

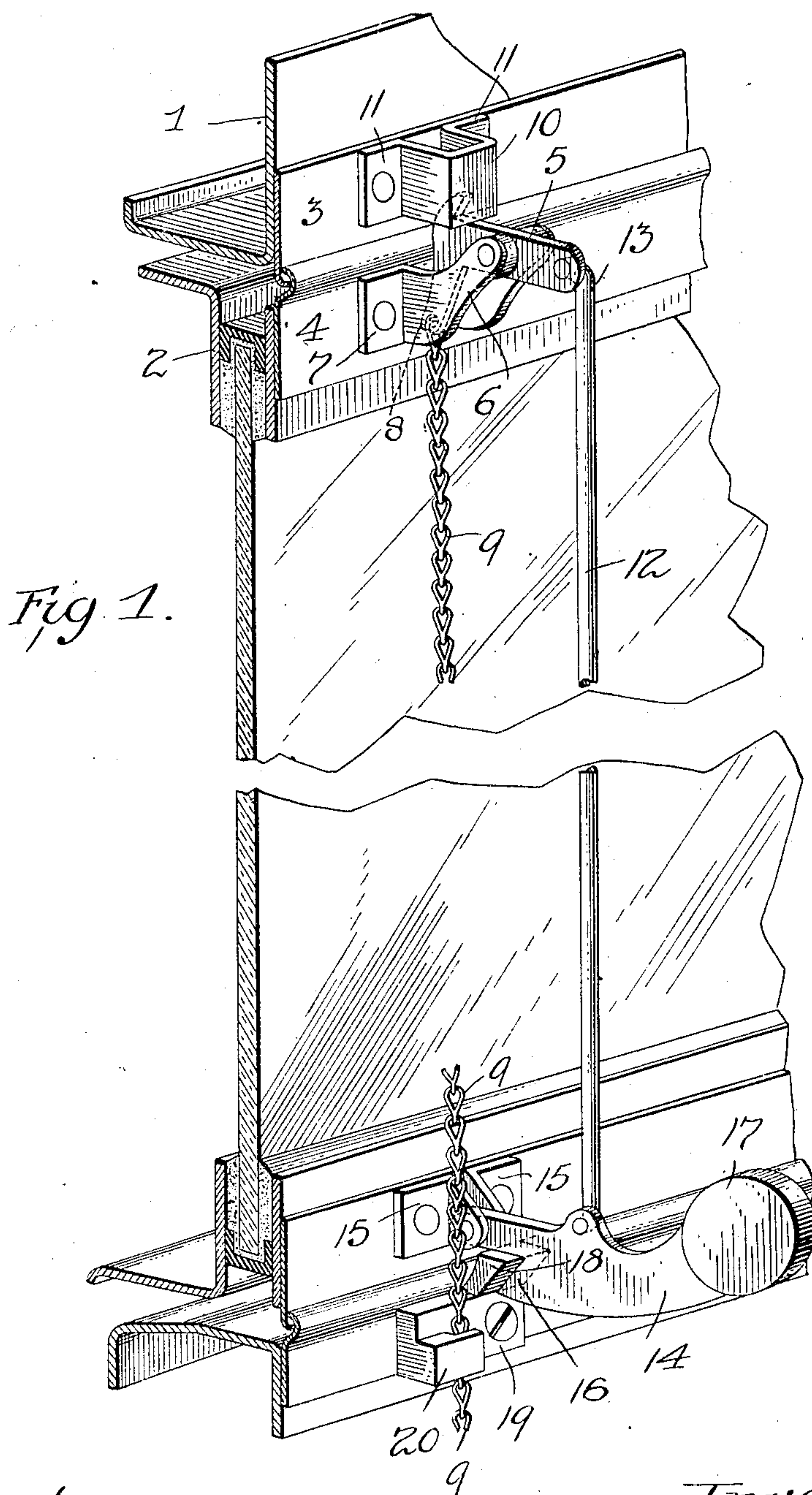
No. 871,206.

PATENTED NOV. 19, 1907.

C. M. CONKLIN & E. H. LUNKEN.
LOCKING MECHANISM FOR SWINGING WINDOWS.

APPLICATION FILED MAR. 6, 1907.

