A. J. SANBORN.
Farm-Gate.

No. 219,024. Patented Aug. 26, 1879.

Fig. 1.

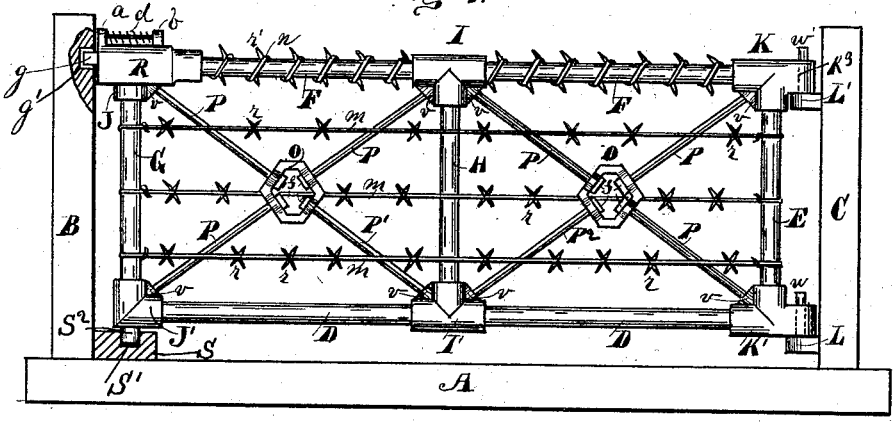



Fig. 2.

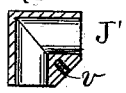



Fig. 3

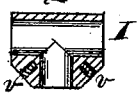



Fig. 4

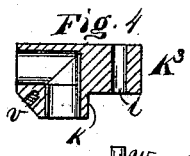



Fig. 5.

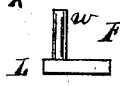



Fig. 6.

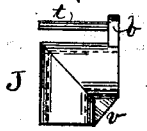
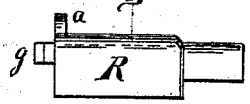



Fig. 7.



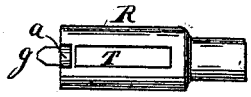
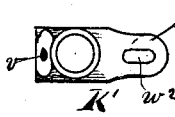




Fig. 8.

Fig. 9.

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C. G. Franck
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# UNITED STATES PATENT OFFICE.

ALBERT J. SANBORN, OF MATTOON, ILLINOIS.

## IMPROVEMENT IN FARM-GATES.

Specification forming part of Letters Patent No. **219,024**, dated August 26, 1879; application filed May 20, 1879.

*To all whom it may concern:*

Be it known that I, ALBERT J. SANBORN, of Mattoon, in the county of Coles and State of Illinois, have invented a new and useful Improvement in Farm-Gates, of which the following is a description, reference being had to the accompanying drawings.

My invention relates to a metallic gate to be used with wire or other fences, and particularly adapted to be used at crossings of railroads.

The object of my invention is to provide a newly constructed and arranged metallic gate for farm-fences and railroad-crossings.

My invention consists, mainly, in the new construction and arrangement of devices, also in the new combination of old elements, all of which, singly or combined, are deemed essential in my newly-organized metallic gate, whereby new and useful results are produced, as will be hereinafter fully described in the specification, and set forth in the annexed claims.

In the accompanying drawings, in which like letters of reference in the different figures indicate like parts, Figure 1 represents a side elevation of my improved gate. Fig. 2 represents a sectional view of one of the lower front corner-elbows with brace-socket. Fig. 3 represents a sectional view of one of the T-couplings with double brace-sockets. Fig. 4 represents a sectional view of one of the corner-elbows with brace-socket and hinge-joint. Fig. 5 represents one of the hooks on which the gate swings. Fig. 6 represents a side view of the front upper elbow with brace-socket and lug with rod for supporting a coil-spring. Fig. 7 represents a side view, and Fig. 8 a top view, of the sliding latch; and Fig. 9 represents a top view of the lower hinge-elbow with brace-socket and elongated pintle-hole.

Referring now to the drawings, A represents the base or ground, in which are firmly secured the vertical posts B C. The post C is provided with two hooks, L L′, forming part of the hinge-joint. The post B is provided near its upper end with a recess, $g'$, to receive the latch $g$, and a block, S, is secured to the base of the post B or in the ground. The block S is provided with a recess or hole, $S^1$, in which the lower projecting end of the vertical front gate-rail, G, is designed to rest when the gate is closed.

