(No Model.) 2 Sheets—Sheet 1.

W. R. PITT.

GATE.

No. 312,380. Patented Feb. 17, 1885.

Fig 1.

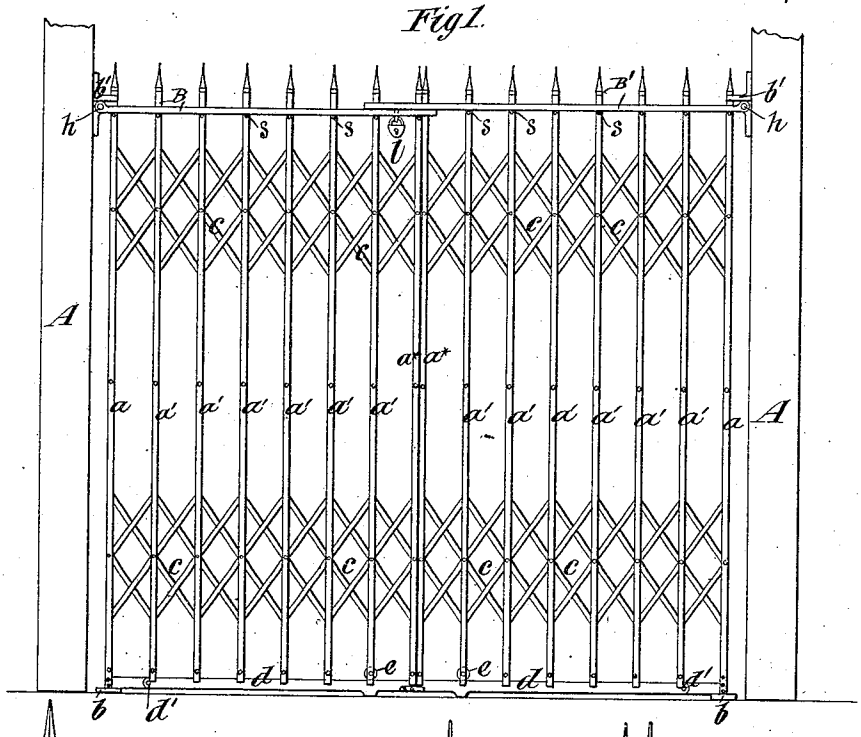


Fig 3.

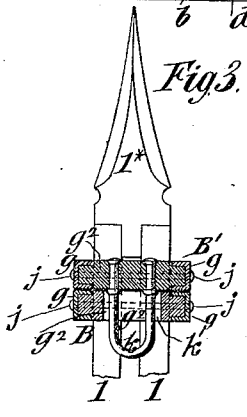


Fig 2.

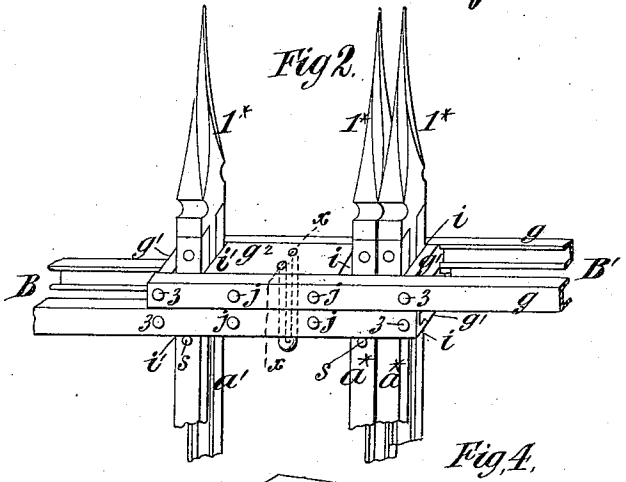


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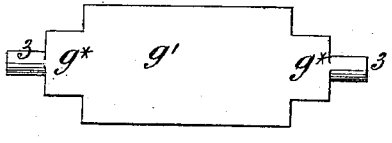
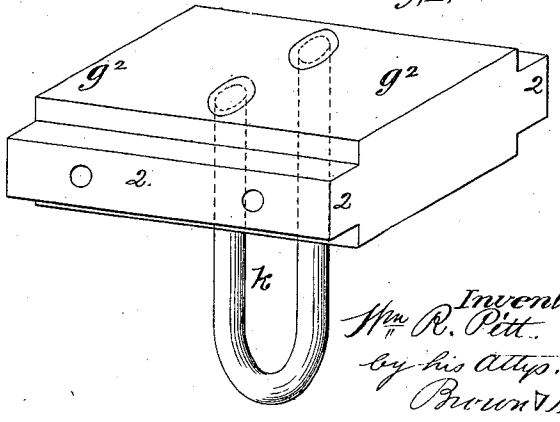


Fig 4.



