

(No Model.)

A. D. EMERY.
WOVEN SEAMLESS BAG.

No. 415,153.

Patented Nov. 12, 1889.

Fig. 2.

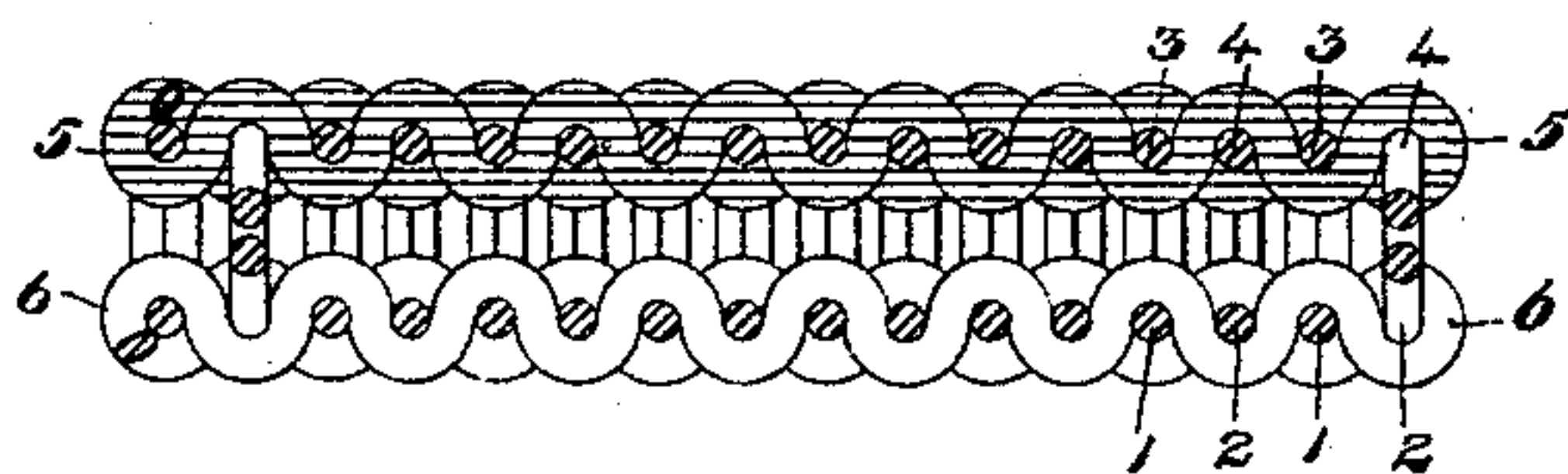


Fig. 1.