2 SHEETS—SHEET 1.



Attest:
R. E. Ourand
Edward N. Sartou

Inventors
Edmund H. Lunken
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by Spear, Middleton, Donaldson & Spear
Attys

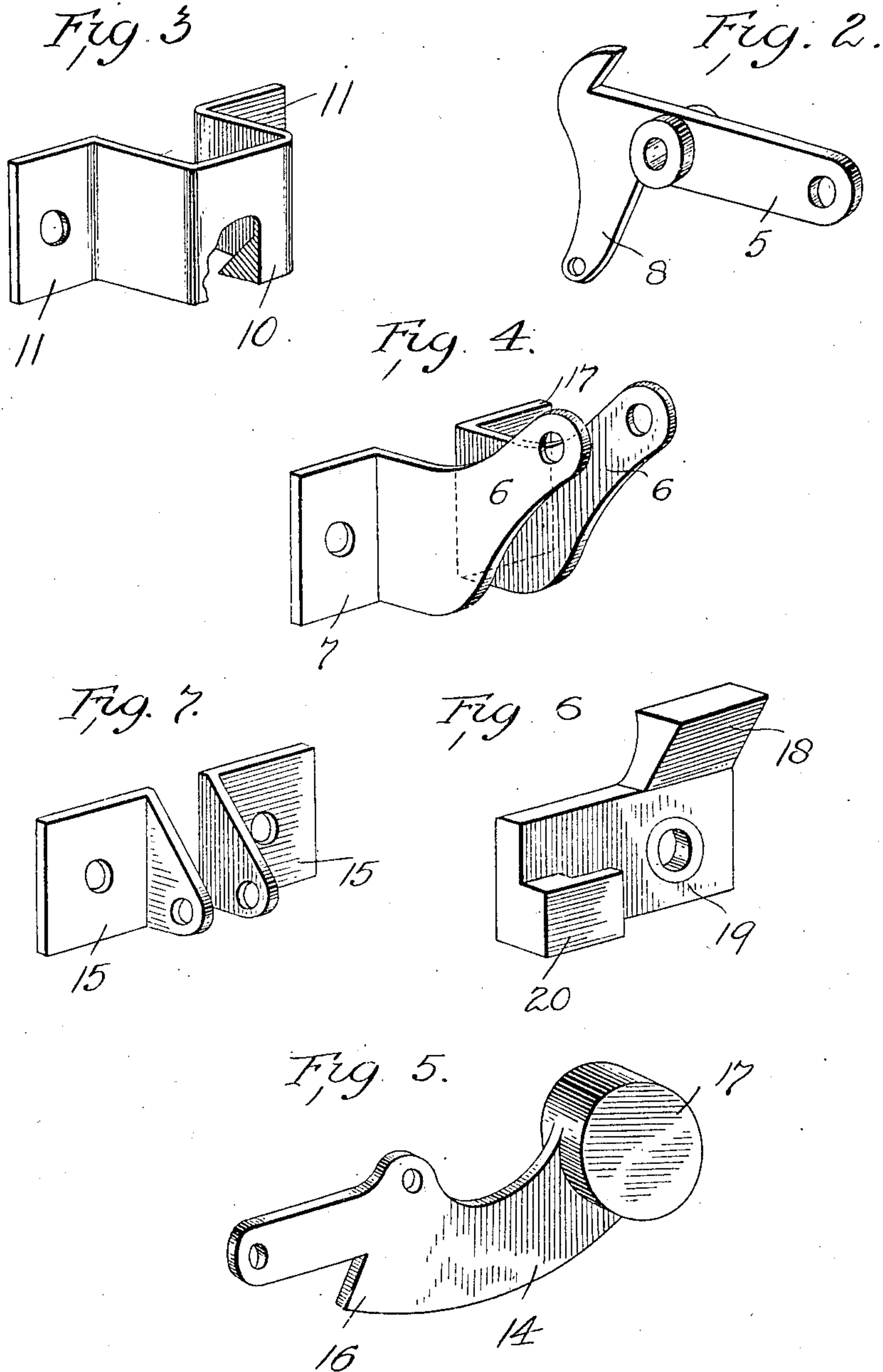
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UNITED STATES PATENT OFFICE.

CHARLES M. CONKLIN AND EDMUND H. LUNKEN, OF CINCINNATI, OHIO, ASSIGNORS TO THE LUNKEN STEEL WINDOW CO., A CORPORATION OF OHIO.

LOCKING MECHANISM FOR SWINGING WINDOWS.

No. 871,206.

Specification of Letters Patent.

Patented Nov. 19, 1907.

Application filed March 6, 1907. Serial No. 360,864.

To all whom it may concern:

Be it known that we, CHARLES M. CONKLIN and EDMUND H. LUNKEN, citizens of the United States, residing at Cincinnati, Ohio, have invented certain new and useful Improvements in Locking Mechanism for Swinging Windows, of which the following is a specification.

The invention consists in locking mechanism, which while designed particularly for fire-proof windows, is not limited in its application to windows of this character.

The class of windows for which the invention is designed is that known as swinging windows in which the glass carrying frame is pivotally mounted within a main frame.

