

(No Model.)

2 Sheets—Sheet 1.

J. SISUNG.

GATE.

No. 395,360.

Patented Jan. 1, 1889.

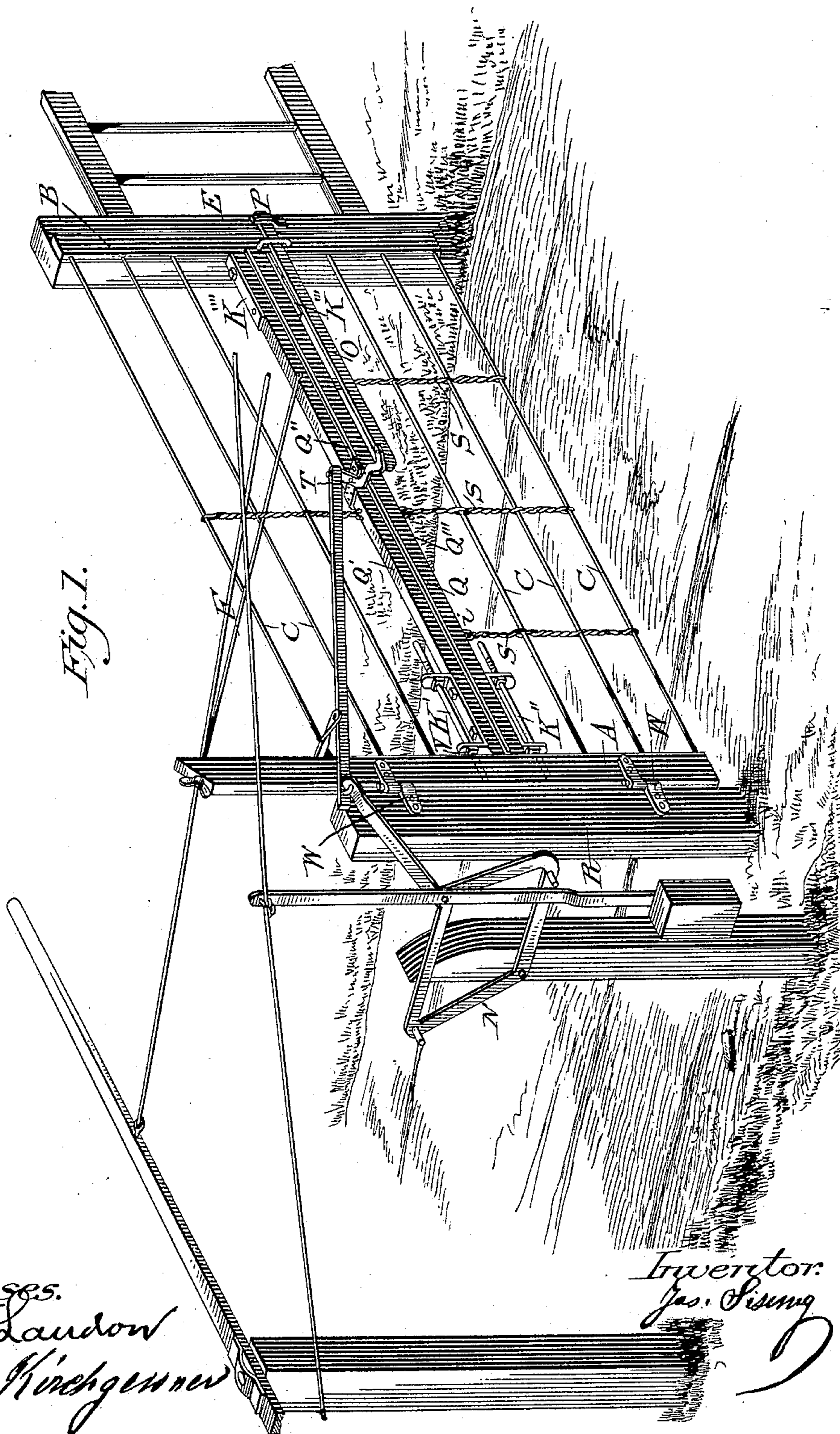


Fig. 1.

