

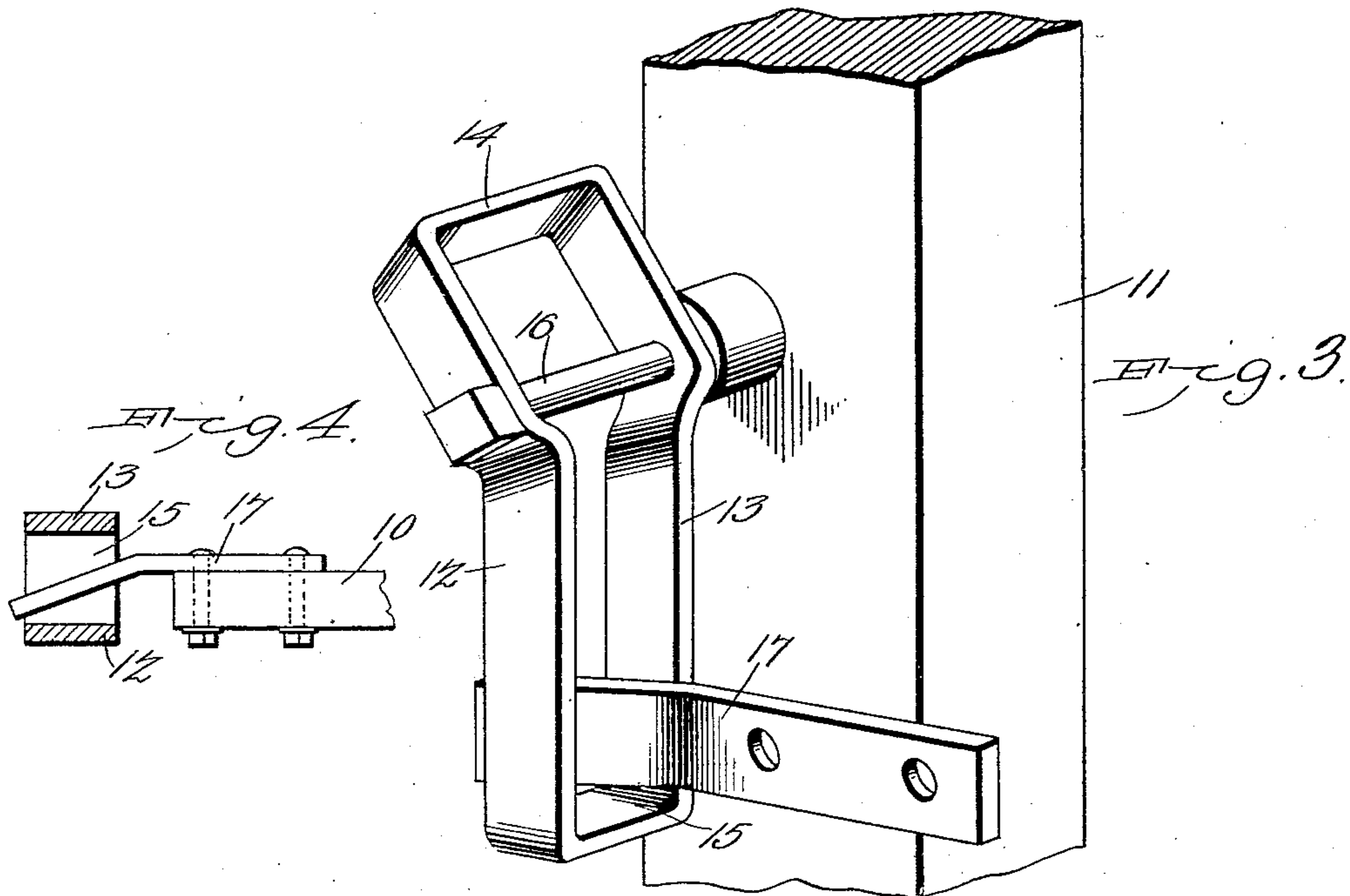
