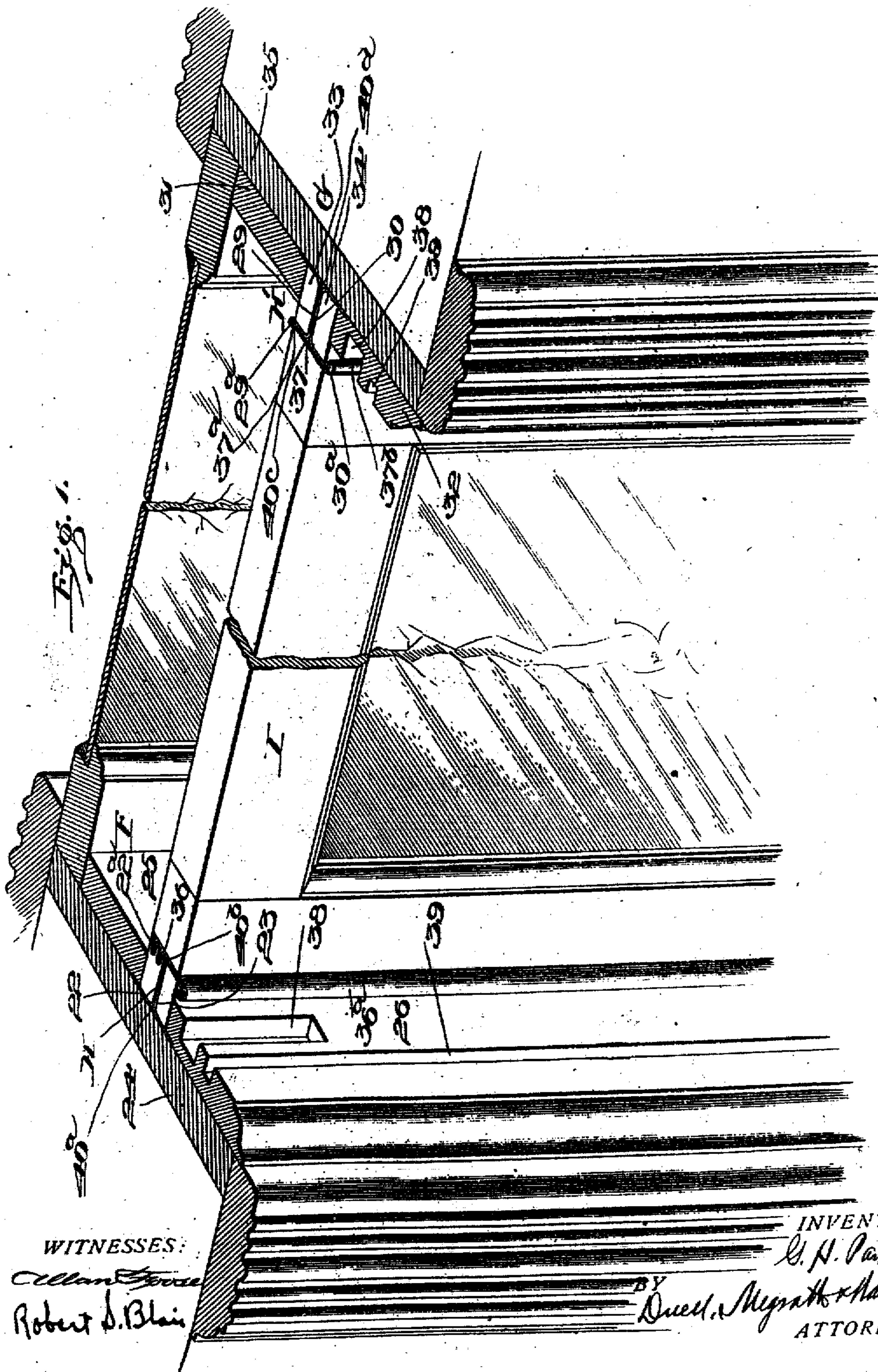


No. 814,316.

PATENTED MAR. 6, 1906.