Witnesses.
Geo. M. Landow
Chas. Kirchgewner

Inventor:
Jas. Sisung

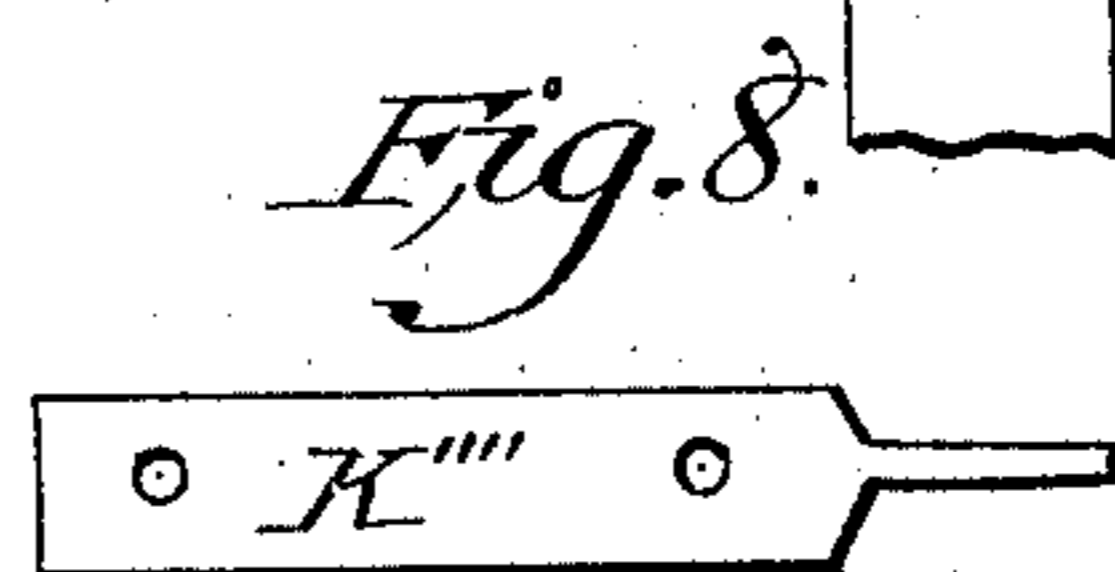
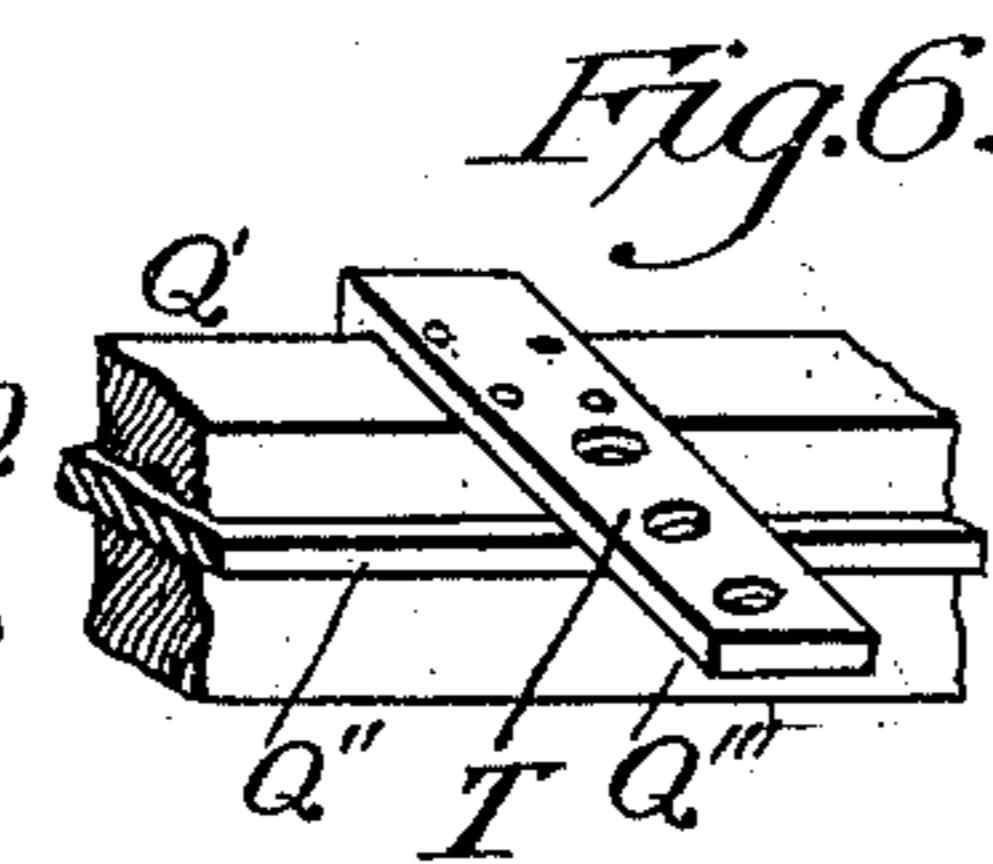
