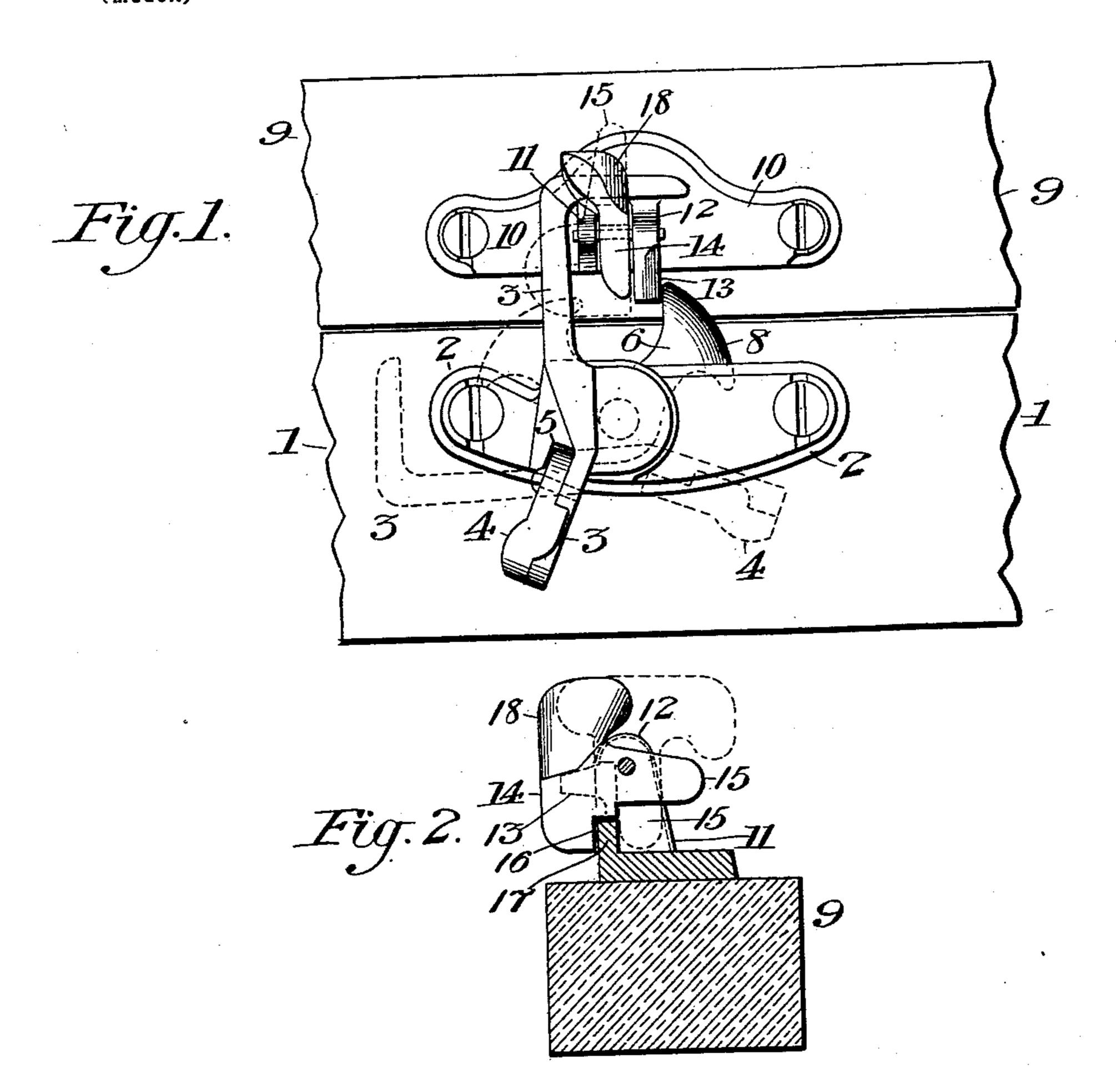
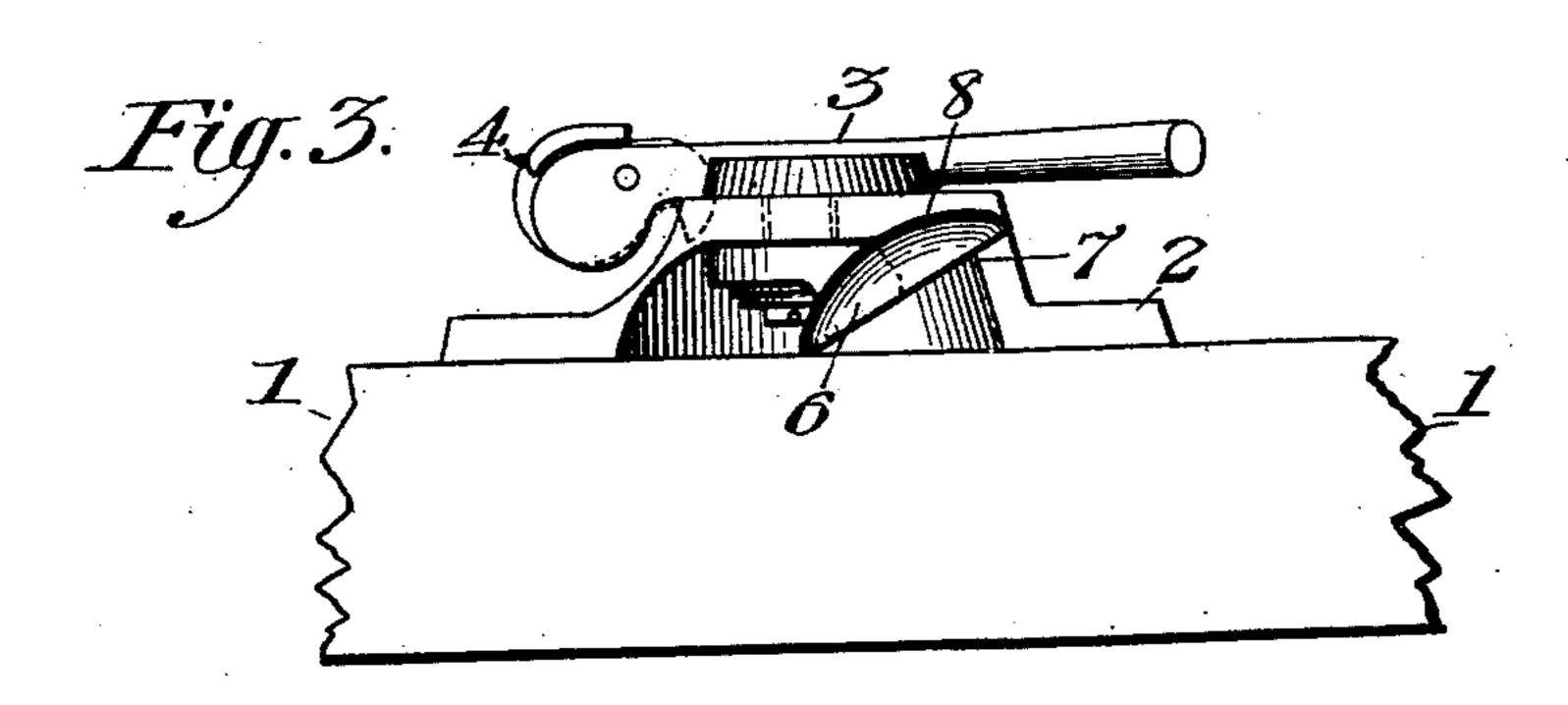
J. A. MCCANDLESS. AUTOMATIC SASH LOCK.

