No. 719,838. PATENTED FEB. 3, 1903.

J. H. MOSS.

GATE.

APPLICATION FILED JUNE 11, 1902.

NO MODEL.

FIG. 1.

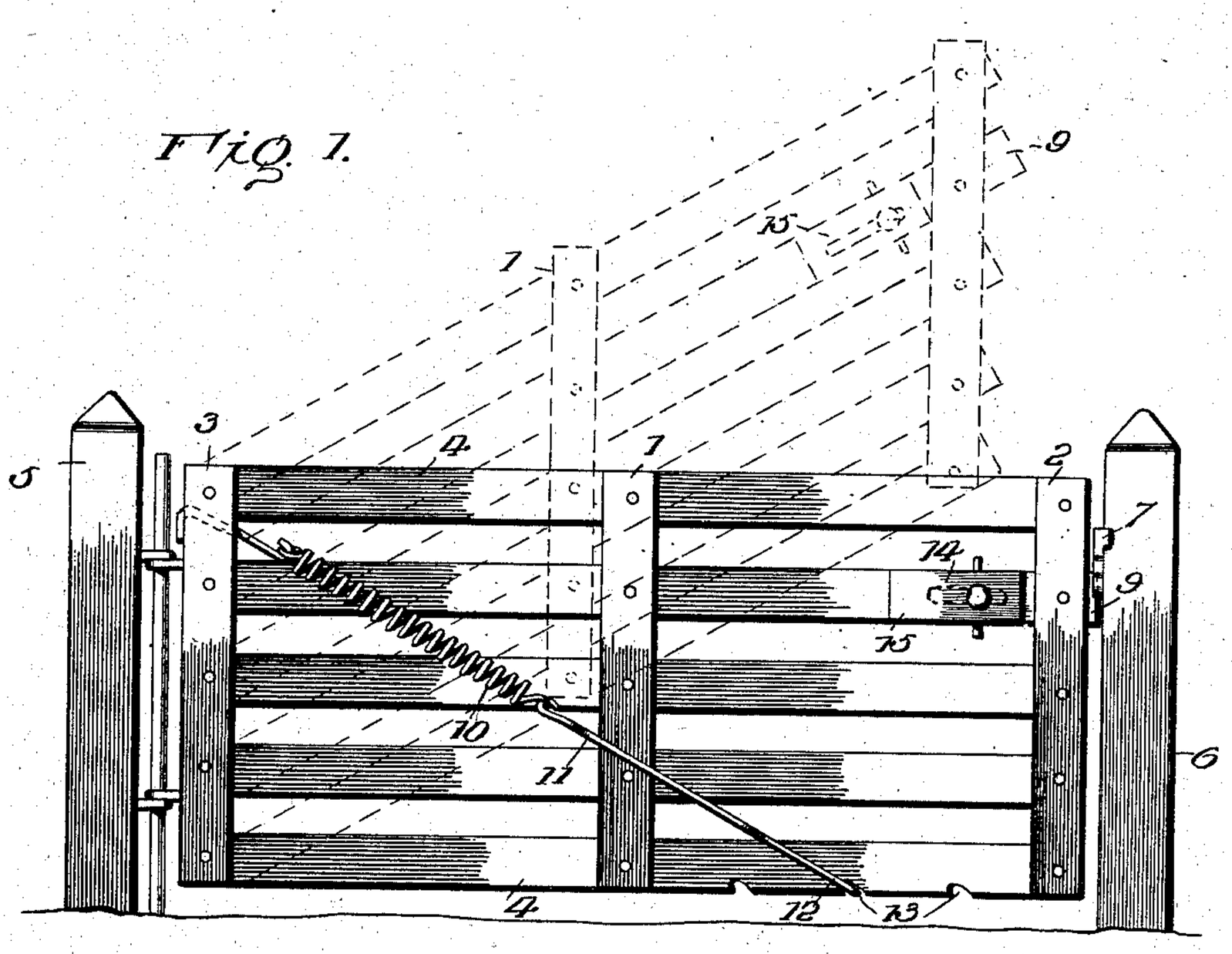


FIG. 2.