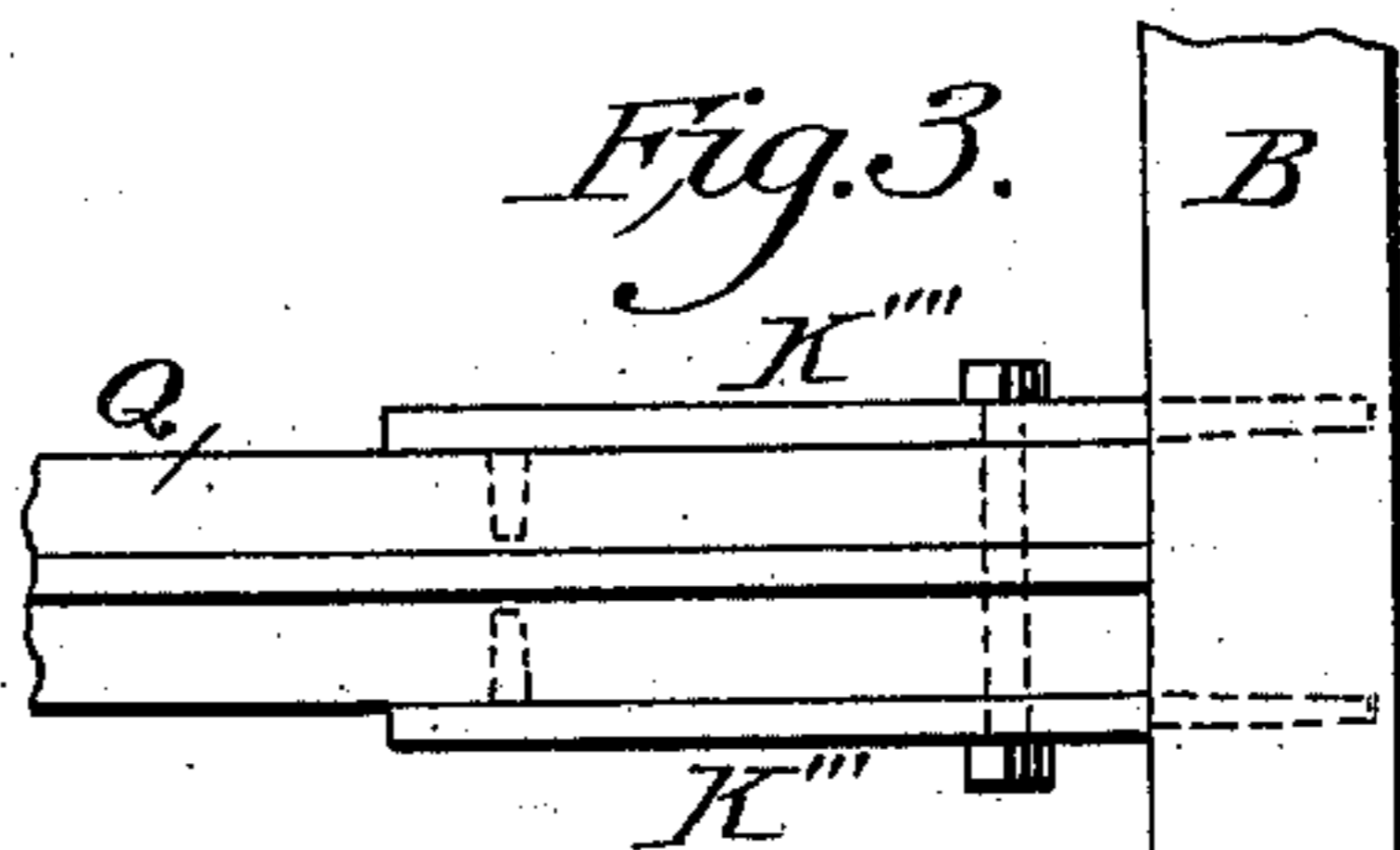
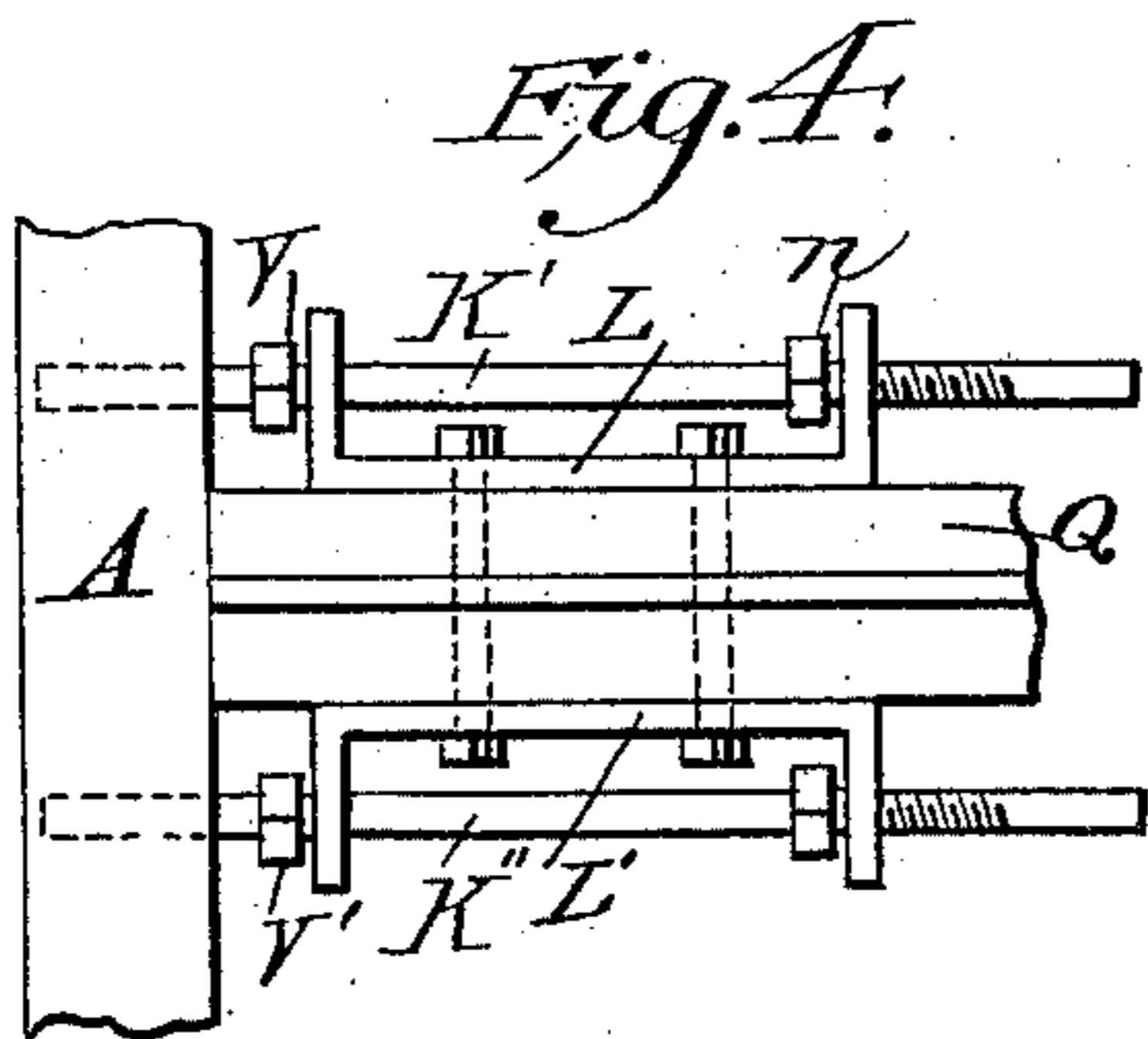
