No. 694,432. Patented Mar. 4, 1902.

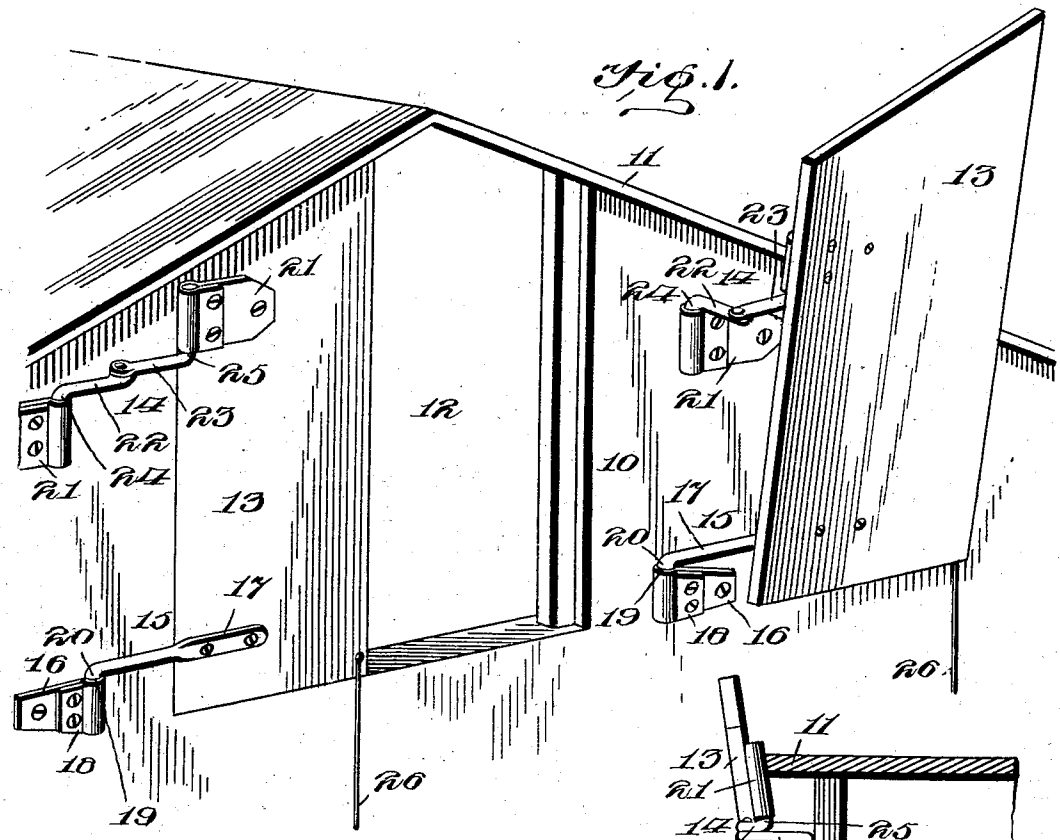
W. L. SELLECK.

HINGE FOR SUPPORTING AND OPERATING DOORS.

(Application filed Nov. 27, 1900.)

(No Model.)

Fig. 1.



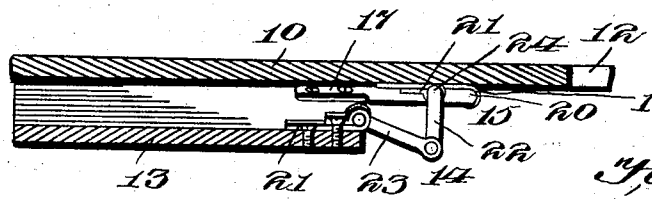


Fig. 2.

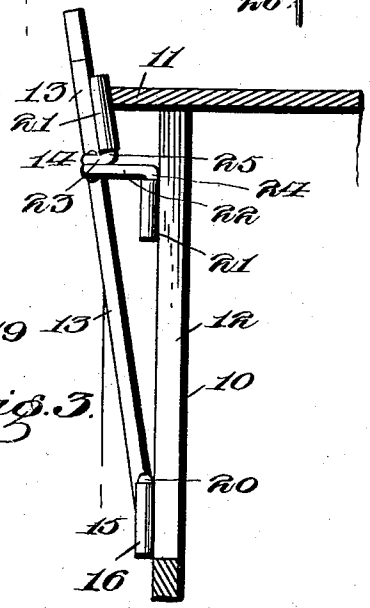


Fig. 3.

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UNITED STATES PATENT OFFICE.

WALLACE L. SELLECK, OF PLATTEVILLE, WISCONSIN.

HINGE FOR SUPPORTING AND OPERATING DOORS.

SPECIFICATION forming part of Letters Patent No. 694,432, dated March 4, 1902.

Application filed November 27, 1900. Serial No. 37,918. (No model.)

To all whom it may concern:

Be it known that I, WALLACE L. SELLECK, a citizen of the United States, residing at Platteville, in the county of Grant and State of Wisconsin, have invented a new and useful Hinge for Supporting and Operating Doors, of which the following is a specification.

