

H. MARTIN.
Bottle-Stopper Fastener.

No. 206,341.

Patented July 23, 1878.

Fig. 1.

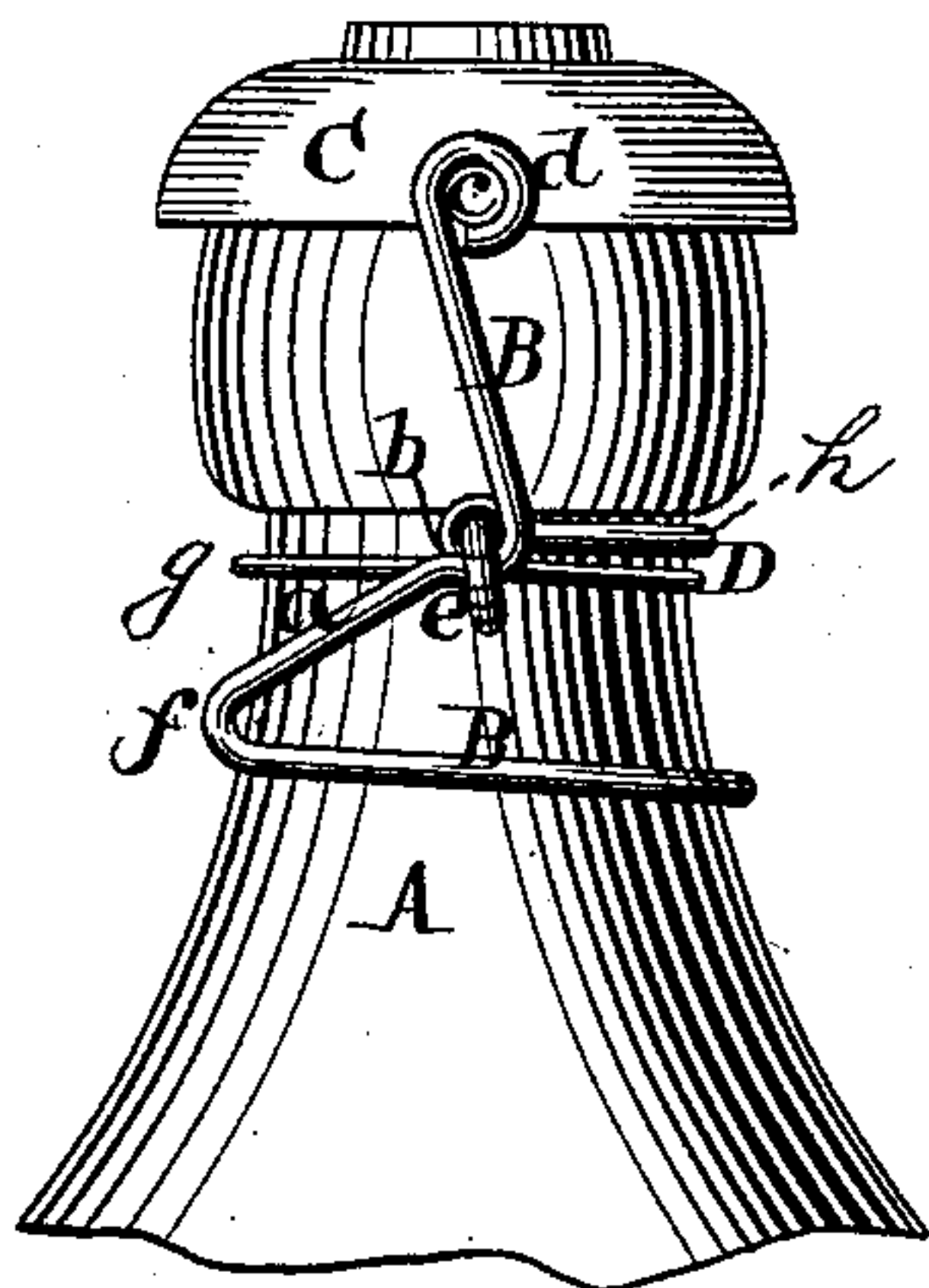


Fig. 3.