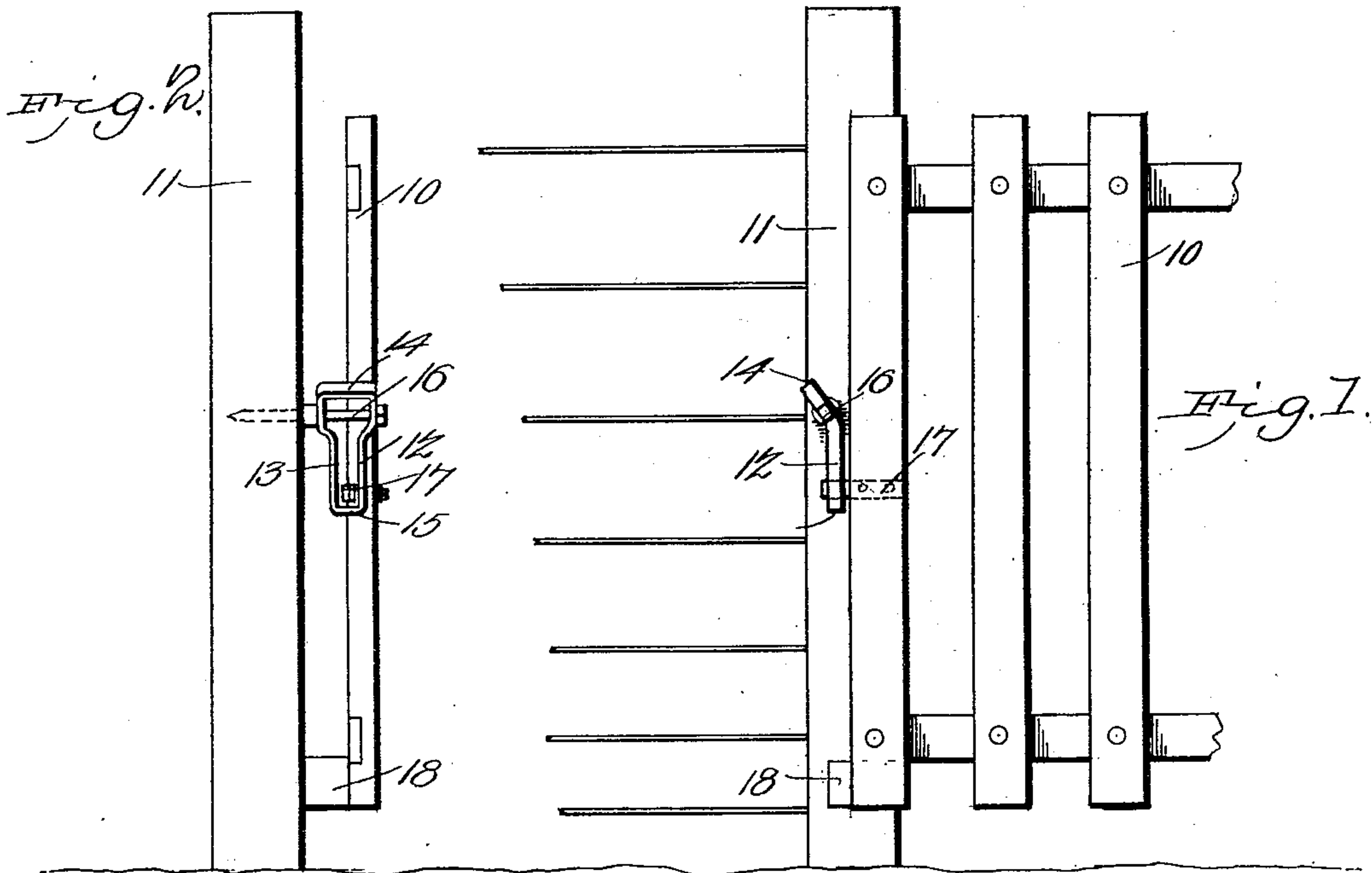
No. 745,970.