G. H. PARKER.  
SWINGING WINDOW.  
APPLICATION FILED MAY 13, 1904

2 SHEETS—SHEET 1.



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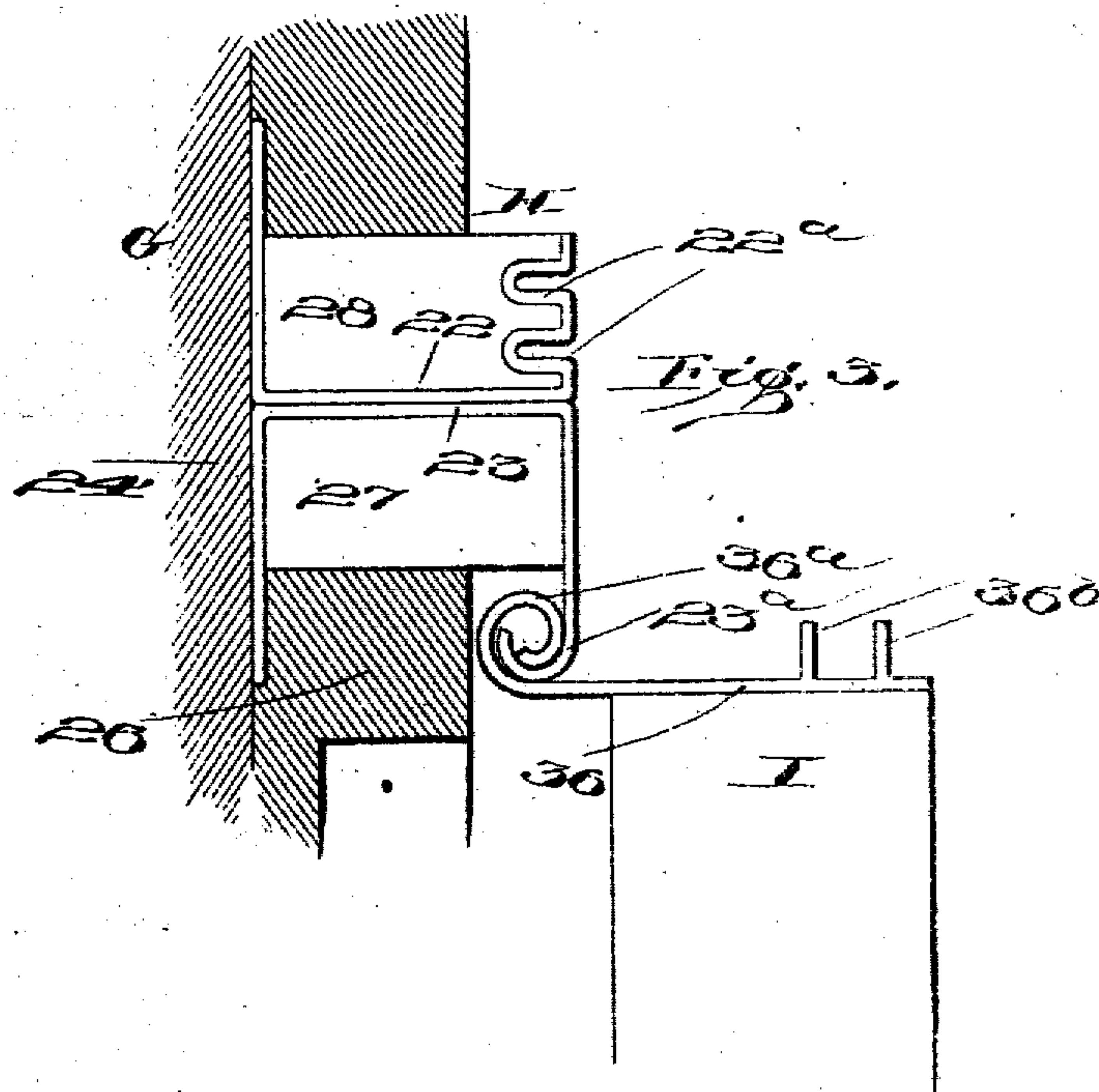
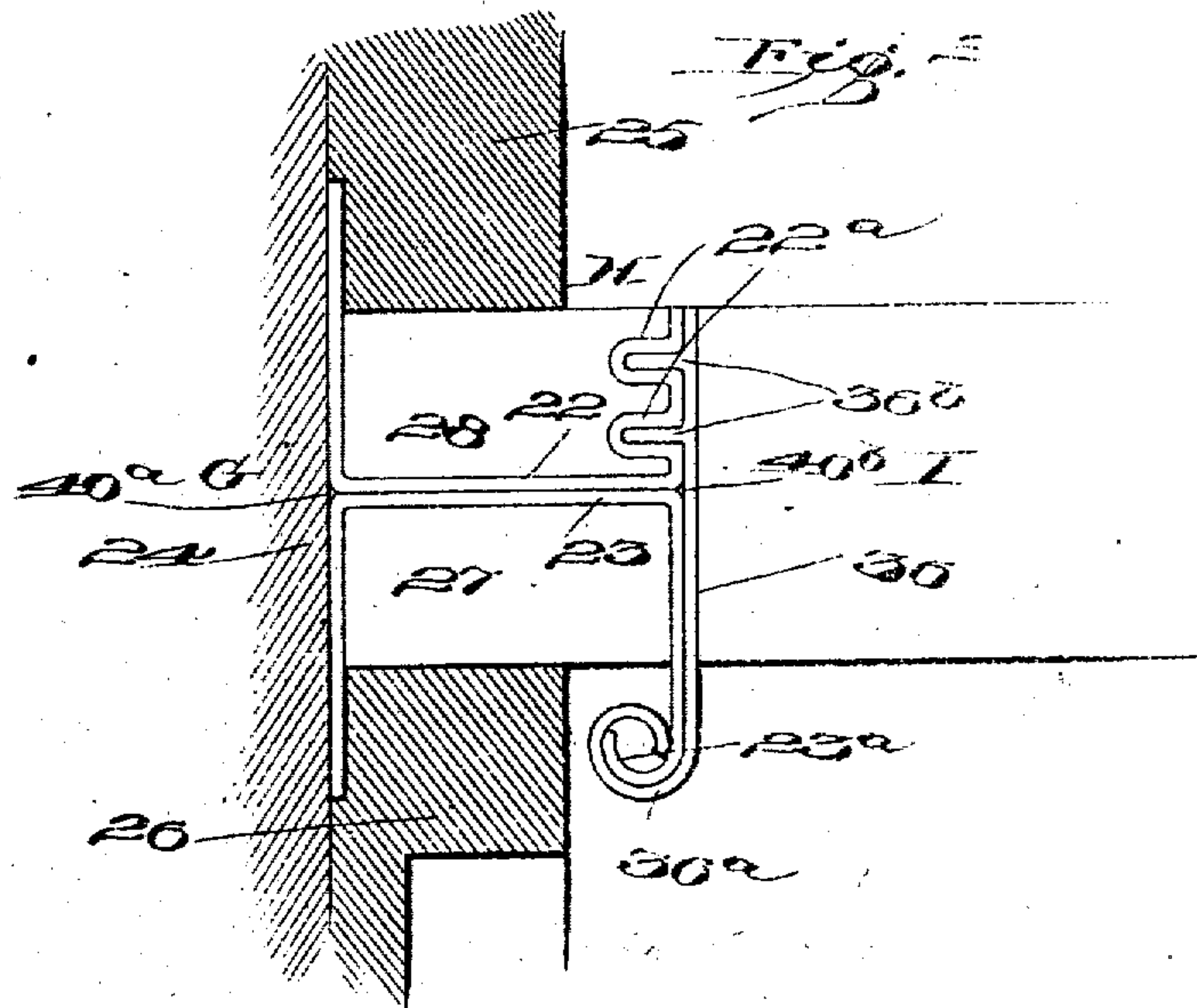
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APPLICATION FILED MAY 13, 1964.

