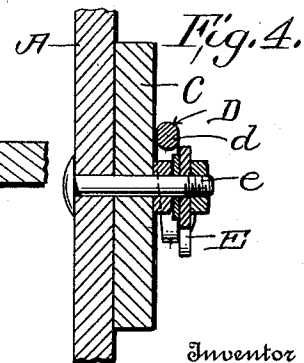
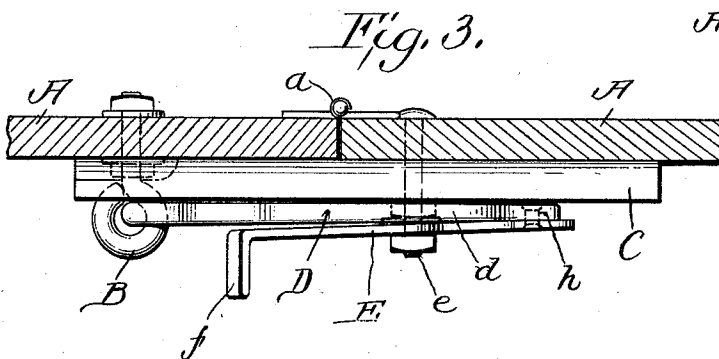
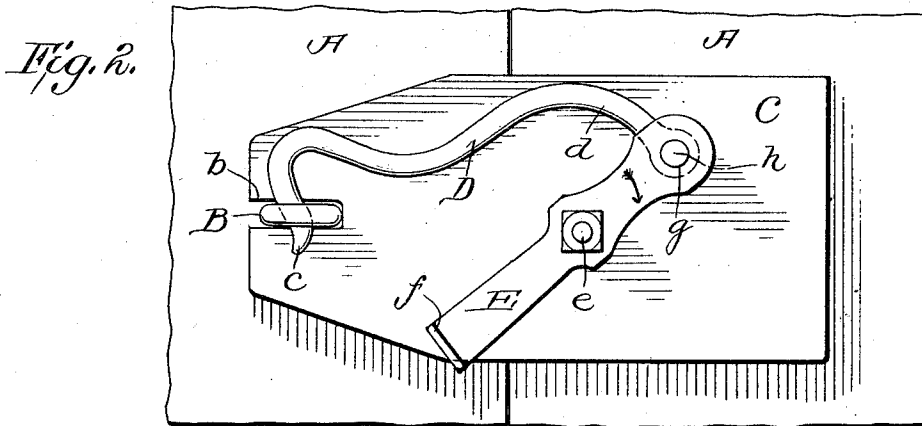
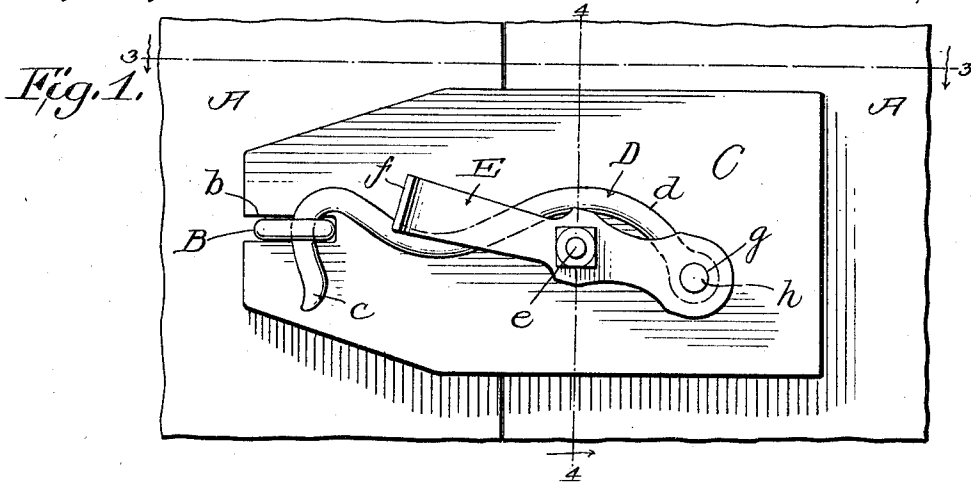


O. T. BELSVIG.
SWINGING LATCH.
APPLICATION FILED MAY 27, 1910.

1,006,347.

Patented Oct. 17, 1911.



Witnesses

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UNITED STATES PATENT OFFICE.

OLE T. BELSVIG, OF MILAN, MINNESOTA.

SWINGING LATCH.

1,006,347.

Specification of Letters Patent.

Patented Oct. 17, 1911.

Application filed May 27, 1910. Serial No. 563,720.

To all whom it may concern:

Be it known that I, OLE T. BELSVIG, citizen of the United States, residing at Milan, in the county of Chippewa and State of Minnesota, have invented new and useful Improvements in Swinging Latches, of which the following is a specification.

