

No. 703,347.

Patented June 24, 1902.

J. T. McCABE.

THERMOSTATIC FIRE DOOR APPARATUS.

(Application filed Apr. 8, 1899.)

(No Model.)

Fig. 1.

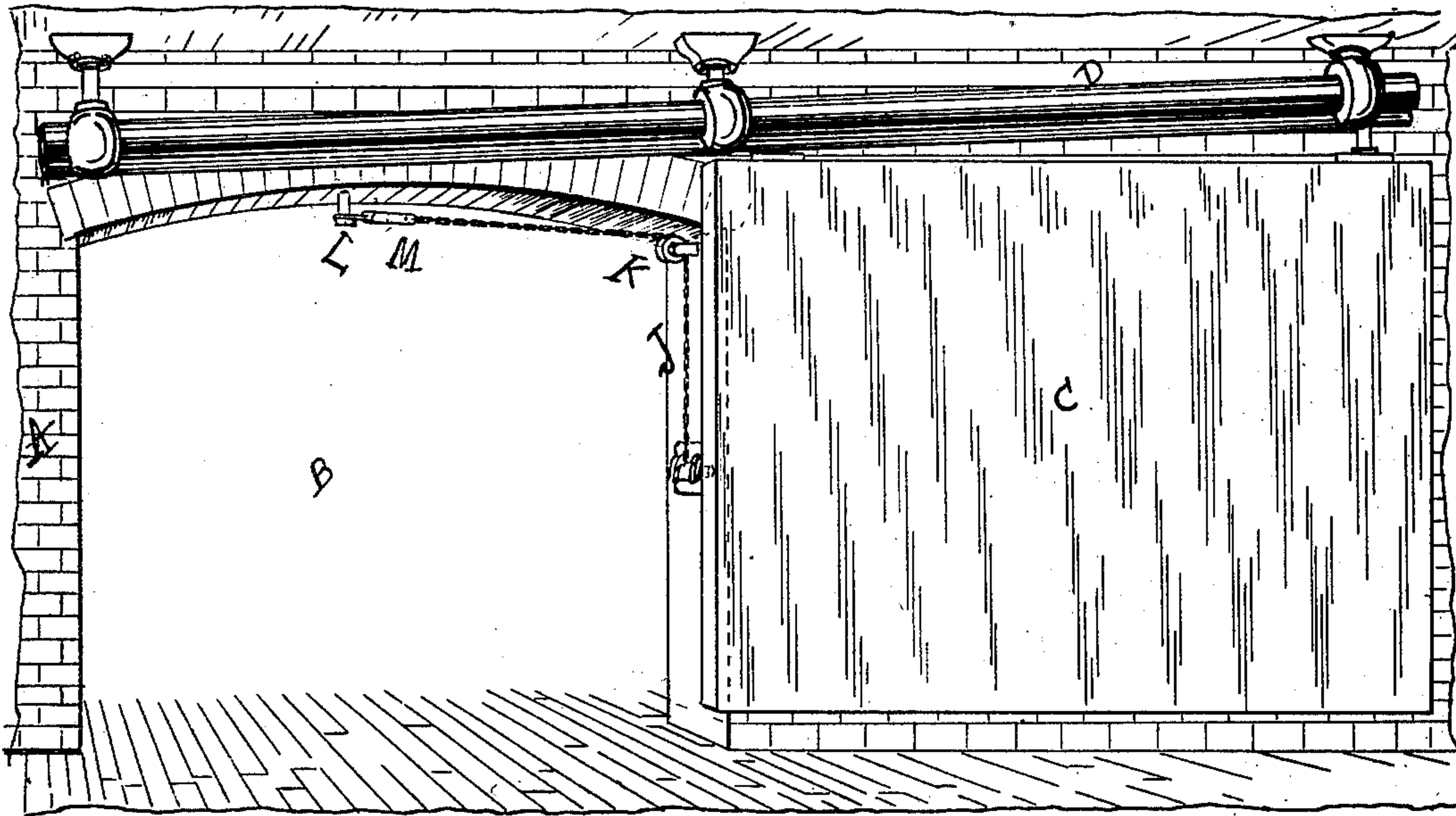
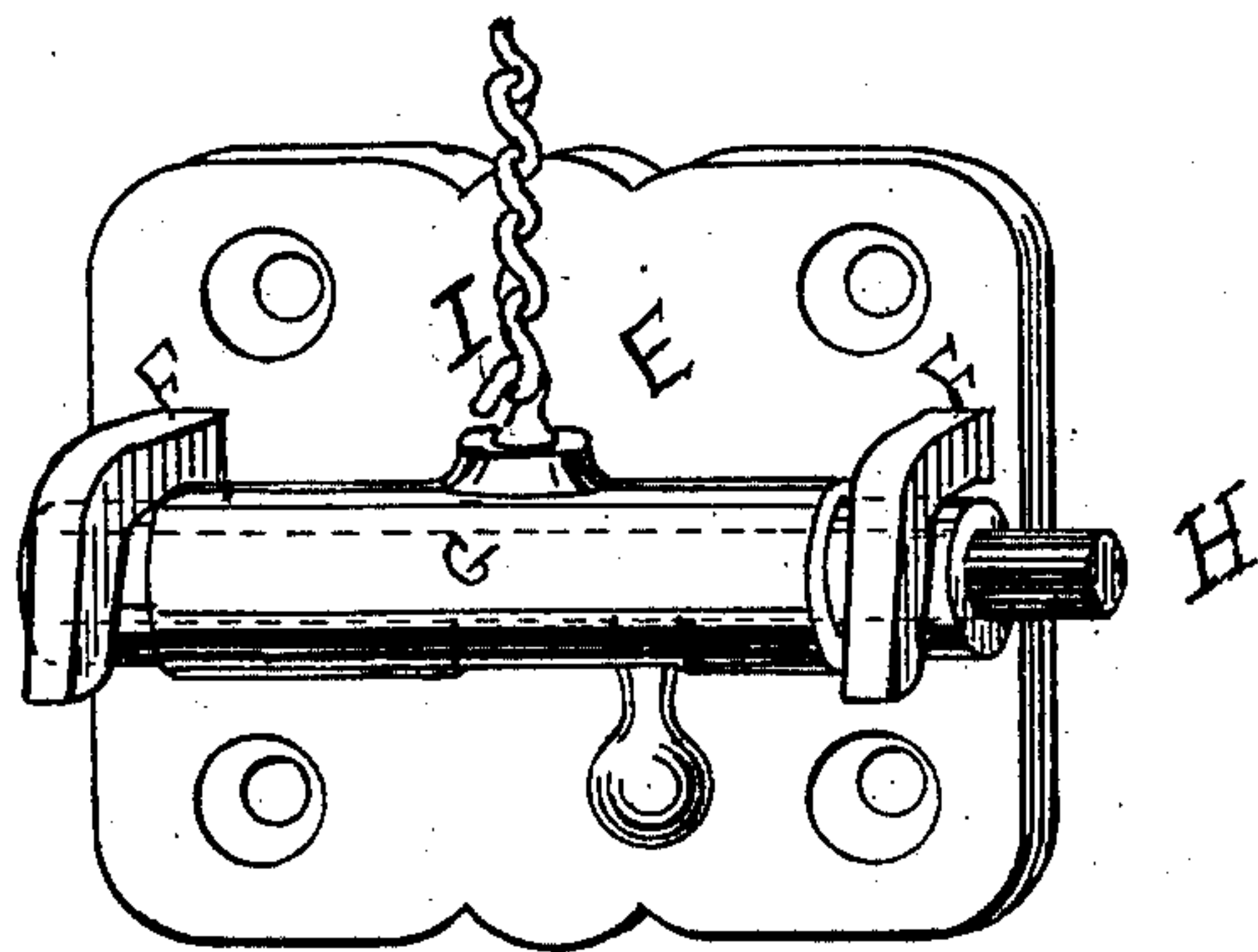


Fig. 2.