2 SHEETS-SHEET 2.



**WITNESSES:**

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# UNITED STATES PATENT OFFICE.

GEORGE HENRY PARKER, OF NEW YORK, N. Y., ASSIGNOR TO CHARLES HEMINGWAY PLATT, OF NEW HAVEN, CONNECTICUT.

## SWINGING WINDOW.

No. 814,316.

Specification of Letters Patent.

Patented March 6, 1906.

Application filed May 13, 1904. Serial No. 207,776.

*To all whom it may concern:*

Be it known that I, GEORGE HENRY PARKER, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Swinging Windows, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to the construction of windows, and particularly those of the swinging type.

Certain broad features shown and described in this application are shown, described, and claimed in a companion application, Serial No. 207,774, filed of even date herewith, and accordingly are not claimed herein.

One of the objects of this invention is to provide a window construction wherein a sash may be conveniently and securely swung about one of its edges and yet make a tight joint with the contacting members when in normal position.

Other objects will be in part obvious and in part pointed out hereinafter.

The invention accordingly consists in the features of construction, combinations of elements and arrangement of parts, which will be herein illustrated and the scope of the application of which will be indicated in the following claims.

In the accompanying drawings, which illustrate one of various possible embodiments of my invention, Figure 1 is a perspective view of a double-sash window, the outer sash being slightly raised. Fig. 2 is a plan of a hinge and correlated parts embodying my invention with the sash in normal position. Fig. 3 is a similar view showing the sash swung out of normal position.