(Application filed Oct. 24, 1900.)

(Model.)





Witnesses: Samuel & Stadon Invertor. Janu A M. Candlin

UNITED STATES PATENT OFFICE.

JAMES A. MCCANDLESS, OF OMAHA, NEBRASKA.

AUTOMATIC SASH-LOCK.

SPECIFICATION forming part of Letters Patent No. 677,367, dated July 2, 1901.

Application filed October 24, 1900. Serial No. 34,176. (Model.)

To all whom it may concern:

Be it known that I, James A. McCandless, a citizen of the United States, residing at Omaha, in the county of Douglas and State of Nebraska, have invented certain new and useful Improvements in Automatic Sash-Locks; and I do 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, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in automatic sash-locks; and it consists in the novel combination and arrangement of parts, as will be hereinafter more fully described

and claimed.

of my complete invention as applied to the meeting-rails of the ordinary sashes, showing in dotted lines the parts in an unlocked position. Fig. 2 is a transverse section of the upper sash and parts carried thereby, and Fig. 3 is a rear view of the lower sash and the parts carried thereby.

The object of my invention is to construct a simple, practical, and durable automatic double-acting sash-lock, or more properly one that is automatically actuated or locked when the window or sashes thereof are moved in a closed position, the parts comprising the invention being so constructed as to operate enticular construction of the parts, as will be

hereinafter described in detail.