The gate is constructed wholly of metal, as follows, to wit: The lower front corner, J′, is an elbow similar to that of steam-fitting, made of cast metal, having a lug, $S^2$, cast on its lower side, or a hole is made therein, through which the lower end of the front vertical pipe-rail, G, projects to form the fastening. The corner between the branch openings of the elbow J′ is filled with metal and provided with a small screw-threaded hole, $v$, for the purpose of receiving one end of the brace-rod P. The T-couplings I I′ are also made of cast metal similar to the ordinary T-coupling used in steam and gas fitting; but each corner of the branch opening and the ends are also filled with metal and provided with screw-threaded holes $v$ to receive one end of the braces $P^1$ $P^2$.

The upper front corner or elbow, J, is in construction similar to the lower one, J′, except that a lug, $b$, is cast on the upper side, near the open end of one branch, and said lug is provided with a rod, $t$, which extends forward parallel with the upper edge of the elbow. Said rod is designed to support and hold the coil-spring $d$, as shown in Figs. 6 and 1.

The sliding latch R (shown more fully in Figs. 7 and 8) is a U-shaped casting or trough adapted to fit over the upper corner-elbow, J, and pipe-rail F. Said sliding latch is provided with a lug or projecting catch, $g$, at the front end, and also provided with an upward-projecting lug, $a$, at the upper front corner. Said lug $a$ is provided with a hole, in which the rod $t$ operates. The upper part of the sliding latch is also provided with a slot, T, in which the lug $b$ of the elbow J operates.

The coil-spring $d$ is placed on the rod $t$, between the lug $b$ of the elbow J and the lug $a$ of the sliding latch R. Thus the latch is adapted to move forward or backward, and secure the gate or release it, as desired.

The upper rear corner iron or elbow, K, is similar to the other corner-irons in construction, but provided with a rearward extension having a vertical hole, $i$, to receive the pin $w^1$ of the upper hook, L′, thus forming a corner-iron, a brace, and hinge, all in one piece, as shown in Figs. 1 and 4.

The lower rear corner iron or elbow, $K^1$, is similar in construction to the corner-iron K, except that the pin-hole $w^2$ is elongated for

the purpose of allowing the front end of the gate to be raised or lowered.

The links O O are metallic frames, with holes at four sides to receive the ends of the brace-rods P P.

The upper rod or pipe, F, is secured in the T-coupling I midway of its length; or, if two pieces are used, they are screwed into each end of the T-coupling. The upper hinge corner-iron, K, and upper front corner-iron, J, are also screwed onto the other ends of the pipe F. The front, middle, and rear vertical pipe-rails, G, H, and E, are then screwed into the other branches of the corner-elbows J and K and the T-coupling I.

To the lower ends of the vertical pipes G, H, and E are screwed the corner-iron J′, the T-coupling I′, and rear hinge corner-iron, K¹, respectively, after which the lower rail or pipe, D, is either screwed into the corner-irons and T-coupling or made fast by rivets or set-screws.

The brace-rods P P are provided with screw-threads at each end, and one end of each rod is screwed fast in their respective sockets *v*, formed in the corner-irons and T-couplings. The central ends of the brace-rods P are then inserted in the holes formed in the link-frames O O, and made fast by the nuts *f*, thus stiffening up the gate and rendering it firm, solid, light, and strong.

The outer rails of the gate may be wrapped with barbed fence-wire, as shown at *n r′* in Fig. 1, and several lines of barbed wire, *m r*, may be stretched across the gate, as shown, to prevent animals from getting through, under, or over the gate.

When it is desired to open or close the gate the latch R is drawn backward, and the front end of the gate is raised to release or insert the catch, as the case may be.

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

1. In a metallic gate, the upper front corner iron or elbow, J, having an upward-projecting lug, *b*, provided with a rod, *t*, and a threaded brace-socket, *v*, combined with the sliding catch R and spring *d*, as and for the purpose specified.

2. In a metallic gate, the lower corner iron or elbow, J′, provided with a downward-projecting lug, S², and the brace-socket *v*, as and for the purpose specified.

3. The sliding latch R, having a lug, *a*, projecting upward from its front upper corner, and a latch or catch, *g*, projecting endwise from the front end, and a slot, T, in its upper part, combined with the gate, as and for the purpose specified.

4. In a metallic gate, the rear corner-iron hinges, each consisting of an elbow having a threaded brace-socket, *v*, in the angle of the elbow, and a rearward extension, K³, cast thereon, forming part of the hinge-joint, as shown and described.

5. In combination with the corner-elbows J J′ and branch couplings I I′, the brace rods or pipes P and link-frames O O, one end of said brace-rods being screwed into the sockets *v* of the corner-elbows, and the other end inserted in the links O O and made fast by the nuts *f*, thus stiffening up the gate and rendering it firm, solid, light, and strong, as shown and described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ALBERT J. SANBORN.

Witnesses:
E. B. McCLURE,
E. O. FRINK.