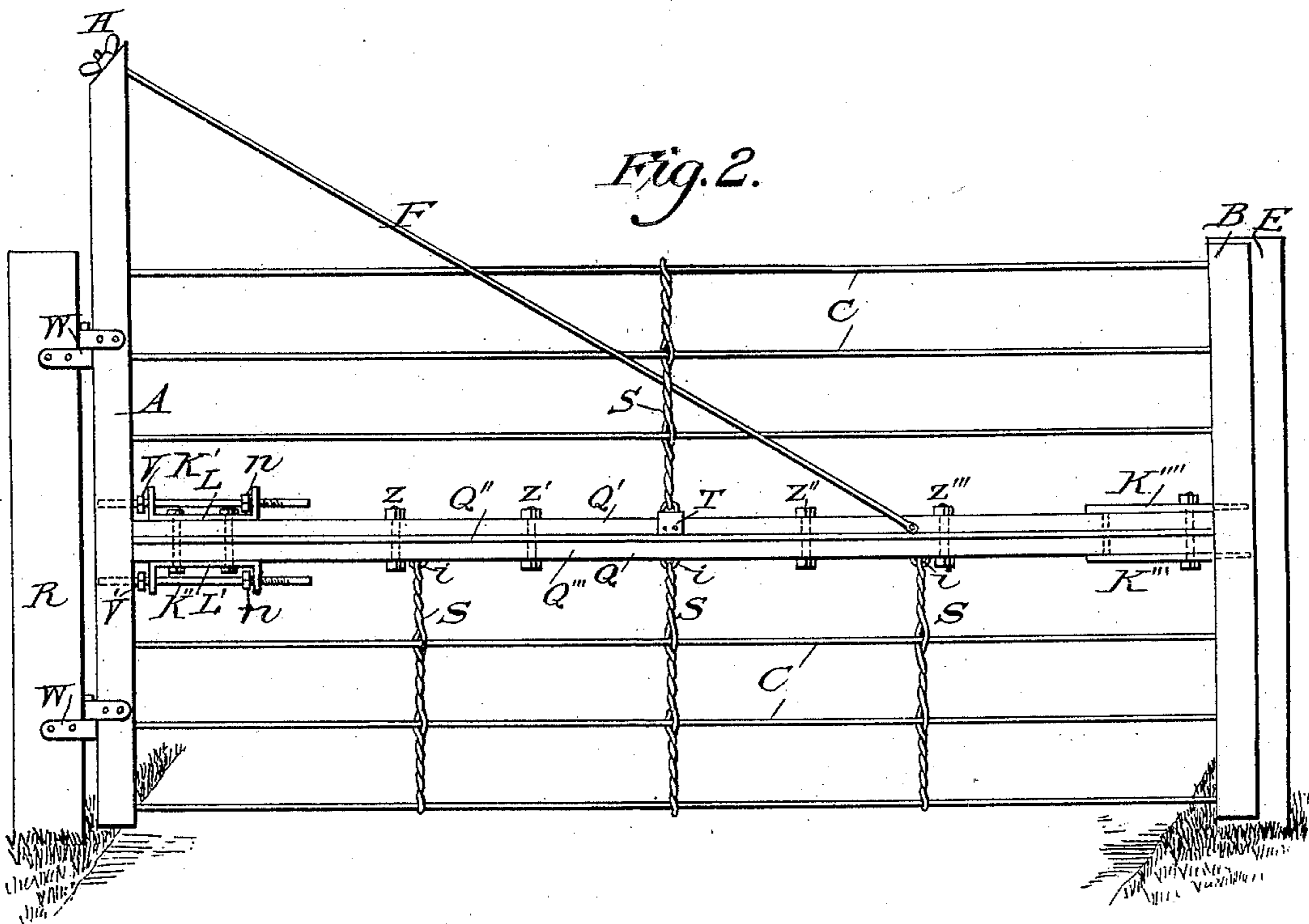
(No Model.)