My invention pertains to swinging latches; and it consists in the peculiar and advantageous swinging latch, hereinafter described and claimed, adapted to be used to advantage as a fastener for wagon end-gates, and also adapted for various other applications.

In the drawings accompanying and forming part of this specification: Figure 1 is an elevation illustrating my novel latch as properly arranged on a portion of an end-gate, and also illustrating the latch as closed to hold the hook on the swinging member in the keeper. Fig. 2 is a similar view showing the latch open to permit of the said hook being readily placed in or removed from the keeper. Fig. 3 is a horizontal section taken in the plane indicated by the line 3—3 of Fig. 1, looking downward. Fig. 4 is a vertical section taken in the plane indicated by the line 4—4 of Fig. 1.

Similar letters designate corresponding parts in all the views of the drawings, referring to which—

A A are end-gate sections hinged together in the usual manner, as indicated by *a*.

B is an apertured keeper fixed to one of the sections A and extending rearward therefrom. C is a strip fixed to the other section A and extending across the joint between the sections and having its free end bifurcated, as indicated by *b*, to receive the keeper B when the sections A A are in alinement.

D is the swinging member of the latch, and E is the lever member thereof. The swinging member D is provided at its free end with a hook *c*, and its rear portion *d* is curved upwardly and its forward portion downwardly as shown for a purpose presently set forth. The lever member E is fulcrumed at an intermediate point of its length and is suitably secured on a stud *e* extending rearward from the strip C, and is provided at one end with a lateral, outwardly-directed finger-piece *f*, and near its opposite end is provided with a transverse aperture *g* which loosely receives a lateral projection *h* at the rear end of the swinging

member D. The said lateral projection *h* is of circular form in cross-section and has its rear end upset or enlarged to retain the lever member E thereon, and while I prefer to employ the said lateral projection to pivotally connect the lever member to the swinging hook-bearing member, I do not desire to be understood as confining myself to the same, inasmuch as the two members may be pivotally connected together near their rear ends in any suitable manner without involving departure from the scope of my invention as claimed.

In the practical use of my novel latch, it will be readily understood that when the lever member E is swung into the position shown in Fig. 2, the member D will be rendered loose, and consequently its hook *c* may be readily withdrawn from the keeper B, and may as readily be replaced in said keeper. When, however, upward pressure is exerted against the forward arm of the lever E and said lever is swung in the direction indicated by arrow, the rear portion of the swinging member D will be drawn downward and rearward until the under side of the curved rear portion *d* of said member D brings up against the stud *e* or an enlargement thereof, when both swinging member D and lever member E will be securely held in position and the hook of the swinging member will be drawn tight against the keeper, and there will be no liability of either the swinging member or the lever member becoming casually loose. When, however, considerable downward pressure or pull is exerted on the forward arm of the lever member E and said member is rocked sufficient to carry the pivotal connection between the members to a point above a line extending through the keeper and the fulcrum of the lever member, both the lever member and the swinging member will be rendered loose, and the hook on the said swinging member may then be readily withdrawn from engagement with the keeper.

By reason of the rear portion *d* of the member D being curved upward as described, it will be observed that when the latch is closed as shown in Fig. 1, the forward arm of the lever E intersects the member D at a point in front of the stud *e*, and the latch as a whole is rendered compact. It will also be observed that the upward curvature of the rear portion and the down-

ward curvature of the forward portion of the member D contribute to the shortness or compactness of the device without rendering the same unduly hard to operate.

5 It will be gathered from the foregoing that my novel swinging latch is simple, compact and inexpensive, that it is reliable in operation, and that it is well adapted to withstand the rough usage to which swing-
10 ing and other latches are ordinarily subjected.

While I have shown and described one form of my invention, it is to be understood that I am not limited to the details or the
15 form or relative arrangement of parts disclosed, but that modifications may be made therein without departing from the spirit thereof.

20 Having described my invention, what I claim and desire to secure by Letters-Patent, is:

25 A swinging latch comprising a suitable support, an apertured keeper carried by and extending laterally from said support, a second support, a stud carried by and extending laterally from the second support, a movable member provided at its forward

end with a depending hook for engaging the apertured keeper and having a downwardly curved forward portion and an upwardly
30 curved rear portion, the latter disposed above and in the same vertical plane as the stud and extending at all times in front and rear of the stud and movable laterally down-
35 ward toward and upward away from said stud, and a lever fulcrumed at an intermediate point of its length on the stud in a vertical plane in front of and parallel to that of the said movable member and having
40 its rear end pivoted to the rear end of the upwardly curved rear portion of the movable member and also having a forward arm adapted to intersect the downwardly curved portion of the movable member when the
45 latch is closed, and further having a finger-piece on the said forward arm and extending laterally outward therefrom.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

OLE T. BELSVIG.

Witnesses:

J. H. SKOGRAND,

C. O. ERICKSON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."