Referring to the drawings, 1 represents the meeting-rail of the lower sash, to which is secured a bearing 2, and movably secured to the latter is a hook-shaped lever 3, the short end of which is provided with a pivoted gravity-acting dog 4, which coöperates with a recess 5, formed in said bearing, whereby the parts are positively and automatically locked when in their normal position or that shown in Fig. 1, and forming a rigid part of the hook-shaped lever 3 and operated thereby is an extension 6, having a lower flat surface 7 and an upper curved surface 8, all of which forms a cam with which coöperates the remaining part of the lock for automatically

operating the same in a manner hereinafter described.

Secured to the upper sash or meeting-rail 9 55 thereof is a bearing 10, having uprights 11 and 12, the latter one having an extension 13, with which coöperates the lower flat surface 7 of the cam when the parts are brought together in closing the sashes for turning the hook- 60 shaped lever in a locked position, or more properly assisting in the complete closing of the said hook-shaped lever. Pivotally secured between the uprights 11 and 12 is a dog 14, which is actuated in one direction by its 65 own gravitation and in the opposite or locked position by the end of the hook-shaped lever 3 when brought in contact with the extension 15 of said dog, in which operation the latter is turned in the position as shown in 70 dotted lines, Fig. 2, and over the end of said hook-shaped lever. The dog 14 is provided with a shoulder 16, which coöperates with the stop 17, located between the uprights 11 and 12, for holding said dog in an operative posi- 75 tion, as shown in full lines in Fig. 2, when the meeting-rails of the sashes are separated or in unlocked position and before it is operated by the movement of the hook-shaped lever. The dog 14 is provided with a cam-surface 18, with 80 which cooperates the flat inclined surface 7 of the extension 6, forming a rigid part of the hook-shaped lever 3, whereby the latter is turned automatically in a locked position when the meeting-rails of the sashes are 85 brought together. After the hook-shaped lever is turned in the dotted position shown in Fig. 1 for unlocking the sashes the dog will automatically assume the position shown in full lines, Fig. 2, by its own gravitation, and in the 90 operation of closing the sashes the flat inclined surface of the extension 6 will be brought in contact with the cam-surface 18 of said dog, causing the hook-shaped lever 3 to be turned against the extension 15 of the dog, turning the 95 latter over the rear end of the hook-shaped lever, in which position the parts will be absolutely locked and the sashes prevented from being moved in either direction. It is further to be noted that when the hook-shaped lever roc is automatically moved in a locked position when the sashes are in a closed position the gravity-acting dog 4 will automatically cooperate with the recess 5 of the bearing 2, whereby the parts will be held absolutely against movement until said dog is elevated by hand from the inside of the room for releasing the

sashes from their locked position.

I do not limit myself to the exact construction of the parts as herein shown and described, as the same may be varied or somewhat changed without departing from the nature of my invention, the principal object beio ing to construct a sash-lock that will be automatically locked when the sashes are moved in a closed position, the parts comprising said lock being operated entirely by gravity and without the employment of springs.

Having fully described my invention, what I claim, and desire to secure by Letters Pat-

ent, is—

1. A sash-lock, comprising a bearing secured to the lower sash a lever pivotally secured to the said bearing, an extension forming a rigid part of said lever and having a lower inclined surface, a dog for securing the lever in a locked position, a bearing secured to the upper sash, a dog pivotally secured to the same and having an extension with which the lever coöperates, and a cam-surface formed on said dog with which the inclined surface of the extension of the lever coöperates for

operating the lever in a closed position, as and for the purpose described.

2. A sash-lock comprising a bearing adapted to be secured to the lower sash, a hookshaped lever pivotally secured to said bearing, an extension forming a rigid part of said lever and actuated thereby, an inclined flat 35 surface formed on said extension, a bearing adapted to be secured to the upper sash, uprights forming a part of said bearing one of which is provided with an extension, a dog pivotally secured to said uprights, a stop lo- 40 cated between the latter against which the dog rests, an extension forming a part of said dog with which the hook-shaped lever cooperates, a cam-surface formed on the dog and adapted to be brought in contact with 45 the inclined surface of the extension of the lever, and a suitable lock or catch carried by the latter and adapted to cooperate with a recess formed in the bearing carried by the lower sash, as and for the purpose described. 50

In testimony whereof I affix my signature

in presence of two witnesses.

JAMES A. McCANDLESS.

Witnesses:

F. W. MOTT, HENRY T. MOTT.