

EDWARD WELLS.

Improvement in Concealed Hinges for Carriage Doors.

No. 122,977.

Patented Jan. 23, 1872.

fig. 1.

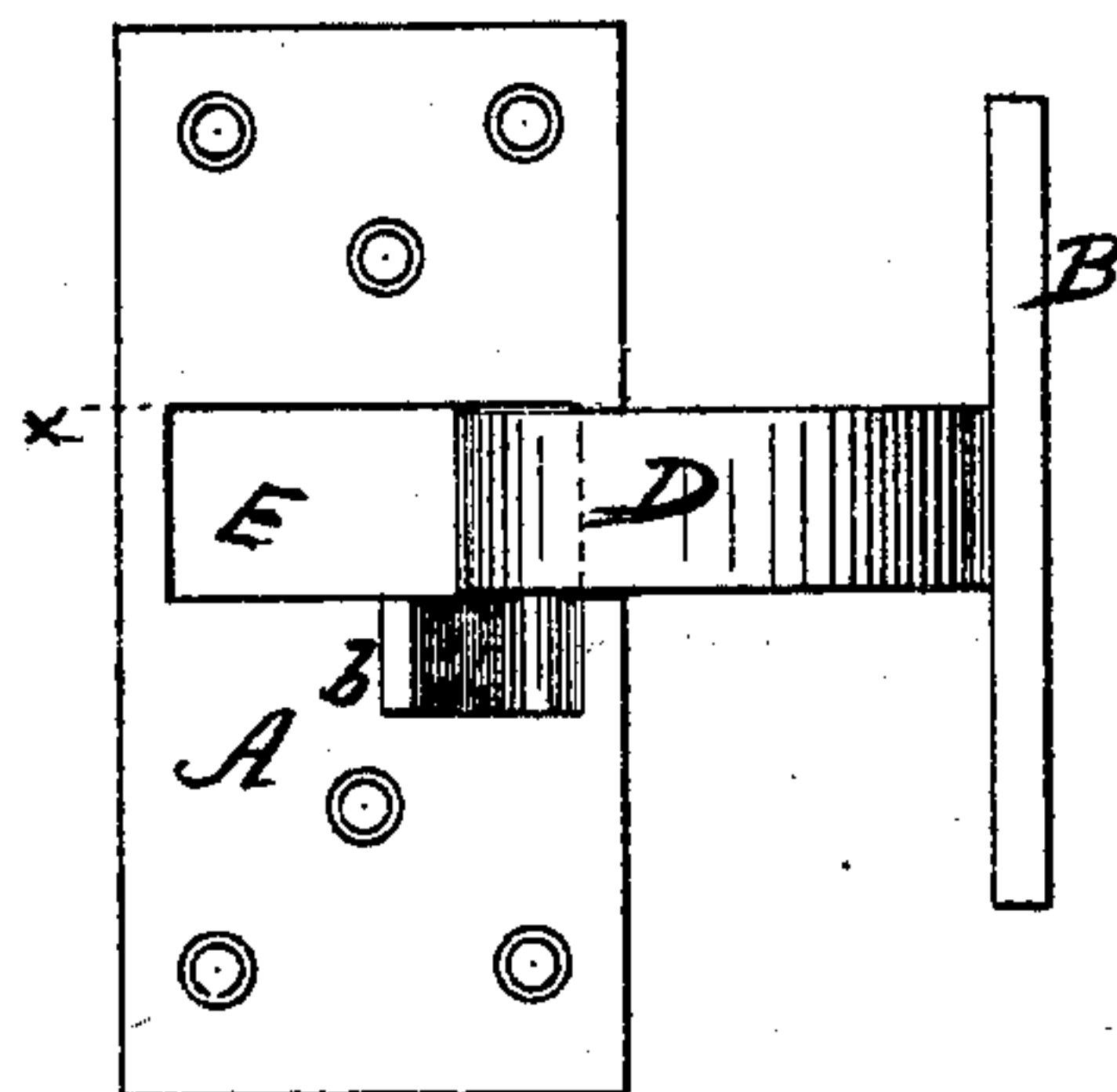


fig. 2.