Witnesses:

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JAMES T. McCABE, OF EAST ORANGE, NEW JERSEY.

THERMOSTATIC FIRE-DOOR APPARATUS.

SPECIFICATION forming part of Letters Patent No. 703,347, dated June 24, 1902.

Application filed April 8, 1899. Serial No. 712,324. (No model.)

To all whom it may concern:

Be it known that I, JAMES T. McCABE, a citizen of the United States of America, and a resident of East Orange, Essex county, State of New Jersey, have invented certain new and useful Improvements in Thermostatic Fire-Door Apparatus, of which the following is a specification.

My present invention relates to a latch for fire-doors or similar devices for closing passage-ways, so that not only can the door be manually disengaged to permit it to be closed, but that it will be automatically disengaged upon the occurrence of excessive heat to permit the automatic closing of the door.

In carrying out my invention I provide a self-closing door of any approved construction and mechanism adapted to engage the said door to keep it open, the said mechanism consisting of a part which may be manually disengaged from the door or may be automatically disengaged from the part on which it is normally carried, and I will hereinafter more particularly describe and claim the several features of my invention.

Referring to the accompanying drawings, in which corresponding parts are designated by corresponding marks of reference, Figure 1 is a perspective view of a door having my invention applied thereto. Fig. 2 is an enlarged view of the latch.

A represents a wall having therein the passage B which it is desired to protect by the door C, the door sliding on the inclined track D, which tends to throw the door to its closed position. A plate E is attached to the wall of the passage and is provided with retainers F, which normally hold the shell G, inclosing the bolt H, the bolt being capable of being manually slid in the shell (the latter being held by the retainers) to disengage it from the door. The bolt and shell together form what may be generically termed a "latch." The bolt-shell G has a hook I thereon, and to this hook is attached a cord, wire, or chain J, which passes freely over a pulley K and is attached to a fixed support, as at L. Inserted in this cord is a piece M of any suitable construction, which will melt or otherwise break the continuity of the cord upon excessive heat, whereby as the sleeve is held in the retainers by such cord the sleeve and bolt will be released therefrom and permitted to drop out of the retainers, whereby the door will be

released and permitted to close to protect the passage. It will be noted that the manual movement of the bolt disengages the latch from the door without affecting the fastening between the latch and retainers, while the automatic release effected by excessive heat frees the bolt and bolt-carrier from the sleeve without directly affecting the engagement between the latch and door. It will be obvious, however, that the position of the plate E may be reversed between the wall and door without departing from the spirit of my invention.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. The combination with a self-closing door, of a detachable bolt-carrier, a retainer for said carrier, a bolt sliding in the carrier for holding the door in an open position, but capable of being manually moved to disengage it from the door and a device, releasable by heat for holding the bolt-carrier in the retainer, substantially as described.

2. The combination with a self-closing door, of a bolt for holding the door in an open position, a fixed support, a bolt-carrier detachably secured to the fixed support, and a device releasable by heat for holding the bolt-carrier to the fixed support, substantially as described.

3. The combination with a self-closing door, of a sliding bolt for holding the door in an open position, capable of being manually moved to disengage it from the door, a detachable carrier, in which the bolt is held for movement, and a device, releasable by heat for holding the carrier in place, substantially as described.

4. The combination with a self-closing door, a latch to hold the door in an open position, a retainer for the latch, normally holding it against movement with the door, the latch being capable of being manually moved in the retainer to disengage it from the door, and means releasable by heat for disengaging the latch from the retainer, substantially as described.

Signed by me at New York city this 6th day of April, 1899.

JAMES T. McCABE.

Witnesses:

JOSEPHINE McILVAINE,
THOS. G. BAIN.