In carrying out the invention a locking device is provided at both the upper and the lower edges of the swinging frame, and upon the inner side thereof or the side facing the interior of the building, and these locking devices are connected so as to operate in unison. Each locking device consists of a pivoted latch on the swinging frame adapted to engage a keeper or catch on the main frame.

The invention consists in the features, combination and arrangement of parts hereinafter described and particularly pointed out in the claims.

In the accompanying drawings,—Figure 1 is a perspective view of the invention as applied to a swinging window. Fig. 2 is a perspective view of the upper pivoted latch. Fig. 3 is a perspective view of the keeper for said latch. Fig. 4 is a perspective view of the brackets for pivotally holding the latch. Fig. 5 is a perspective view of the lower pivoted latch. Fig. 6 is a perspective view of the block carrying the catch for the lower locking device and also a guide for the operating connection or chain. Fig. 7 is a perspective view of the parts of the bracket for pivotally supporting the lower latch.

In these drawings, 1 indicates the main frame member of the window and 2 the swinging frame member. These members are combined with stop strips 3 and 4 on their interior faces, that is, the sides facing the interior of the room and which stop strips are arranged to overlap and exclude the wind, rain, or other elements. The upper locking device for the swinging frame consists of a latch lever 5 pivoted interme-

diate of its length between bracket arms 6, 55 each of said arms having a foot portion 7 riveted or otherwise secured to the swinging frame. The latch lever has an arm 8 extending downwardly therefrom and towards the outside of the pivot of the lever to which an operating cord or chain 9 is secured. This latch lever engages a keeper or catch device 10 secured by rivets or other suitable means to the main frame. This keeper is formed, preferably of sheet metal presenting a front or cross portion to be engaged by the latch lever and foot portions 11 to be secured to the main frame. To the inner end of the latch lever, a rod 12 is pivotally secured by simply having its end at 13 bent or turned laterally and passing through an opening in the said lever, the projecting end being headed in any suitable way to complete the connection. At the lower end this rod connects with the lower locking device which comprises a lever 14, pivoted at its outer end to the interior face of the swinging frame by means of the brackets or ears 15 secured to the said frame by rivets or otherwise. The latch tooth 16 on this lever is located intermediate of its length and the said lever is weighted at its inner end as at 17. The latch tooth engages with a catch piece 18 formed on a block 19, which is secured to the main frame, the said catch piece presenting an inclined surface to be engaged by the latch tooth. This block 19 may be of cast metal, and it is also provided with a lug or projection 20 for guiding the chain or operating connection 9. The rod 12 is bent at its lower end to pass through an opening in the lower latch lever wherein it is held by heading the end of the said rod in any suitable manner.

For operating the locking mechanism, the chain or operating connection 9 is drawn upon, swinging downwardly the upper latch lever so that its latch tooth will disengage the keeper or catch 10 and the inner end of the said latch lever or that directed towards the interior of the room will be raised by this action and drawing upon the rod 12, the lower latch lever will be swung upwardly on its pivot to withdraw this latch tooth 16 from the catch piece 18, whereupon the swinging frame may be moved to the desired position.

It will be seen from the above that we em-

ploy a pivoted locking device for both the upper and lower portions of the swinging frame and that these operate in unison through a direct connection between them
5 so that it is only necessary to operate the upper latch device, whereupon the lower latch device will also be operated.

It will be understood that when the swinging sash is swung to close the same both
10 latches will automatically engage with their catches.

We claim as our invention:—

1. In combination in locking mechanism for swinging windows, an upper latch piv-
15 oted intermediate of its length, having a latch tooth at its outer end, and having an inwardly extending end for connection with a lower latch device, a lower latch pivotally connected at its outer end with the swinging
20 frame, a rod extending from the inner end of the upper latch to an intermediate portion of the lower latch, and an operating connection for the upper latch, substantially as de-
scribed.

25 2. In combination in locking mechanism

for swinging windows, an upper latch piv-
oted intermediate of its length having a latch
tooth at its outer end, and an extended inner
end, a lower pivoted latch, and a connection
from the inwardly extending end of the up- 30
per latch to the lower latch, substantially as
described.

3. In combination in locking mechanism
for swinging windows, a latch for the lower
part of the window pivotally mounted, a piv- 35
oted latch for the upper part of the window,
a catch piece for the lower latch, an operating
connection for the upper latch, and a guide
for the said operating connection, said catch
piece and guide being carried by a block se- 40
cured to the main frame, substantially as de-
scribed.

In testimony whereof we affix our signa-
tures in presence of two witnesses.

CHARLES M. CONKLIN.
EDMUND H. LUNKEN.

Witnesses:

FRED HOEHN,
BEN B. DALE.