Similar reference characters refer to similar parts throughout the several views.

It may be stated that in many previous types of double-window construction common in cars and other vehicles there has been found difficulty in washing the surfaces of the glass. Also great difficulty has been found in providing weather-strips which will make the joints of the windows sufficiently tight to prevent dust, cinders, &c., working through the same. This embodiment of my invention proposes to remedy these and other de-

fects by means of the construction herein set forth.

Referring now to Fig. 1, F represents another sash mounted in a frame G, within which are also mounted what may be termed "auxiliary" sash members H and H'. Sash member H comprises two channel-shaped weather-strips 22 and 23, preferably stamped out of sheet metal and placed with their connecting-webs in contact, as shown in the drawings. Two of the adjacent lateral flanges of these members rest against the sash-stile 24 and extend inwardly and outwardly, engaging recesses rabbeted in parting-strip 25 and front stop 26, respectively. The two remaining lateral flanges of these members extend in a plane substantially parallel to that of those above described, and that of strip 22 is bent substantially as shown, so as to form corrugations 22<sup>a</sup>, extending toward sash-stile 24. The remaining flange of the strip 23 extends inwardly and terminates in a curved or rolled portion 23<sup>a</sup>. The space between the lateral flanges of strips 22 and 23 is occupied by filler-blocks 27 and 28, conforming to the outline of the strips and engaging, respectively, the rear surface of stop 26 and front surface of parting-strip 25. The auxiliary sash member H' comprises channel-shaped strips 29 and 30, similar to strips 22 and 23 and engaging parting-strip 31 and front stop 32 in precisely the same manner. Filler-blocks 33 and 34, moreover, are substantially identical with and perform the same function as filler-blocks 28 and 27. The remaining flanges of strips 29 and 30 extend, respectively, outward and inward in a plane parallel to that of stile 35 and that of strip 29 projects slightly beyond filler-block 33, as shown at 29<sup>a</sup>, and the flange of strip 30 projects inwardly beyond the inner surface of filler-block 34, as shown at 30<sup>a</sup>.

Positioned between auxiliary sash members H and H' and adapted to be locked in engagement therewith is a sash I. This sash is provided with a strip or shield 36, having a rolled edge 36<sup>a</sup>, adapted to embrace the rolled edge 23<sup>a</sup> of strip 23. These two coacting parts form a hinged connection between sash I and auxiliary sash member H, which is simple of construction and free of movement and yet when in closed condition



forms a tight joint between the same. A pair of parallel ribs 36<sup>b</sup> projects from and is preferably integral with shield 36 and is adapted to swing into a close engagement with the recesses formed by the corrugations 22<sup>a</sup> of strip 22. Upon the edge of sash I adjacent auxiliary sash member H' is a strip 37, projecting outwardly in a straight edge extending slightly beyond the same, as shown at 37<sup>a</sup>, and the inner edge terminates in a curved lip 37<sup>b</sup>, these edges, respectively, being engaged by the curved portion 30<sup>a</sup> of strip 30 and engaging the straight projecting edge 29<sup>a</sup> of strip 29. The sash may be locked in this engaging position by any desired locking means, (not shown,) as it forms no part of the present invention. It is also to be understood that the construction is to be used in conjunction with a small upper sash common in windows of this type, but which is not shown, as it also forms no part of the invention. The relative position of this upper sash and a curtain are indicated by recesses 38 and 39, rabbeted in front stops 26 and 32.

The manner of using the above embodiment of my invention is as follows: With the parts in normal position, as shown in Fig. 1, it will be noted that the passage of cinders, dirt, or even dust about the edges is rendered practically impossible with properly-fitting parts. Moreover, any foreign matter working through the outer portion of these joints would enter the small openings or "wells" 40<sup>a</sup>, 40<sup>b</sup>, 40<sup>c</sup>, and 40<sup>d</sup> between strips 22, 23, 29, and 30 and the members with which they contact and be led to the sill of the frame G. When it is desired to swing the sash I, it is freed from member H' and swung about its previously-described hinged connection with member H, the parts 36<sup>b</sup> and 23<sup>a</sup> coiling one within another, as shown in Fig. 3, and the sash being supported upon the sill of the window. In this position both surfaces of sash I and the inner surface of sash F are readily accessible for washing or other purposes, and the sash I is securely held in any desired position. When it is desired to close the sash, a reverse series of operations are performed and the same is securely locked into its normal position in which it may be reciprocated together with auxiliary sash members H and H' in frame G as an ordinary window-sash.