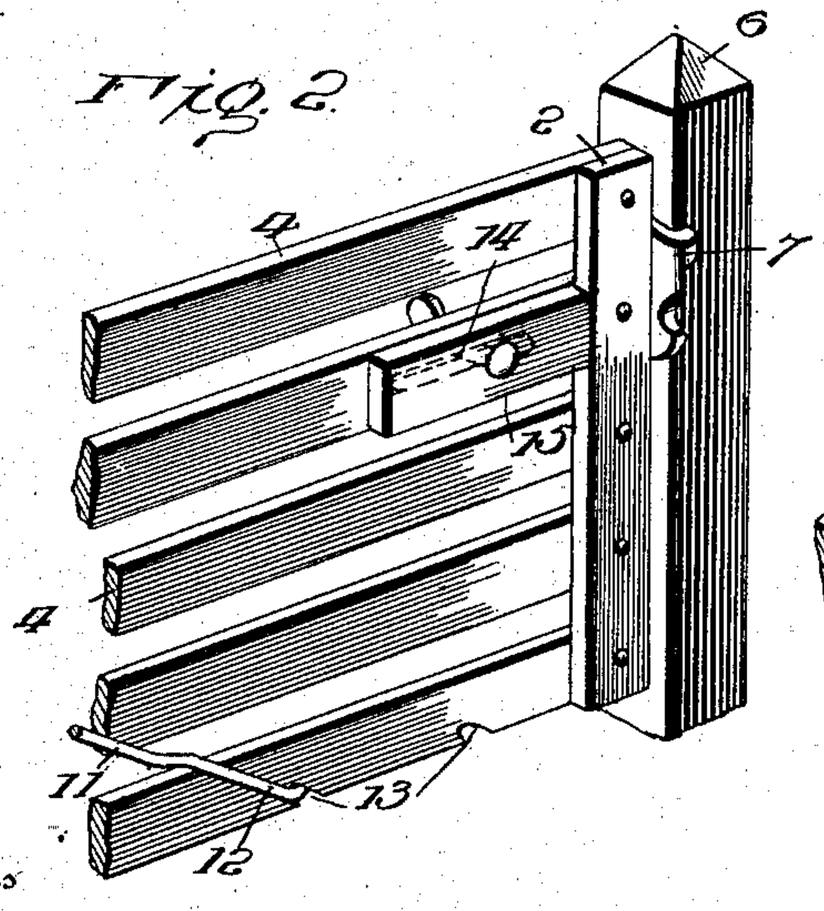
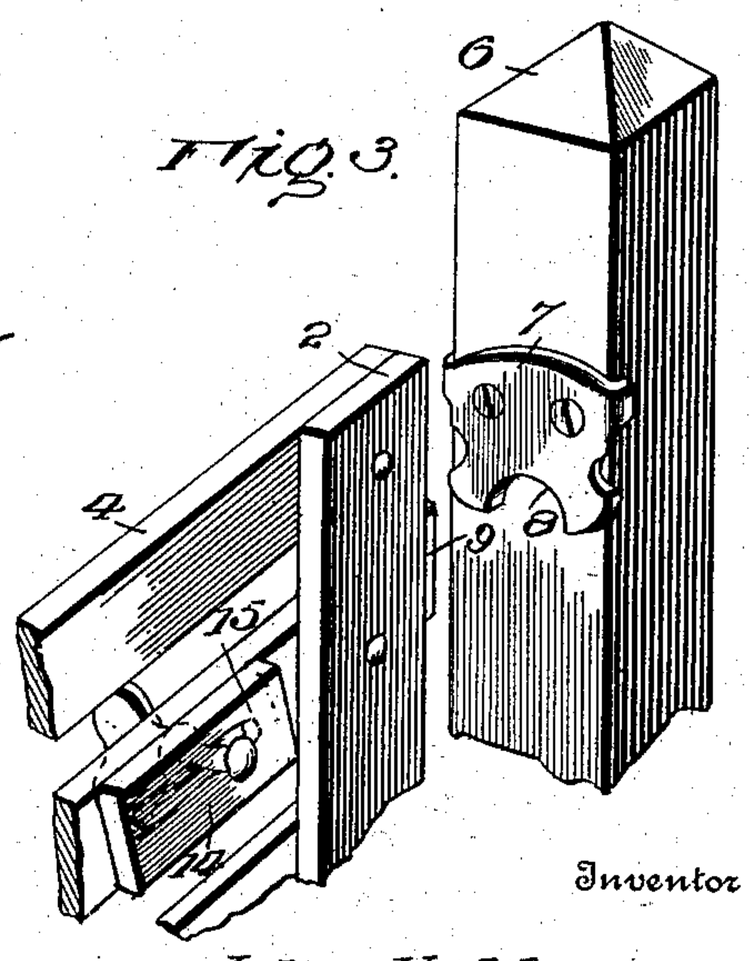


FIG. 3.



Witnesses

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GATE.

SPECIFICATION forming part of Letters Patent No. 719,838, dated February 3, 1903.

Application filed June 11, 1902. Serial No. 111,191. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. MOSS, a citizen of the United States, residing at Angola, in the county of Steuben and State of Indiana, have invented certain new and useful Improvements in Gates; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention has relation to the type of gates which are mounted to swing laterally and to tilt vertically and which in their construction comprise longitudinal rails and vertical battens pivotally connected at the points of crossing and a spring for throwing the free end of the gate upward when released.