PATENTED DEC. 1, 1903.

D. M. McRAE.
GATE LATCH.

APPLICATION FILED JAN. 28, 1903.

NO MODEL.



Witnesses
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UNITED STATES PATENT OFFICE.

DANIEL M. McRAE, OF CEDARPARK, TEXAS, ASSIGNOR TO HENRY BOYKIN LEE, OF RUTLEDGE, TEXAS.

GATE-LATCH.

SPECIFICATION forming part of Letters Patent No. 745,970, dated December 1, 1903.

Application filed January 28, 1903. Serial No. 140,919. (No model.)

To all whom it may concern:

Be it known that I, DANIEL M. McRAE, a citizen of the United States, residing at Cedar-park, in the county of Williamson and State of Texas, have invented a new and useful Gate-Latch, of which the following is a specification.

This invention relates to latches for gates and other swinging closures, and has for its object the production of a simply-constructed device of this character which will automatically close and which may be opened by releasing the latch by hand or by the manipulation of the gate; and the invention consists in certain novel features of the construction, as hereinafter shown and described, and specified in the claims.

In the drawings illustrative of the invention, in which corresponding parts are denoted by like designating characters, Figure 1 is a side elevation of a portion of a gate and a section of the adjacent fence with the improvement applied. Fig. 2 is an end elevation of the same. Fig. 3 is a perspective view, enlarged, of the operative portions of the device. Fig. 4 is a sectional detail illustrating the operation.

The improved device may be applied to any form of swinging gate or to swinging doors or other similar closures, but will be more particularly applicable to gates, and for the purpose of illustration the improvement is shown connected to an ordinary gate structure, 10 representing the gate, and 11 the adjacent post against which the gate closes.

The improved device consists of a swinging latch member and a tongue operatively engaging the swinging latch, the latch member being preferably pivoted upon the post near the top of the gate and the tongue being carried by the gate.

The latch member will preferably be formed with spaced side members, between which the tongue member operates, the side members indicated at 12 13 and connected at their ends, as at 14 15, and with a transverse pivot 16, by which the latch is connected to the post 11, the pivot being preferably an ordinary lag-screw, as shown.

The pivot 16 will engage the latch member intermediately of its length, as shown, with the

shorter upper part set off at an angle to form a "balance" to maintain the lower portion of the latch yieldably in a vertical position and at the same time rendering it possible to move the lower portion by the expenditure of a less force than if the pivot were at the upper end of the latch member, as will be obvious.

The lower portion of the latch member is narrower than the upper portion, as shown, so that a space is provided between the adjacent side member of the latch and the post 11, the object to be hereinafter explained.

The tongue member is indicated at 17 and consists of a bar attached to the gate and extending therefrom and at an angle thereto and extends between the lower part of the members 12 13, as shown, when the gate is closed. By this arrangement it will be obvious that when the gate is to be closed the inclined portion of the tongue member 17 engaging the lower part of the side member 12 will swing the latch member upon its pivot transversely to the path of the gate and pass into the space within the latch member, thus automatically "locking" the gate closed, as the outer inclined side of the tongue will effectually prevent any return movement to the gate, unless the latch member be swung clear of the tongue.

The gate does not swing into engagement with the post 11, but is limited in its closing movement by a stop 18 between the post 11 and the lower portion of the gate, which holds the gate with its upper part a short distance from the post. As before stated, the lower portion of the side member 13 remains a short distance from the post, so that when the upper portion of the gate is sprung inwardly the inclined side of the tongue 17 will engage the side member 13 and vibrate the latch member away from the gate, and if this movement of the gate be rapidly executed the latch member will swing far enough to permit the gate to be opened before the latch member swings back to its normal position. By this simple arrangement the gate will be automatically locked closed and may be readily released by a sudden rapid motion in continuation of its closing movement and then a sudden drawing outward of the gate to carry the tongue member past the returning latch member.

This makes a very simple, cheap, and easily applied and operated device which will be applicable to any size or form of gate or door or other swinging closure.

5 The parts may be of any suitable size in proportion to the gate and to enable them to withstand the strains to which they will be subjected and will preferably be of steel or other suitable metal.

10 The stop 18 may be upon the gate 10 or upon the post 11, as may be preferred.

The parts may be modified in minor particulars without departing from the principle of the invention or sacrificing any of its advantages.

15 Having thus described my invention, I claim—

1. A gate-latch comprising a latch member mounted to swing transversely of the path of 20 the gate and having spaced side members, and an angularly-disposed tongue operable by the closing of the gate to engage one of the side members and automatically swing the latch member into engagement with the tongue and 25 upon a continuance of said closing movement to engage the other side member for swinging the latch member out of engagement with the tongue.

2. A gate-latch comprising a latch member 30 pivoted between its ends to swing transversely of the path of the gate and having spaced side members and its upper portion above the pivot

overhanging, and an angularly-disposed tongue acting upon the portion of the latch member below the pivot and operable upon 35 the closing of the gate to engage one of the side members and automatically swing the latch member into engagement with the tongue and upon a continuance of the gate-closing movement to engage the other side 40 member for swinging the latch member out of engagement with the tongue.

3. The combination of a stationary post, a gate swinging transversely of the post, a latch member movably carried by the post relatively 45 near the top of the gate and swinging transversely of the movement thereof, a tongue carried by the gate and operatively engaging the swinging latch member at an angle thereto, and a stop relatively near the bottom of the 50 gate and limiting the movement of the lower part of the gate, but permitting the closing movement to be continued as to the upper part of the gate, whereby motion, in continuation of the closing movement, may be im- 55 parted to the gate when the tongue member is to be released, substantially as described.

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

DANIEL M. MCRAE.

Witnesses:

D. F. WRIGHT,
PAT MALONE.