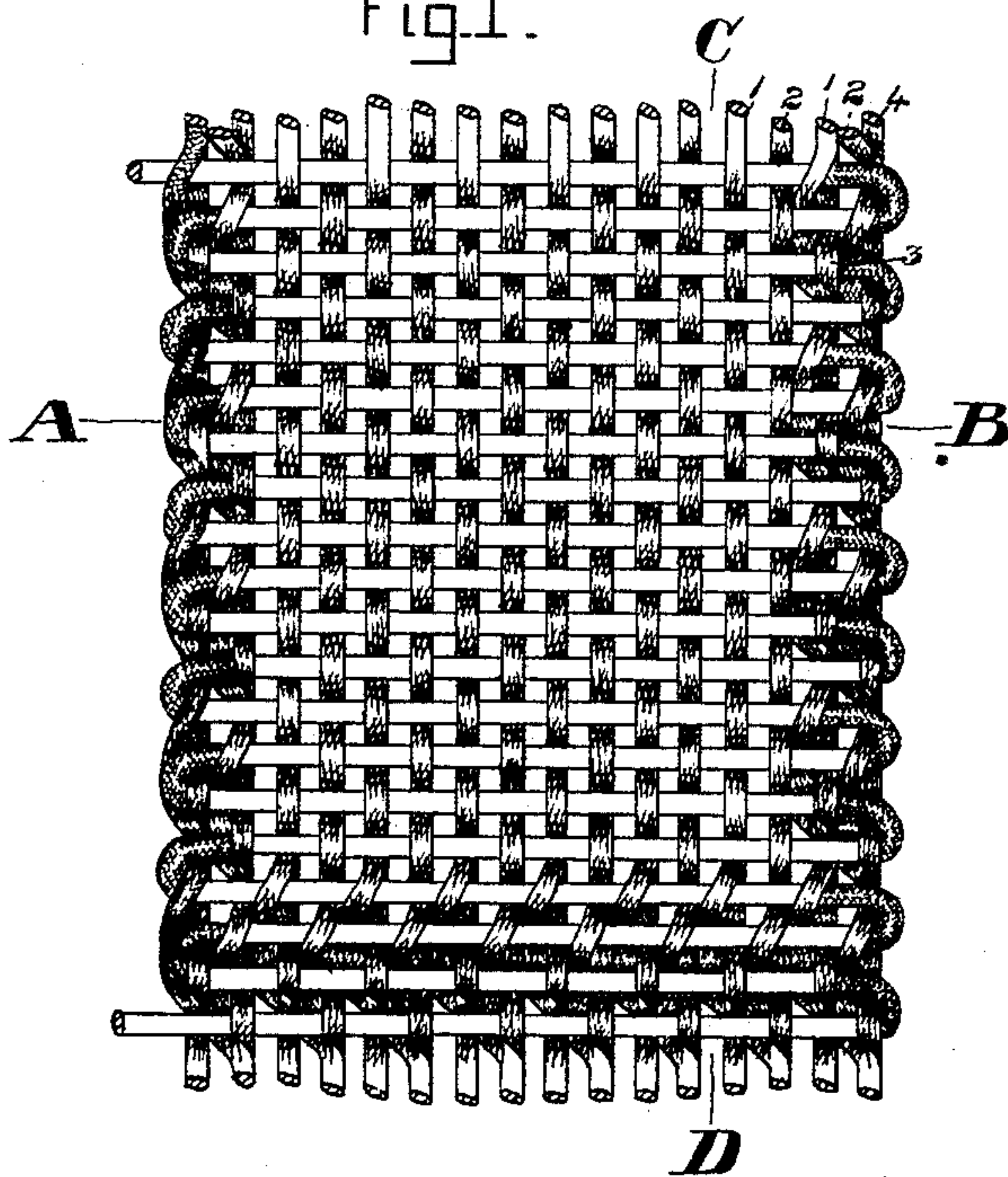
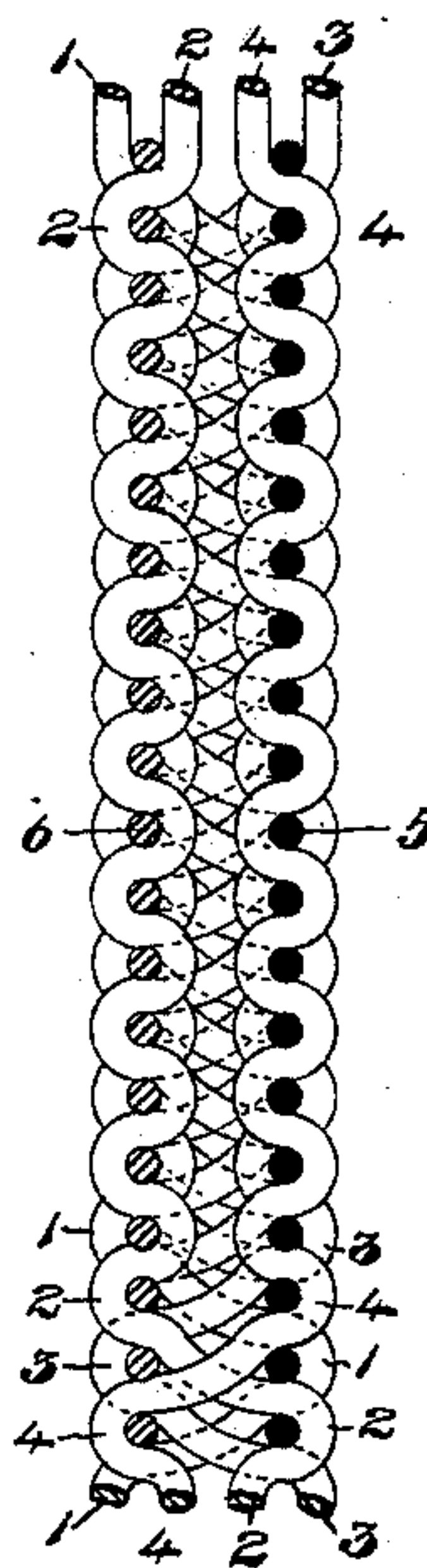


Fig. 3.