2 Sheets—Sheet 2.

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GATE.

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Witnesses.
Geo. M. Landon
Chas. Kuehner

Inventor.
Jas. Sisung

UNITED STATES PATENT OFFICE.

JAMES SISUNG, OF NEWPORT, MICHIGAN.

GATE.

SPECIFICATION forming part of Letters Patent No. 395,360, dated January 1, 1889.

Application filed February 25, 1888. Serial No. 265,333. (No model.)

To all whom it may concern:

Be it known that I, JAMES SISUNG, residing at Newport, in the county of Monroe and State of Michigan, have invented certain new and useful Improvements in Gates, of which the following is a description.

My invention has relation to an improvement in the gate described in Letters Patent No. 369,968, dated September 13, 1887, application filed June 24, 1887, Serial No. 242,220, (no model,) which said Letters Patent have been granted to James Sisung, Jr., as inventor, and to James Sisung, Sr., as assignee of one-half interest.

Figure 1 of the accompanying drawings is a perspective view of a gate having my improvements, combined with the gate-opening and gate-closing apparatus described in said Letters Patent No. 369,968. Fig. 2 is a side elevation of my gate; and Figs. 3, 4, 5, 6, 7, and 8 are details thereof.

Like letters refer to like parts in the several figures.

My gate is constructed as follows:

The center bar, $Q\ Q'\ Q''$, consists of a plate of iron, Q' , about one-eighth of an inch in thickness and about two inches wide, (what is generally known as "two-inch band-iron" is about the right thing,) laid between two boards, $Q\ Q''$, each about one inch in thickness and about two inches wide. These boards are bolted edgewise to the iron plate, one above and the other below it, by the bolts $Z\ Z'\ Z''\ Z'''$, which are about a quarter-inch in thickness and pass through the two boards $Q\ Q''$ and the iron plate Q' , as shown by the accompanying drawings. The center bar so constructed cannot bend or warp by the action of the sun nor by the straining of the wires.

The center bar is connected with the latch-board B by two iron straps, $K''' K''''$, about one inch wide and about a quarter of an inch in thickness, each having a rounded end about three-eighths of an inch in diameter and about two inches long, the flat part being about six inches long. These are placed flat, one above the other, below the front end of the center bar, so that the rounded ends project beyond the center bar and enter the latch-board in lieu of tenons. The straps are

bolted to the center bar by the bolts $Y\ Y'$, which bolts pass through the upper strap, K''' , upper board, Q , iron plate Q' , lower board, Q'' , and lower strap, K'''' , where they are fastened by threaded nuts, the whole as shown by the drawings.

The center bar is fastened to the hinge-board A by a pair of straining-bolts, $K' K''$, consisting of two iron bolts about half an inch in thickness and about one foot long, with shoulders $V\ V'$ two inches from one end, and the other end threaded to the length of about three inches. These bolts are passed through the eyes of clips $L\ L'$, with the threaded ends toward the front of the gate and the nuts $N\ N'$ between the eyes of the clips and near the front ones.

The clips $L\ L'$ are pieces of iron about one-quarter inch in thickness and one inch wide and about eight inches long, turned up at each end at right angles about one and one-half inch. Through the upturned ends holes are bored, forming the eyes through which the straining-bolts pass. These clips are bolted—one above, the other below—to the hind or hinge end of the center bar by the bolts $D\ D'$, the ends of the straining-bolts which project beyond the shoulders $V\ V'$ entering into the hinge-board A in lieu of tenons. The hinge-board is a piece of timber about four inches wide by one and one-half inch in thickness and about six feet long. The front or latch board is a piece of timber about three by one and one-half inches and about four feet long. Either smooth or barbed wires in suitable numbers are stretched between the two uprights. When smooth wires are used, all the wires in the gate may be of one piece. To stiffen the wires so that they cannot bend up or down, screw-eyes are fastened into the center bar. Pieces of wire, of suitable length and about one-eighth of an inch in thickness, are linked into them in the middle, so that both ends are of equal length. These ends of wire are then twisted together and turned into cables S until they meet the first wire C , whence they are pressed one on each side of the wire C , then twisted again to the next wire, &c., so that each wire is linked into the twisted cross-wires S , as shown by the accompanying drawings. Two or three cross-wires or cables be-

low the center bar and one or more above, according to the length of the gate, are sufficient to keep the wires perfectly stiff. Single wires could not accomplish this object. They would
5 always bend, whereas two wires turned into a cable remain stiff.