It will thus be seen that I have provided a simple and inexpensive construction, the several strips and shields being easily formed out of sheet metal. It will also be apparent that windows now in use may be fitted with parts so as to embody my invention without the necessity for the use of skilled labor. Moreover, as above indicated, the construction is practically proof against the entry of dust, cinders, and air, and the several parts when properly formed will obviate rattling of the sash.

As many changes could be made in the above construction and many apparently widely different embodiments of my invention could be made without departing from the scope thereof, I intend that all matter contained in the above description and shown in the accompanying drawings shall be interpreted as illustrative and not in a limiting sense. It will also be understood that the invention here set forth could be utilized in various relations as a combined weather-strip and hinge for doors, hatches, and other similar devices, and where in the claims I use the terms such as "frame," "sash," and the like such terms are used broadly as referring to the permanent and movable members of this general class of devices. I desire it also to be understood that the language used in the following claims is intended to cover all of the generic and specific features of the invention herein described and all statements of the scope of the invention which, as a matter of language, might be said to fall therebetween.

Having described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In combination, a sash, an auxiliary sash member and weather-strips lying between the same, said weather-strips being shaped so as to form a hinge between said sash and said auxiliary sash member.
2. In combination, a sash, an auxiliary sash member, and weather-strips lying between the same, said weather-strips having a hinged connection.
3. In combination, a sash, an auxiliary sash member, and weather-strips lying between the same, said weather-strips having a hinged connection integral therewith.
4. In combination, a sash, an auxiliary sash member, and weather-strips upon each of the same, one of the edges of each of said strips having a hinged connection one with another and the remaining portions of said strips resting in contact between said sash and said sash member.
5. In combination, a sash, an auxiliary sash member, and weather-strips upon the same, the edges of said weather-strips being shaped so as to form a hinge between said sash and said auxiliary sash member and the remaining portions of said strips resting in contact between said sash and said sash member.
6. In combination, a sash, an auxiliary sash member, and weather-strips upon each of the same, the edge of one of said weather-strips being curved so as to embrace the corresponding edge of the other of said weather-strips and form a hinged connection therewith and the remaining portions of said strips resting in contact between said sash and said sash member.
7. In combination, a sash, an auxiliary



sash member, and weather-strips upon each of the same, the edge of one of said weather-strips being curved so as to embrace the corresponding edge of the other weather-strip and form a hinged connection therewith, said corresponding edge being curved in a similar manner and said weather-strips normally resting in contact throughout substantially the entire thickness of said sash.

8. In combination, a plurality of relatively slidable members, one of said members comprising a sash member and the other of said members comprising an auxiliary member, and weather-stripping upon each of said members, the weather-stripping upon one of said members being adapted normally to lie in contact with the stripping upon the other of said members, the projecting edge of the stripping upon one of said members being curved so as to embrace the corresponding edge of the stripping upon the other of said members to form a hinged connection therebetween, the weather-stripping upon one of said members being provided with a projection upon its contacting surface adapted to enter a recess in the contacting surface of the weather-stripping of the other of said members.

9. In combination, a sash, a frame, auxiliary sash members adapted to reciprocate in said frame, said sash and one of said auxiliary sash members being adapted to swing with relation one to another in a plane transverse of said members, and weather-stripping upon said sash and upon one of said auxiliary sash members, the stripping upon said sash being adapted normally to lie in contact with the stripping upon said auxiliary sash member, the projecting edges of the stripping upon said sash and said auxiliary sash member being curved so that one of the curved portions embraces the curved portion upon the other to form a hinged connection between said sash and said auxiliary sash member.

10. In combination, a plurality of slidable members, one of said members comprising a sash and an auxiliary sash member, weather-stripping upon each of the same, said weather-stripping being so formed as to adapt said sash to be rotated about said auxiliary sash member, and projections upon said sash adapted to fit into corresponding depressions in said auxiliary sash member.

11. In combination, a sash, a frame, auxiliary sash members adapted to reciprocate in said frame, said sash and one of said members being adapted to swing with relation one to another in a plane transverse of said members and the other of said members being adapted to be locked to said sash, and projections upon said sash adapted to fit into corresponding depressions in said auxiliary sash member.

12. In combination, a sash, an auxiliary sash member and weather-stripping upon

each of the same, said weather-stripping being so formed as to adapt said sash to be rotated about said auxiliary sash, and the stripping upon one of said members being provided with projections adapted to fit into corresponding recesses in that upon the other of said members.