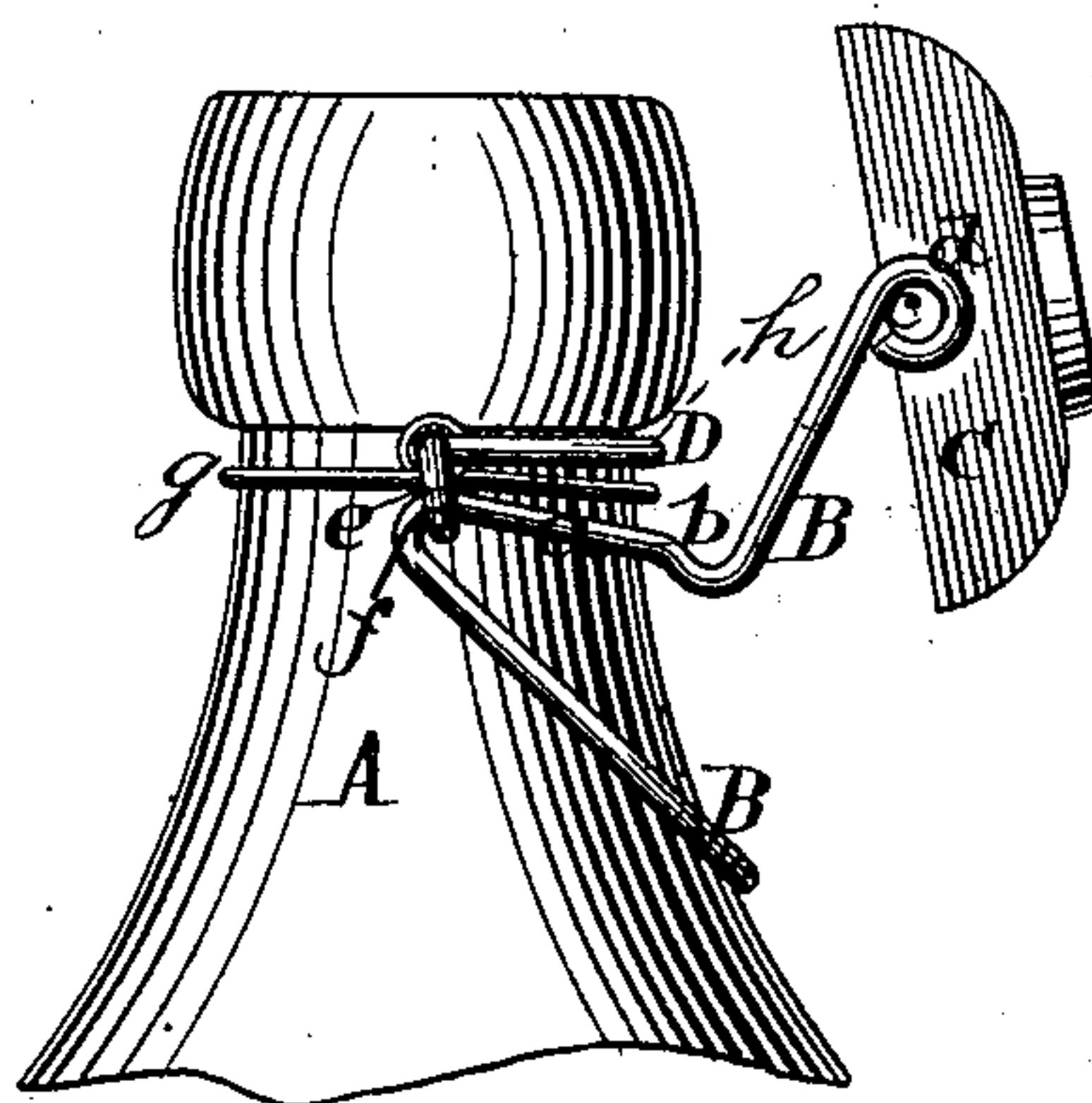
