

B. S. NORRIS.
Gate.

No. 218,826.

Patented Aug. 26, 1879.

Fig. 1.

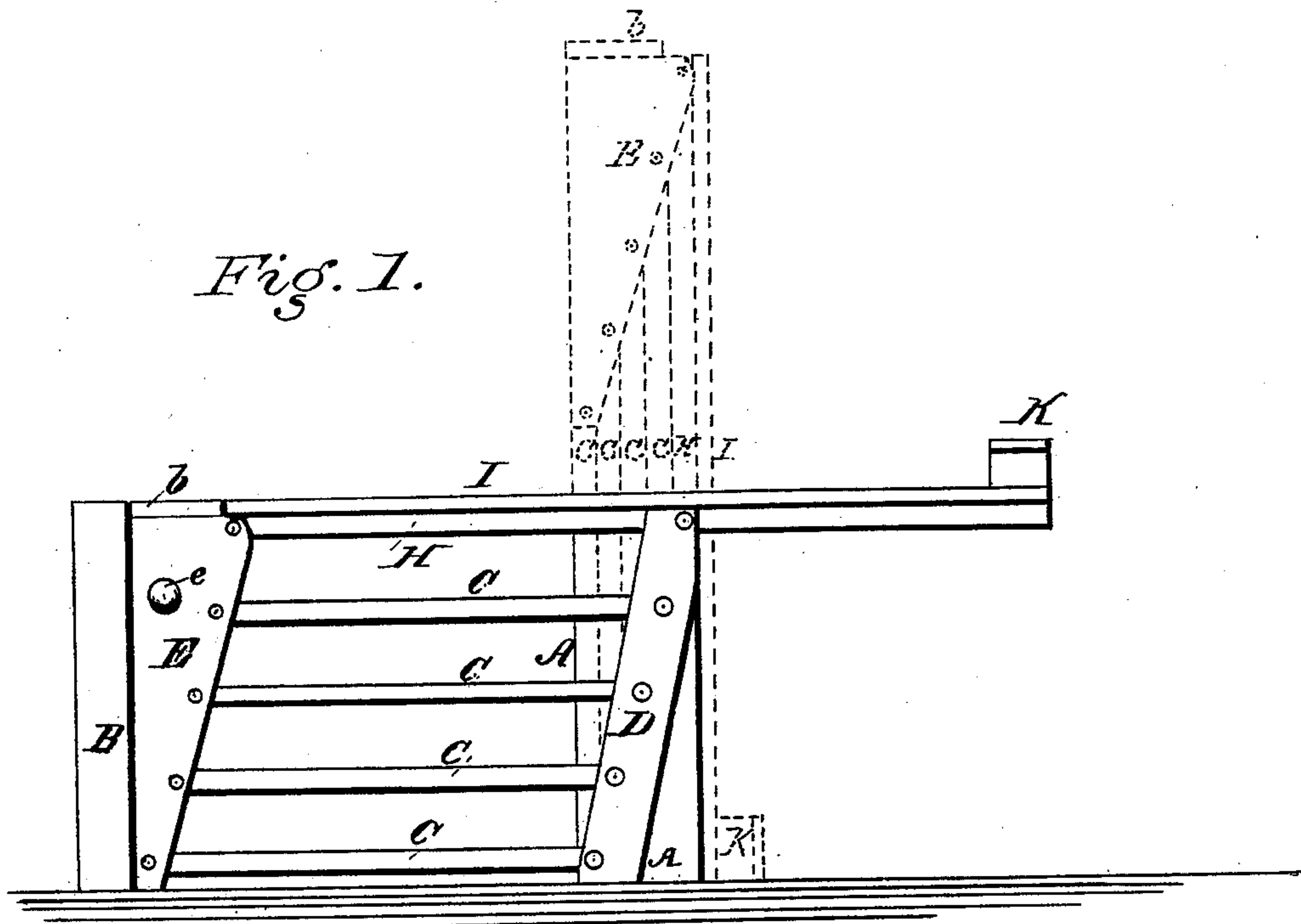
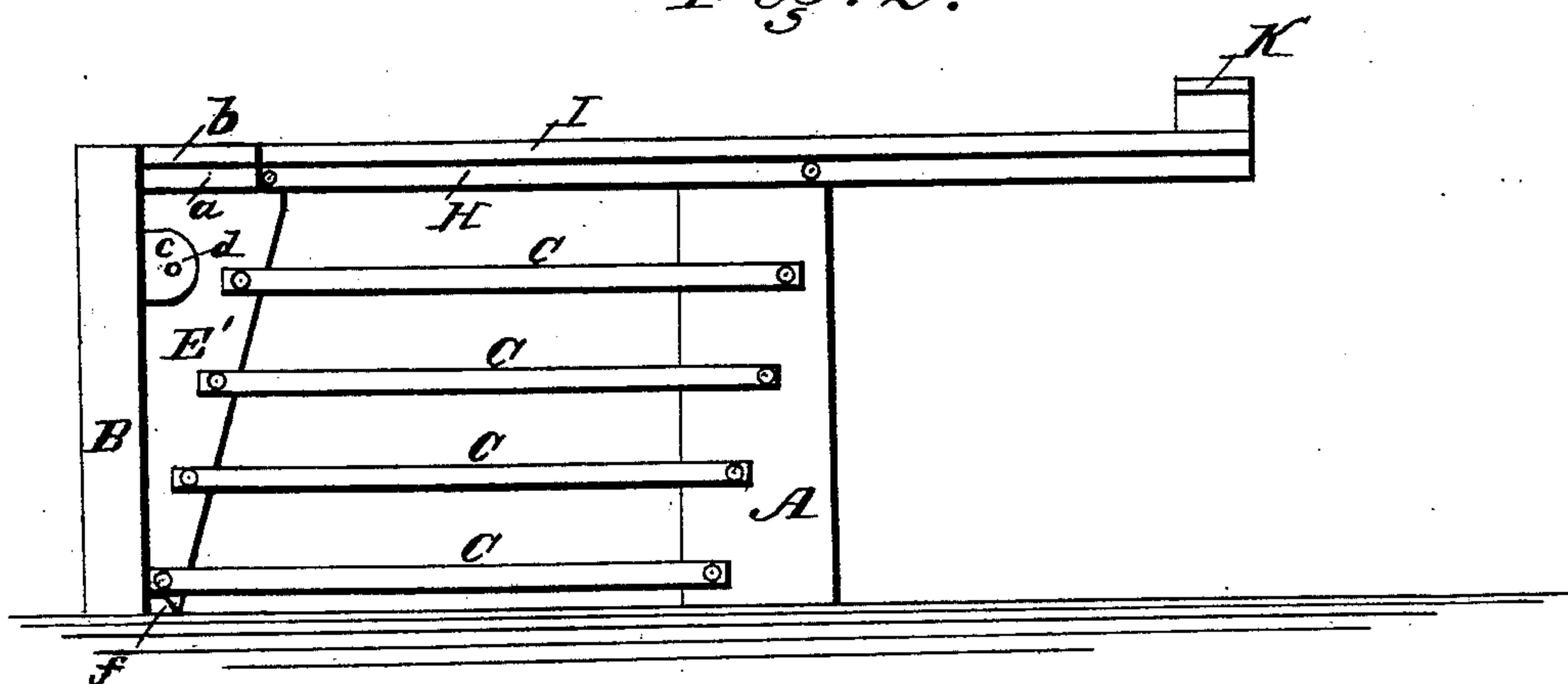