13. In combination, a sash member, an auxiliary sash member, and weather-stripping upon each of the same, said weather-stripping being so formed as to adapt said sash to be rotated about said auxiliary sash, and the stripping upon one of said members being provided with projections adapted to fit into corresponding recesses in that upon the other of said members and being shaped so as to form a hinged connection with the same.

14. In combination, a sash, an auxiliary sash, and weather-stripping upon each of the same, the edges of said weather-stripping being so curved as to interlock and form a hinged connection between said members, and the stripping upon one of said members being provided with projections adapted to fit into corresponding recesses in that upon the other of said members.

15. In combination, a plurality of slidable members, one of said members comprising a sash and an auxiliary sash member, and weather-stripping upon each of the same, said weather-stripping being so formed as to adapt said sash to be rotated about said auxiliary sash member, and the stripping upon one of said members being shaped so as to form a hinged connection with that upon another thereof and being provided with projections adapted to fit into corresponding recesses in the same.

16. In combination, a sash, a frame, auxiliary sash members adapted to reciprocate in said frame, said sash and one of said members being adapted to swing with relation one to another in a plane transverse of said members, and weather-stripping upon said sash and one of said members, the edges of said weather-stripping being so curved as to interlock and form a hinged connection between the same, and the stripping upon one of said members being provided with projections adapted to fit into corresponding recesses in that upon another of said members.

17. In combination, two channel-shaped members lying with their connecting-webs substantially parallel, a sash, and a weather-strip upon said sash, one edge of said weather-strip being curved so as to form a hinged connection with one of the flanges of one of said channel-shaped members.

18. In combination, two channel-shaped members lying with their connecting-webs substantially parallel and two adjacent flanges thereof extending in the same plane, a sash, and a strip upon said sash, one of the edges of said strip being curved so as to form a



hinged connection with the remaining flange of one of said channel-shaped members.

19. In combination, two channel-shaped members lying with their connecting-webs substantially parallel and two adjacent flanges thereof extending in the same plane, a sash, and a strip upon said sash, one of the edges of said strip being curved so as to form a hinged connection with the remaining flange of one of said channel-shaped members, said strip being provided with a projection adapted to be embraced by the remaining flange of the remaining channel-shaped member.

20. In combination, a frame, two channel-shaped members lying with their connecting-webs substantially parallel and having two adjacent flanges resting against said frame, a sash, and a weather-strip upon said sash, one edge of said weather-strip forming a hinged connection with the remaining flange of one of said channel-shaped members, said strip being provided with a projection embraced by the remaining flange of the remaining channel-shaped member.

21. In combination, a frame, two channel-shaped members lying with their connecting-webs substantially parallel and having two adjacent flanges resting against said frame, a sash, a weather-strip upon said sash, one edge of said weather-strip forming a hinged connection with the remaining flange of one of said channel-shaped members, said strip being provided with a projection embraced by the remaining flange of the remaining channel-shaped member, filler-blocks within said channel-shaped members, and guiding members upon said frame resting in contact with said filler-blocks.

22. In combination, a sash, a member adjacent thereto, and weather-stripping secured to said sash and said member, the weather-stripping upon said sash being adapt-

ed normally to rest in contact with that upon said sash member between said sash and member, and the end of said weather-stripping upon said sash being rolled about that upon said member.

23. In combination, a frame, two channel-shaped members lying with their connecting-webs substantially parallel and having two adjacent flanges resting against said frame, a sash and weather-stripping upon said sash, the inner edge of said weather-stripping being rolled about the remaining flange of one of said channel-shaped members and forming a hinged connection therewith, said weather-stripping being provided with a projection fitting a recess in the remaining flange of the remaining channel-shaped member, filler-blocks within said channel-shaped members, and guiding members upon said frame resting in contact with said filler-blocks.

24. In combination, a frame, two channel-shaped members lying with their connecting-webs substantially parallel and having two adjacent flanges resting against said frame, a sash and weather-stripping upon said sash, the inner edge of said weather-stripping being rolled about the remaining flange of one of said channel-shaped members and forming a hinged connection therewith, said weather-stripping being provided with a projection fitting a recess in the remaining flange of the remaining channel-shaped member, filler-blocks within said channel-shaped members, and guiding members upon said frame resting in contact with said filler-blocks and holding said first-mentioned adjacent flanges of said channel-shaped members against said frame.

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

GEORGE HENRY PARKER.

Witnesses:

H. M. SEAMANS,  
J. B. KNOX.