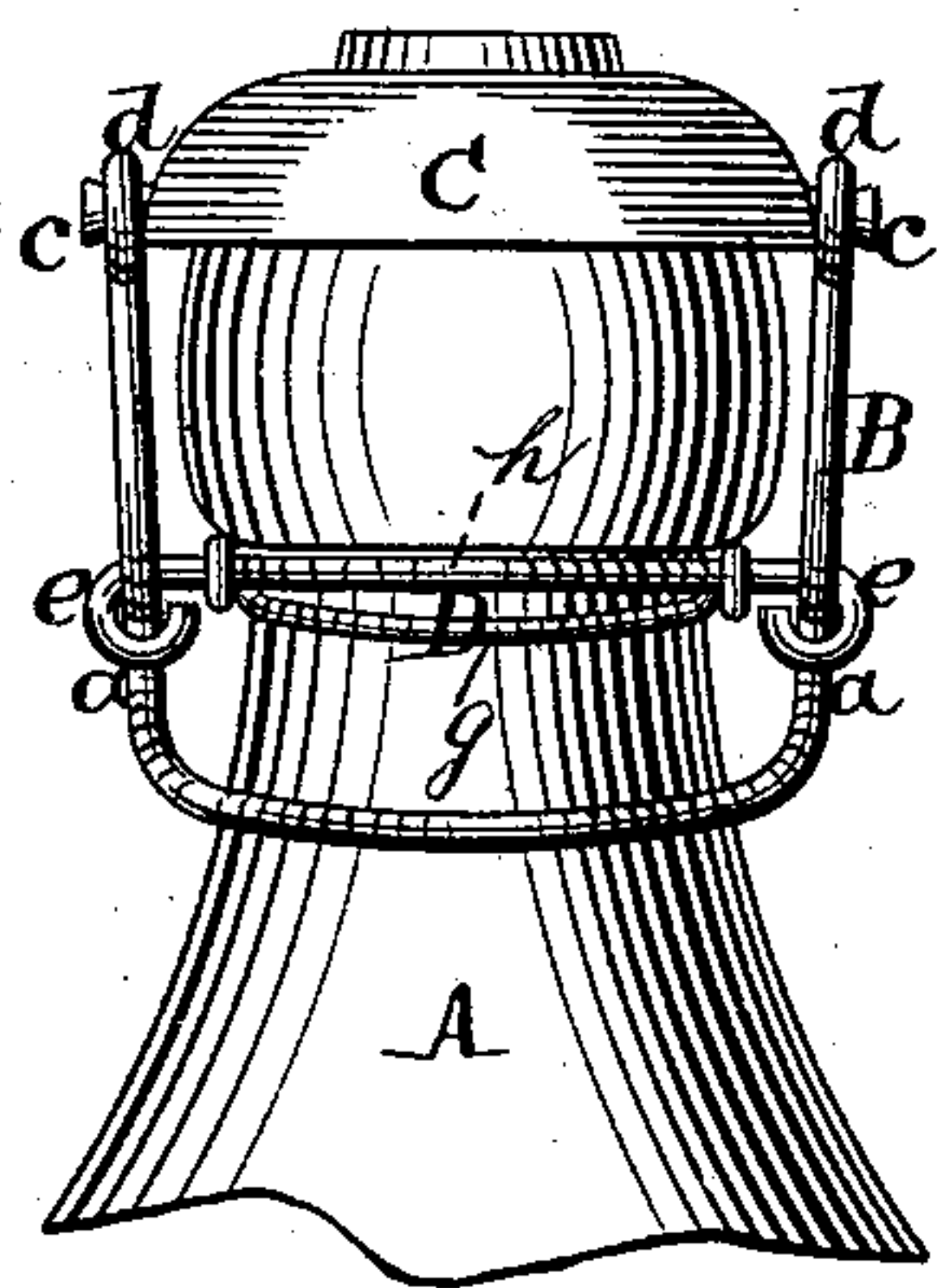