Witnesses.
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WOVEN SEAMLESS BAG.

SPECIFICATION forming part of Letters Patent No. 415,153, dated November 12, 1889.

Application filed May 31, 1889. Serial No. 312,832. (No model.)

To all whom it may concern:

Be it known that I, ABRAM D. EMERY, a citizen of the United States, residing at Taunton, in the county of Bristol and State of Massachusetts, have invented certain new and useful Improvements in Woven Seamless Bags, of which the following is a full description.

My invention relates to woven seamless bags composed of a set of chain-threads and two separate weft-threads. The weft-threads make continuous passages back and forth each through half of the chain-threads continuously, thus forming a double selvage on each edge. Each weft-thread remains on one side of the bag continuously and passes uncut and unbroken from one end of the bag to the other, forming a selvage, first on one edge and then on the other, thus giving strength and durability to the bag. The selvage edges, when brought together by the junction of the sides, produce a characteristic vertical ridge denoting the character of the bag. The two fabrics thus formed are bound together at the bottom and sides to form the bag by interlacing the chain-threads of the two halves around the two weft-threads. The mouth of the bag has a raw edge formed by cutting across the chain-threads. In this formation the chain-threads pass lengthwise of the fabric over and under the weft-threads.

In the accompanying drawings, forming a part of this specification, Figure 1 is a plan view of the fabric with the several threads separated and enlarged to show the position of the same. Fig. 2 is a transverse section of the fabric taken on the line A B, Fig. 1. Fig. 3 is a vertical cross-section on the line C D, Fig. 1:

One of the weft-threads is shown as shaded, and is designated by the numeral 5. The other weft-thread is shown as plain, and is designated by the numeral 6. The numerals 1, 2, 3, and 4 designate the chain-threads through which the weft-threads pass. One weft-thread 5 uniformly passes between the chain-threads 3 and 4 to form one side of the bag, while the weft-thread 6 uniformly passes between the chain-threads 1 and 2 to form the other side of the bag. In forming the bottom

and sides of the bag, however, the chain-threads are interlaced around the weft-threads by passing the chain-threads of one side of the fabric to the other in regular order, as illustrated in Fig. 3. In this figure it will be observed that the chain-threads 1 and 2 are uniformly over and under weft-thread 6, and chain-threads 3 and 4 are uniformly over and under weft-thread 5, except at the bottom, where the two sides are bound together. Beginning at the fourth pick from the bottom and continuing downward, it will be observed that chain-thread 1 has passed from the outside of the left-hand side of the figure to the outside of the right-hand side of the figure, and that chain-thread 3 likewise has passed from the outside of the right-hand side of the figure to the outside of the left-hand side of the figure. At the next passage it will be observed that chain-thread 4 is on the right and chain-thread 2 is on the left, and that at the next two passages threads 1, 2, 3, and 4 are on the outside of their halves, the weft-threads being between at all times. The formation described binds the two sides together into one piece to form the bottom of the bag. The sides are bound together in a perfectly analogous manner.

In the drawings I have shown an interweaving of the two weft-threads with four chain-threads, which in four successive picks pass through the four positions, as described in connection with the interweaving of the bottom. The weft-threads each turn a selvage edge at each pick, first on one side of the bag and then on the other. These selvage edges, when brought together by the interweaving just described, remain visible in the completed bags as vertical ridges.

It will be understood, of course, that the binding can be continued for any distance so long as the number of picks and chain-threads are multiples of 4.

The bags described in this application are formed in an endless fabric in the manner described by me in an application filed August 3, 1889, Serial No. 319,700, (Case 22.)

What I claim is—

A woven seamless bag containing two con-

tinuous weft-threads, each making passages
back and forth through its own half of the
chain-threads and forming selvages first on
one side of the bag and then on the other, the
5 sides and bottom of the bag being closed by
the interlacing of the two weft-threads with
all the chain-threads.

In testimony whereof I have hereunto set
my hand this 29th day of May, A. D. 1839.

ABRAM D. EMERY.

Witnesses:

WM. T. DONNELLY,
WALTER T. EMERY.