Fig. 2.



WITNESSES

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BARON S. NORRIS, OF RIPLEY, OHIO.

IMPROVEMENT IN GATES.

Specification forming part of Letters Patent No. **218,826**, dated August 26, 1879; application filed March 27, 1879.

To all whom it may concern:

Be it known that I, BARON S. NORRIS, of Ripley, in the county of Brown and State of Ohio, have invented certain new and useful Improvements in Automatic Gates; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The invention relates to that class of gates known as "raising and lowering gates;" and consists in the arrangement of a face plate or piece placed diagonally on the post and two peculiar-shaped side pieces, between which are pivoted a series of rails.

By this construction a cheaper and better gate is produced than the ordinary swinging gate.

Figure 1 represents a side elevation, the dotted lines showing the gate in a vertical position, as when open, and Fig. 2 a side elevation of my improved gate with the face and one of the side pieces removed.

The letter A represents the rear, and B the front, gate-post. The letters C C C C represent a series of rails or slats of uniform length and width, placed longitudinally, and pivoted at their rear ends between the post A and a face-piece, D, said piece being placed diagonally on the post A, and at their front ends between two side pieces, E E'. These pieces are shaped wider at the top than at the bottom, the top being the united width of all of the rails, whereby the gate is permitted to fold within a space not wider than the width of the top of said pieces, and the bottom the width of one of the rails. The front end of the bottom rail is pivoted flush with the front edges of the side pieces E E'. The remaining rails are pivoted at a uniform distance from the outwardly-inclined or back edges of the said pieces, thus permitting the front edge of the gate to retain its vertical position during the opening and closing operations. A short rail or piece, *a*, not quite as long as the width of the side pieces at the top, is interposed at

the top, and the said side pieces are fastened thereto, and the whole surmounted by a cap, *b*, of the same length.

Pivoted at the right-hand upper corner, between the side pieces E E', is a rail, H. Said rail is also pivoted near its center between the face-piece D and post A, and extends some distance beyond and in the rear of the post A, and is surmounted by a cap, I, said cap having secured to its outward end a weight, K, of sufficient weight to more than balance the weight of the gate, so that as soon as the front end of the gate is released from the post B the weight K bears down the outward or rear end of the rail H and cap I, and the gate is thrown upward and assumes a vertical position, as shown by dotted lines in Fig. 1.

A lug, *c*, is secured to the post B near its top, and is made to fit in between the side pieces E E', and is provided with a hole, *d*, corresponding with holes in the said side pieces. A pin, *e*, passes through said holes, thus securing the gate when closed and retaining it in position until the pin is withdrawn to release it, when the gate assumes a vertical position. A stop, *f*, is secured to the post B at its foot, and is so placed that when the gate is closed it will fit between the bottom ends of the side pieces E E', thereby preventing the bottom of the gate from being pushed inwardly or outwardly.

The important features of my invention consist in arranging the face-plate D in a diagonal position, so that the fixed pivot of each succeeding rail will be its own width to one side of the vertical line, and in correspondingly pivoting the opposite ends of the rails between the pieces E E', allowing the rails to swing in between the said side pieces and rest vertically when the gate is raised. The space between the side pieces E E' receives the lug *c* above and the stop or stud *f* below, thus efficiently steadying the gate when closed against lateral play. The side pieces, by embracing the rails firmly at their free ends, serve to strengthen the gate in any position, as is obvious.

I am aware that gates with pivoted rails and weighted bar adapted to operate in a

similar manner are old, and such construction is not sought to be broadly covered in this application.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

The pivoted rails C, weighted cap-rail H I K, and diagonal plate D, as shown, in combination with the side pieces E E', perforated lug *c d*, stop *f*, and posts A B, all constructed

and arranged to operate as and for the purpose set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

BARON STEUBEN NORRIS.

Witnesses:

WM. N. MASTERSON,
BYRON A. JONES.