The essential purpose of the invention is to combine with the operating-spring means whereby the effect of the varied tension of the said spring is regulated independent of itself, so that the gate may tilt upwardly to a greater or less extent when released from the latch-post, according to the purpose for which same is employed and with reference to the will or desire of the user.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and drawings hereto attached.

While the essential and characteristic features of the invention are susceptible of modification, still the preferred embodiment of the invention is illustrated in the accompanying drawings, in which—

Figure 1 is an elevation of a gate embodying the invention. Fig. 2 is a detail perspective view of the latch-post and adjacent end of the gate in locked position, showing the catch mechanism and means for regulating the tilt of the gate. Fig. 3 is a detail view, upon an enlarged scale, of the means for regulating the vertical tilting of the gate.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The gate consists of a middle batten 1 and end battens 2 and 3 and longitudinal rails 4, the latter being pivoted to the several battens at the points of crossing in any substantial manner to admit of the free vertical tilting of the gate when opening and closing by a folding action. The gate is hinged at one end to the post 5 in any desired manner and at its opposite end is adapted to be secured to the latch-post 6 by any suitable catch mechanism, that illustrated being preferred, and consisting of the block 7, attached to the inner side of the post 6, the said block being preferably of metal and notched on the lower edge at 8 to receive the projected portion 9 of one of the cross-rails 4, said part 9 extending beyond the batten 2. It will be understood that this latter portion 9 may extend from any one of the said rails or two or more if requisite to the adoption of the gate. Under normal conditions the free end of the gate tends to move upward under the action of a spring 10, which is connected at opposite ends with upper and lower portions of the gate and which by preference is arranged diagonally in order to secure the best results. This spring is connected at its upper end to the top portion of the batten 3 and at its lower end to the lowermost of the cross-rails 4. The spring normally is under tension sufficient to automatically elevate the free end of the gate when released from the latch-post. This action of the spring holds the projection 9 upon the cross-rail seated in the notch 8 of the block 7 when the gate is closed. The lower end of the spring 10 is secured to the rail by the rod 11, which is curved at its lower end to form the loop portion 12, the latter adapted to be adjusted to engage with inclined notches 13 upon the lower side of the rail in the well-known manner. By this means the tension of the spring may be changed, a light tension serving to lift the gate to a small degree and a strong tension tending to fold the gate by a tilting movement to a greater degree, as will be readily comprehended. However, means are provided to more finely adjust the tilting movement of the gate without recourse to the tension-spring or adjustable bar—means well known in the art. This latter consists, essentially, in providing upon one of the rails 4, and approximately near the batten 2, a longitudinal slot 14. A block 15 is adapted for slidable movement on the rail, being guided by the slot 14, a bolt or other suitable means being employed to re-

tain the block upon the rail. This block is adapted to be adjusted in the said slot and to engage against the inner edge of the batten 2. The block is preferably of metal, so that the wearing due to the above impinging action may be reduced to a minimum. It will be readily seen by reference to Fig. 1 that in the tilting movement of the gate the rails, which when the gate is latched are right-angularly disposed with reference to the battens, lie at an oblique angle to the batten 2 when the gate is opened. Therefore by regulating the size of the angles thus formed by the binding action of the block 15 the extent of such tilting movement is regulated. The block 15 may be applied at the opposite ends of the rails to coöperate with the batten 3 or with the middle batten in accordance with the above principle.

The location of the means for varying the tension of the spring or of the tilting movement of the gate is immaterial within the purview of the invention so long as it serves the desired purpose.

Having thus described the invention, what is claimed as new is—

1. In combination with a gate composed of vertical battens and longitudinal rails pivotally connected at the points of crossing, a diagonally-arranged tension-spring for automatically tilting the gate by a folding movement thereof, means independent of the tension-spring for regulating the extent of the tilting movement of the gate, substantially as set forth.

2. In combination, a gate adapted for vertical and lateral movement, means for normally exerting an upward pressure upon the gate whereby the same is automatically tilted by a folding movement thereof, coacting means between the rails and battens of the gate, whereby the tilting movement thereof is regulated, substantially as described.

3. In combination, a gate adapted for vertical and lateral movement, means for normally exerting an upward pressure upon the gate whereby the same is automatically tilted by a folding movement thereof, means comprising a block slidably mounted with relation to the rails and adapted to engage with the batten thereof, to limit the tilting movement of the gate, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN H. MOSS. [L. S.]

Witnesses:

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HENRY W. JOHNSON.