The gate is prevented from sagging by an iron tie-rod, F, fastened to the center bar at a distance of about three feet from the front
10 end by a bolt, thence interlacing the wires above the center bar and passing through a hole in the upper end of the hinge-board A, (the back corner of the board being sawed off,) and fastened by a threaded nut or a
15 thumb-screw, H, (the end of the tie-rod being threaded,) the whole as shown by the accompanying drawings. By this thumb-screw or threaded nut the sagging of the gate can be regulated at will. The straining of the wires
20 can be regulated by means of the straining-bolts K' K''. By turning the nuts N N' forward they are pressed against the front parts of the clips L L', and the shoulders V V' are consequently pressed against the hinge-board
25 A, pushing it back away from the center bar, Q, and straining the wires.

The gate is hung to the hinge-post R by two ordinary gate-hinges, W W', and is locked to the front post by the latch-bar O, which,
30 passing through an iron clip fastened to the latch-board, falls into the latch P. The other end of the latch-bar is bolted to the bell-crank N, described in Letters Patent No. 369,968, said bell-crank being bolted to the clip-plate
35 T, as shown by the accompanying drawings.

The clip-plate T is a piece of iron about two inches wide, about a quarter of an inch thick, and about eight inches long, with one end turned down at a right angle, so that one end
40 from the angle is about six inches long and the other two inches. The short end is bolted to the side of the upper board of the center bar in the middle, or nearly so, of the gate, the long end lying on the top of the center
45 bar and projecting at a right angle about five inches toward the side to which the gate opens. It is fastened to the upper side of the center bar either by a bolt passing through the whole bar or by one or more wood-screws.

50 The gate will recommend itself for its strength and durability, its simplicity and cheapness, and is so light that no extra strong posts are required. Any post strong enough

for a wire fence is sufficient to hang this gate. It is easily made, matches well with a wire
55 fence, and indeed with any fence. No snow will bank against it, and it is not subject to that greatest of all troubles with hinge-gates—sagging.

I am aware that previous to my invention
60 gates have been made consisting of two uprights (hinge-board and latch-board) and wires and other material stretched across from hinge-board to latch-board, the swinging or
65 hinge board having a tie-rod fastened one end to the upper end of the hinge-board and the other to the front part of the gate to prevent the gate from sagging. I therefore do not claim such a combination, broadly; but

What I claim as my invention, and desire to
70 secure by Letters Patent, is—

1. In a wire gate, the combination, with two uprights, (hinge-board and latch-board,) of a center bar, Q, consisting of an iron plate laid between two boards, which are bolted edge-
75 wise to the plate, two iron straps, K''' K''', bolted one below and one above to the front or latch end of the center bar, the projecting rounded ends of said straps entering into the latch-board in lieu of tenons, two clips, L L',
80 bolted—one above, the other below—to the hind or hinge end of the center bar, two straining-bolts, K' K'', passed through the upturned ends of said clips, each bolt having a shoulder near one end, with a thread and nut at the
85 other, and their ends beyond the shoulders V V' entering the hinge-board in lieu of tenons, wires stretched across the gate, stiffening-cables, the strands of which pass round said wires, and a tie-rod stretched from the front
90 part of the gate to the upper end of the hinge-board, where it is fastened by a thumb-screw or threaded nut, (the end of the tie-rod being threaded,) the whole substantially as and for the purposes set forth. 95

2. A wire gate having a center bar, Q, consisting of a plate of iron laid between two boards bolted edgewise to the plate, substantially as described.

3. A wire gate having its center bar provided with the combined straining-bolts K K' and clips L L'. 100

JAS. SISUNG.

In presence of—

WM. F. KEMNITZ,
F. M. HURD.