Fig. 2.



Witnesses.
Chas. Wahlers.
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Inventor.
Henry Martin
by his attys.
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UNITED STATES PATENT OFFICE.

HENRY MARTIN, OF NEW YORK, N. Y.

IMPROVEMENT IN BOTTLE-STOPPER FASTENERS.

Specification forming part of Letters Patent No. **206,341**, dated July 23, 1878; application filed June 24, 1878.

To all whom it may concern:

Be it known that I, HENRY MARTIN, of the city, county, and State of New York, have invented a new and useful Improvement in Bottle-Stopper Fasteners, which invention is fully set forth in the following specification, reference being had to the accompanying drawing, in which—

Figure 1 represents a side view of my fastener, showing the stopper shut down on the mouth of a bottle. Fig. 2 is a front view thereof. Fig. 3 is a side view of the same, showing the stopper off the bottle-mouth.

Similar letters indicate corresponding parts.

The object of my invention is to furnish a bottle-stopper fastener which is cheap and can be easily operated; and it consists in the combination of a vibrating U-shaped arm, which is bent to form inclined bearing-edges terminating in ledges at their upper ends, a stopper which is connected to the free ends of the vibrating arm, and a neck-wire having loops, through which the vibrating arm passes in such a manner that when the vibrating arm is moved to one of its positions its ledges are jammed against the loops of the neck-wire and the stopper is fastened, while when the vibrating arm is swung to its other position the stopper is released.

In the drawing, the letter A designates the neck of a bottle to which my fastener is applied. B is the vibrating U-shaped arm. C is the stopper, and D is the neck-wire. The vibrating arm B is made of wire, and is bent to form two inclined bearing portions, *a a*, which terminate in ledges or depressions *b b* at their upper ends, these bearing-edges being formed on such parts of the arm that they are opposite to each other. The stopper C may be of any known construction, and it is connected to the free ends of the arm B through the medium of pivots *e e* projecting from the stopper and eyes *d d* formed at the ends of the arm, or in any other suitable way.

The letter D represents the neck-wire, which consists of a wire, *g*, passing around the neck of the bottle, and having small eyes, and of a wire, *h*, in the form of a segment of a circle, the ends of which pass through the eyes in the wire *g*, and the projecting ends of which are provided with two loops, *e e*, through which the vibrating arm B is passed previous to con-

necting the stopper C thereto, so that this arm, together with the stopper, is held on the bottle by means of said loops. I so arrange the loops *e e* of the neck-wire that when the stopper C is fastened on the bottle the pivots *e e* (or their substitutes) and the loops are in a corresponding vertical plane to each other. When it is desired to fasten the stopper C on the bottle the same is placed in position and the vibrating arm B is swung to the position shown in Figs. 1 and 2. During this movement the inclined bearing portions *a a* of the vibrating arm press against the upper portions of the loops *d d*, and thus gradually draw the stopper down on the bottle until the ledges *b b* are brought under the loops, when the maximum draft is reached, and the arm as well as the stopper is tightly held in place.

To facilitate the act of swinging the vibrating arm B to its different positions, I bend the same at the lower ends of its inclined bearing portions, as at *f*, so that the bight thereof extends at an angle to said bearing-edges, and can be pressed upon by the thumb when the bottle is held in the hand, the whole being, moreover, so arranged that the bight of the arm is brought in contact with the bottle when the stopper is fastened. When it is desired to release the stopper, pressure is made on the vibrating arm B at the bends *f* until the ledges *b b* are disengaged from the loops *e e*, when the stopper can be removed and the whole brought to the position shown in Fig. 3.

It will be perceived that the vibrating arm B embodies both the locking-lever and the bail or link commonly used in bottle-stopper fasteners, and hence I obtain a fastener which is simple in its construction and operation, and which can be cheaply gotten up.

I am aware that a stopper has been connected to a bottle by a U-shaped yoke, the stopper being attached to the bend of the yoke and the arms of the latter passing down through the eyes in the neck-wire and pivoted to the ends of a bowed lever that has cams, which, by raising the lever upward, ride against the eyes of the neck-wire and force the yoke downward and the stopper into place; but such is not my invention, which consists in attaching the stopper directly to the free ends of a U-shaped vibrating arm, which of itself is provided with inclined bear-

ings and passes through eyes into the neck-wire, whereby I dispense with a separate cam-lever.

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

The combination, in a stopper-fastener, of a vibrating U-shaped arm, which is bent to form inclined bearing portions terminating in ledges at their upper ends, a stopper which is connected directly to the free ends of the vi-

brating arm, and a neck-wire having loops in which the vibrating arm slides and locks, the whole being adapted to operate substantially as described.

In testimony whereof I have hereunto set my hand this 19th day of June, 1878.

HENRY MARTIN.

Witnesses:

W. HAUFF,
CHAS. WAHLERS.