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(No Model.)

2 Sheets—Sheet 2.

W. R. PITT.

GATE.

No. 312,380. Patented Feb. 17, 1885.

Fig 6.

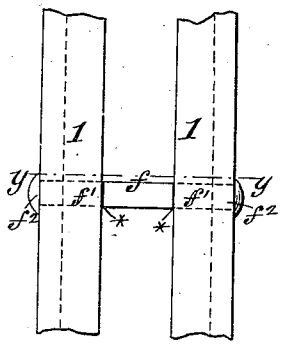


Fig 7.

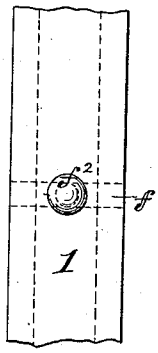


Fig 8.

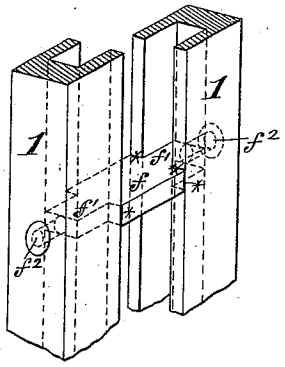


Fig 9.

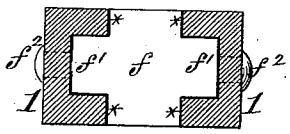


Fig 11.

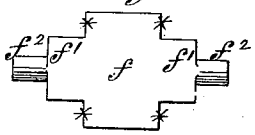


Fig 10.

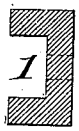
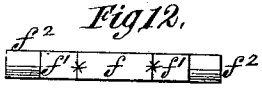


Fig 12.



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UNITED STATES PATENT OFFICE.

WILLIAM R. PITT, OF BROOKLYN, NEW YORK, ASSIGNOR TO WALTER W. BOSTWICK, OF CINCINNATI, OHIO.

GATE.

SPECIFICATION forming part of Letters Patent No. 312,380, dated February 17, 1885.

Application filed June 9, 1884. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM R. PITT, of the city of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Gates, of which the following is a specification.

My invention relates to iron gates which are collapsible to open them and capable of extension to close them, such gates being composed of a number of pickets or upright bars connected by toggle-levers or other jointed connections, whereby provision is made for keeping the pickets or bars nearly or quite in parallelism, whatever may be their distance apart. Examples of gates of this class are shown in United States Letters Patent No. 191,984, granted June 12, 1877, to J. E. Q. Maddox, and No. 213,119, granted March 11, 1879, to Maddox and George P. Humphries, and such gates are used for hallways, vestibules, store or shop doors, and other places.

My invention consists in a novel construction of the pickets used in such gates, and in a novel construction of a locking-bar used for such gates, as hereinafter described and claimed.

In the accompanying drawings, Figure 1 is an elevation of two gates or a double gate embodying my invention. Fig. 2 is a perspective view of a portion of the outer and adjacent pickets of the two gates and portions of the locking-bars. Fig. 3 is a transverse section on the dotted line *x x*, Fig. 2. Figs. 4 and 5 are respectively a perspective view and a side view of pieces of metal employed in the construction of the locking-bars, on a larger scale. Figs. 6 and 7 are side and edge views of a portion of a picket. Fig. 8 is a perspective view of the same. Fig. 9 is a transverse section on the dotted line *y y*, Fig. 6. Fig. 10 is a transverse section of one of the two channel-irons from which each picket is made, and Figs. 11 and 12 are plan and side views of parts which are placed between the two channel-irons of each picket to brace and hold them in proper position relatively to each other.

Similar letters of reference designate corresponding parts in all the figures.

A A designate the two gate-posts, the opening between which is closed by two gates which collapse by movement in opposite directions and constitute a double gate. The picket *a* of each gate nearest the corresponding post is secured at the lower end to a base-plate, *b*, and at the upper end by a bracket, *b'*, to the post. The pickets *a** of the two gates are brought together, as shown in Fig. 1, when the gates are extended or closed, and between the extreme outer and inner pickets, *a a**, of each gate are intermediate pickets, *a'*. The pickets *a a* a'* of each gate are connected by means of toggle-levers or lazy-tongs *c* in a manner very similar to that shown in the patent to Maddox and Humphries, hereinabove referred to, and I make no claim thereto. These toggle-lever connections *c* allow the pickets to move toward and from each other as the gates are collapsed or expanded, serving to maintain the pickets in parallelism; and in order better to effect this result I prefer to employ two systems or series of such connections—one series near the lower ends of the pickets and the others near their upper ends. Below the gates are tracks or ways *d d*, and one or more of the pickets *a'* of each gate has a roller, *e*, at the lower end, bearing on said track or way. The tracks or ways *d* are hinged at *d'*, as shown in the patent to Maddox, above referred to, and after the gates have collapsed the tracks or ways are to be swung up against them, as shown in said patent.

