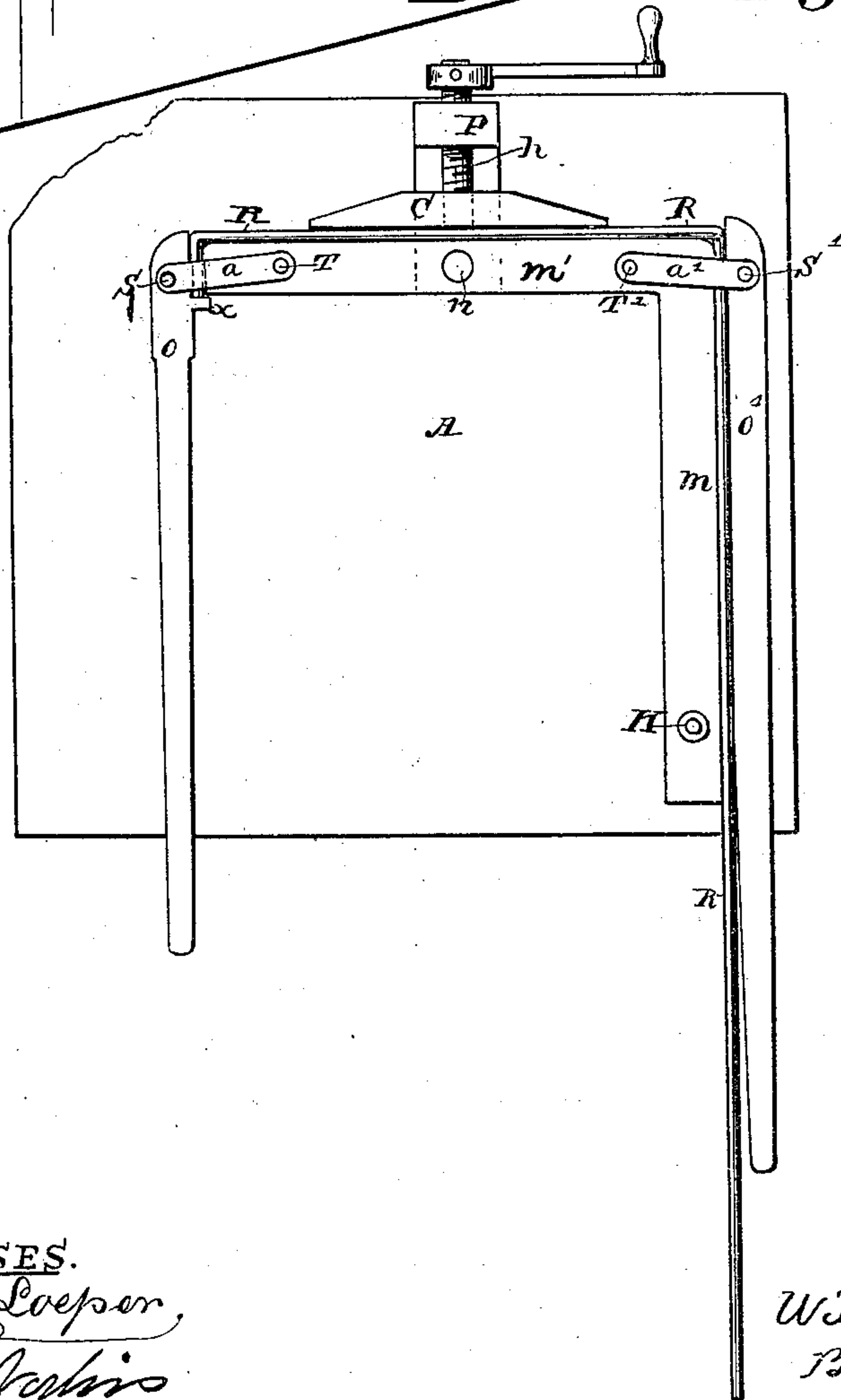


Fig. 2.



WITNESSES.

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WILLIAM A. WREN, OF INDIANAPOLIS, INDIANA, ASSIGNOR OF ONE-HALF
TO JAMES M. BLYTHE, OF SAME PLACE.

MACHINE FOR BENDING IRON.

SPECIFICATION forming part of Letters Patent No. 275,741, dated April 10, 1883.

Application filed November 3, 1882. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM A. WREN, of Indianapolis, Indiana, have invented a new and useful Improvement in Machines for Bending Iron, of which the following is a description, reference being had to the accompanying drawings, in which like letters indicate like parts.

My invention relates to devices for forming angles in iron rods or bars; and its object is to securely hold the iron, and at the same time bend it evenly and at any desired angle without great labor to the workman, or undue and irregular strain upon any part of the bar. I accomplish this by means of the device hereinafter described.

My invention consists in the peculiar construction and combination of the various parts of the bending-machine, and the nature thereof is fully set forth in my specification and claim.

In the drawings, Figure 1 represents a perspective view of my device with the levers and arms lifted for inserting the rod to be bent. Fig. 2 is a view with the arms and levers brought down when the iron is bent.

In detail, $m m'$ is a solid piece of iron of a right-angled shape, which serves as the frame-work. To the top of this is bolted, at n , a recessed frame, P , which sustains the clamp C by its threaded handle h . Pivoted to either end of horizontal arm m' of the frame-work are parallel arms $a a' a'$, which are connected by a knuckle-joint with levers $o o'$, on one of which is a small strap or gage, x , set at any desirable point to limit the length of the iron

that is being bent. At K is an opening for securing the frame-bar m to a bench or block to hold it firm. A represents such a bench.

My device operates as follows: The clamp C being raised by its handle and the levers $o o'$ thrown up parallel with the horizontal bar of the frame m' , the rod R to be bent is inserted, its end abutting against the stop or gage x . This brings the rod directly under the clamp C , which is screwed down firmly upon it, holding it in place. The lever o' is then pulled down parallel with bar m and bends the rod R at a right angle, as shown in Fig. 2. The short end of the rod R is then bent by pulling down the lever o . (Also shown in Fig. 2.)

$T T'$ and $S S'$ are the pivots or bolts which connect the arms $a a'$ to the levers and frame-work.

What I claim, and desire to secure by Letters Patent, is—

In a machine for bending iron, a pair of levers connected one on each side by means of pivoted links to a rigid frame-work, in combination with a stop formed upon and integral with the left-hand lever for gaging the length of the bend on that side, and a clamp for holding the rod to be bent in place against the top arm of the frame-work, substantially as and for the purpose described.

In witness whereof I have hereunto set my hand this 26th day of October, 1882.

WILLIAM A. WREN.

Witnesses:

C. P. JACOBS,
O. S. SPRITZ.