The present invention relates to novel means for hanging doors, and more particularly that class of swinging doors which are placed in the gable end of a barn or other building directly beneath the barge-course.

The object of the invention is to provide means of this character whereby when the door is opened it is swung clear of the barge-course and entirely out of the plane of the edge of the doorway, and preferably so that its lower edge will rest against the outer face of the barn and the upper portion against the projecting edge of the roof.

A further object is to construct the hanging means so that when the door is closed said means will be disposed beneath the barge-course and against the face of the barn, and thus protect it to some extent from the elements.

To the accomplishment of these various objects the invention described in the following specification is provided, and this construction is also illustrated in the accompanying drawings, wherein—

Figure 1 is a perspective view of the upper gable portion of a building, showing a doorway arranged just beneath the roof and having double doors hung by the improved means, one of said doors being shown closed, the other open. Fig. 2 is a horizontal section through the upper portion of the building and one of the doors, which is in open position. Fig. 3 is a vertical sectional view of the same.

Similar numerals of reference designate corresponding parts in the several figures of the drawings.

In the drawings, 10 designates the front wall of the gable portion of a building; 11, the barge-course of the roof; 12, the doorway arranged in said gable and directly beneath the barge-course, and 13 the doors for closing the doorway. Each of the doors 13 is pivotally hung upon the wall of the barn by the improved means, which comprises a pair of hinges (designated, respectively, 14 and 15.) For the purpose of distinction the upper hinge 14 will hereinafter be designated as the "guide-hinge" and the lower one, 15, the "supporting-hinge."

The supporting-hinge 15 comprises two leaves 16 and 17, pivotally connected and secured, respectively, to the face of the building and the lower portion of the door. The leaf 16 is preferably made of a single piece of sheet metal, having a portion 18 bent back upon itself to form an eye 19. Suitable fasteners pass through the leaf to fasten the same to the wall of the building, and certain of these fastening devices pass through both the backwardly-turned portion and the body of the leaf, thus forming an exceedingly strong eye. The other coacting leaf 17 of the lower hinge comprises a shank having one end flattened and secured to the door and provided at its other end with a depending pintle 20, that engages the eye 19 of the leaf 16.

The upper or guide hinge 14 comprises a pair of leaves 21, similar in construction to the leaf 16 of the supporting-hinge and secured, respectively, to the upper portion of the door and the wall of the building. These leaves are connected by a pair of links 22 23, which are pivotally joined together at one end and are provided at their opposite ends with reversely-disposed pintles 24 and 25, that engage in the eyes of the leaves 21. By this construction it will be observed that the upper hinge is provided with three independent pivots. In applying the hinges the leaves are secured to the wall of the building and arranged at some distance from the edge of the doorway, but with the lower one closer to said edge than the upper one. The doors may be operated from the ground by means of cords 26 or similar devices.

The operation of the hinges is as follows: When the door is swung outwardly, it will necessarily be carried away from the plane of the edge of the doorway and from under the projecting end or barge-course of the roof. At the same time when it is in the widest-open position it will assume the position shown in the drawings—that is, tilted outwardly, with its lower edge resting against the face of the building and its upper portion resting against the outer edge of the barge-

course. This necessarily follows from the fact that the main pivots of the two hinges are out of alinement, and as there is but one pivot to the lower hinge the lower portion of the door must necessarily follow the arc of a circle. If there was but a single pivot, therefore, to the upper hinge, the door could not be operated. However, by making the connecting-link of the upper hinge of two pivotally-connected sections 22 and 23 these sections will assume an angle to each other, so that the upper portion of the door will swing in substantially the same circle as that described by the lower portion, and when in wide-open position said upper portion will be supported against the edge of the barge-course and the lower edge against the face of the building. The slight necessary tilting movement of the hinges to permit of the outward tilt of the door may be provided for by having the joints loose enough to permit of slight play or by any means desired. It will therefore be seen that doors mounted in this improved manner when in open position will be at some distance from the edge of the doorway, which is free from projecting hinges that interfere with the passage of hay and similar material. Furthermore, the doors may be fitted tightly in the doorway, and when in closed position the hinges lie flat against the outer wall and are thereby protected by the overhanging roof.

From the foregoing it is thought that the construction, operation, and many advantages of the herein-described invention will be readily apparent to those skilled in the art without further description, and it will be understood that various changes in the form, proportion, and minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having now described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

In door-hanging means of the class described, the combination with the door, of a hinge composed of a pair of pivotally and detachably connected leaves, said leaves being secured respectively to the lower portion of the door and the wall adjacent thereto, and another hinge secured to the upper portion of the door and the wall adjacent thereto, said latter hinge comprising a pair of leaves, one being secured to the door and the other to the wall, and a connecting-arm comprising a pair of links pivotally connected at one end and provided with offstanding pintles at their opposite ends, the pintle of one arm projecting upwardly and detachably engaging in the eye of one leaf and the pintle of the other arm projecting downwardly and detachably engaging in the eye of the other leaf.

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

WALLACE L. SELLECK.

Witnesses:
URBAN STEIL,
GEORGE EDWARDS.