The construction of picket which I prefer to use is shown most clearly in Figs. 2 and 3 and Figs. 6 to 12, inclusive. It consists of two channel-irons or channel-bars, 1 1, having their flanges projecting toward each other, and blocks or pieces *f*, of metal, interposed between them and serving to hold them securely fixed relatively to each other. Each piece or block *f* has at its ends tongues *f'*, which completely fill the channel-bars 1 and form shoulders *, which have a bearing on the flanges thereof. Beyond the tongues *f'* project teats or studs f^2, which enter holes in the bars 1, and are riveted over to secure the component parts of the picket together. The finial or tip 1* of the picket is held between and riveted to the channel-bars at their upper ends, as shown in Figs. 2 and 3. I em-

ploy a locking-bar, B, for the left-hand gate, and a very similar bar, B′, for the right-hand gate. Each bar is composed of channel-bars *g g* and interposed blocks or pieces, *g′ g²*, whereby the channel-bars are held at such a distance apart as to slip over or to receive between them the pickets *a′ a** of each gate. At their outer ends the bars B B′ are hinged at *h*, so that they may be swung upward to remove them entirely from the pickets, and the two channel-bars *g g* are at such a distance apart as to receive the brackets *b′* between them, and thus allow the locking-bars to be swung up into a vertical position. The lower bar, B, has at its end an opening or socket, *i*, which is formed by a piece, *g′*, and a piece, *g²*, and which receives the two extreme pickets *a** of the two gates. At a slight distance from its end it has a socket or opening, *i′*, which is formed by the piece *g²* and another piece *g′*, and which receives a picket *a′* of the gate corresponding to that bar. The locking-bar B′ has at the end a socket or opening, *i′*, which is formed by pieces *g′ g²*, and which receives the aforesaid picket *a′*, and at a slight distance from the end is a socket, *i*, formed by the pieces *g² g′*, and which receives the two extreme pickets *a**. The piece *g²* is provided with tongues or ribs 2, which are received in the channel-irons *g g*, and the two channel-irons and interposed block or piece are then secured together by rivets *j*, inserted through them all. The pieces *g′* are provided with tongues *g**, which enter the channel-irons, and with projections 3, which are received in the holes in the channel-irons, and are riveted over to secure them thereto. The bars B B′, as here shown, are locked by a staple, *k*, fixed in the block *g²* of the bar B′, and projecting downward through an aperture, *k′*, in the block *g²* of the bar B, a padlock, *l*, being inserted through said staple or hasp, as shown in Fig. 1.

When it is desired to open the gate, it is only necessary to remove the lock *l* and turn or swing the bars B B′ upward against the posts A.

When the locking-bars are turned or swung downward toward and to a horizontal position, they receive through them the upwardly-presented ends of the pickets, and are arrested by pins *s* in the pickets, forming stops below which the bars cannot move.

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

1. A gate-picket consisting of two oppositely-arranged channel-bars with their flanges presented toward each other, and a spacing piece or block, *f*, having tongues *f′*, which fit the interior of the channel-bars, and shoulders *, which support the flanges thereof, substantially as herein described.

2. A gate-picket consisting of two oppositely-arranged channel-bars with their flanges presented toward each other, and a spacing block or piece, *f*, having tongues *f′*, which fit the interior of the channel-bars, shoulders *, which support the flanges thereof, and projections *f²*, which extend through the channel-bars and are riveted on the exterior thereof, substantially as herein described.

3. The combination, with the collapsible gate, constructed as herein described, of a hinged locking-bar, B, composed of oppositely-arranged channel-bars *g g* and interposed blocks or pieces *g′ g²*, the said channel-bars being spaced to receive between them the pickets of the gate, substantially as herein described.

4. The combination, with two gates forming a double gate and capable of collapsing by movement in opposite directions, of the locking-bars B B′, hinged at *h*, and each consisting of channel-bars *g g* and interposed blocks *g′ g²*, the said channel-bars being spaced to receive between them the pickets of the gates and the locking-hasp *k*, substantially as herein described.

WILLIAM R. PITT.

Witnesses:
FREDK. HAYNES,
LOUIS M. F. WHITEHEAD.