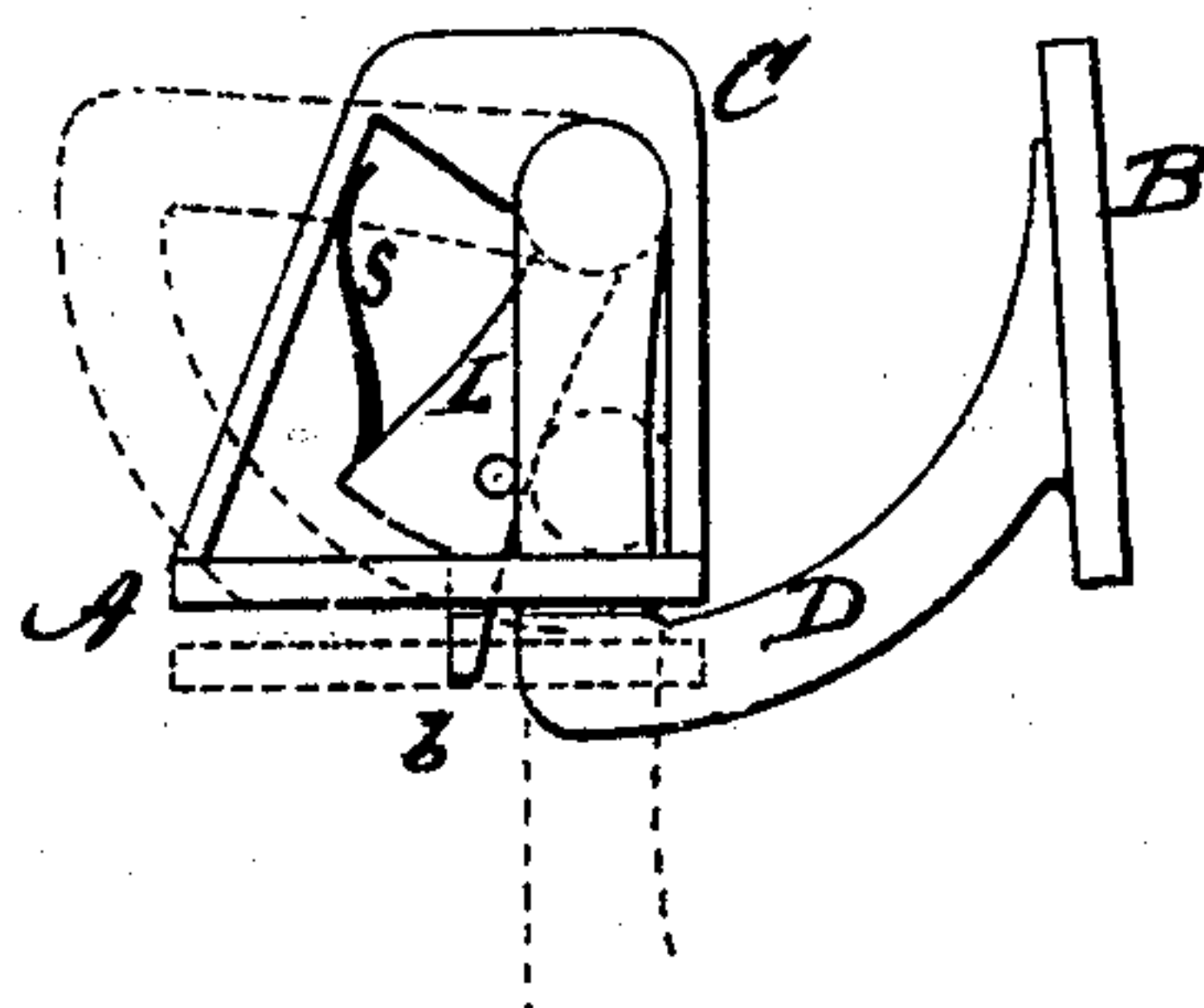
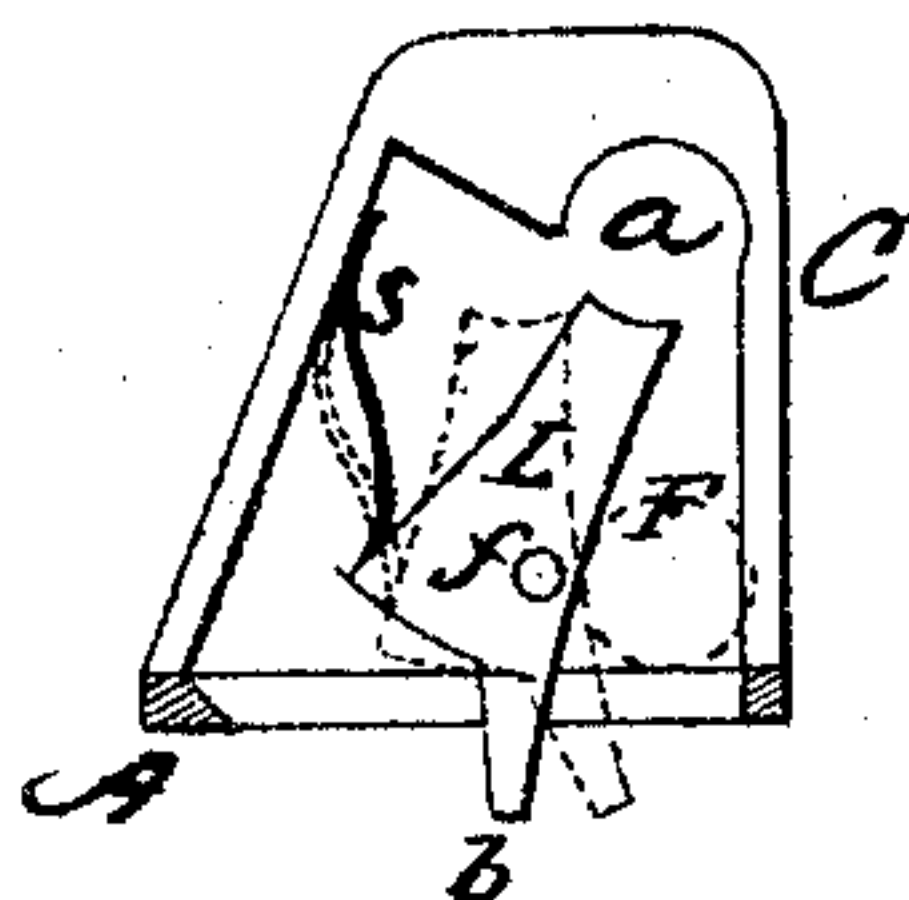
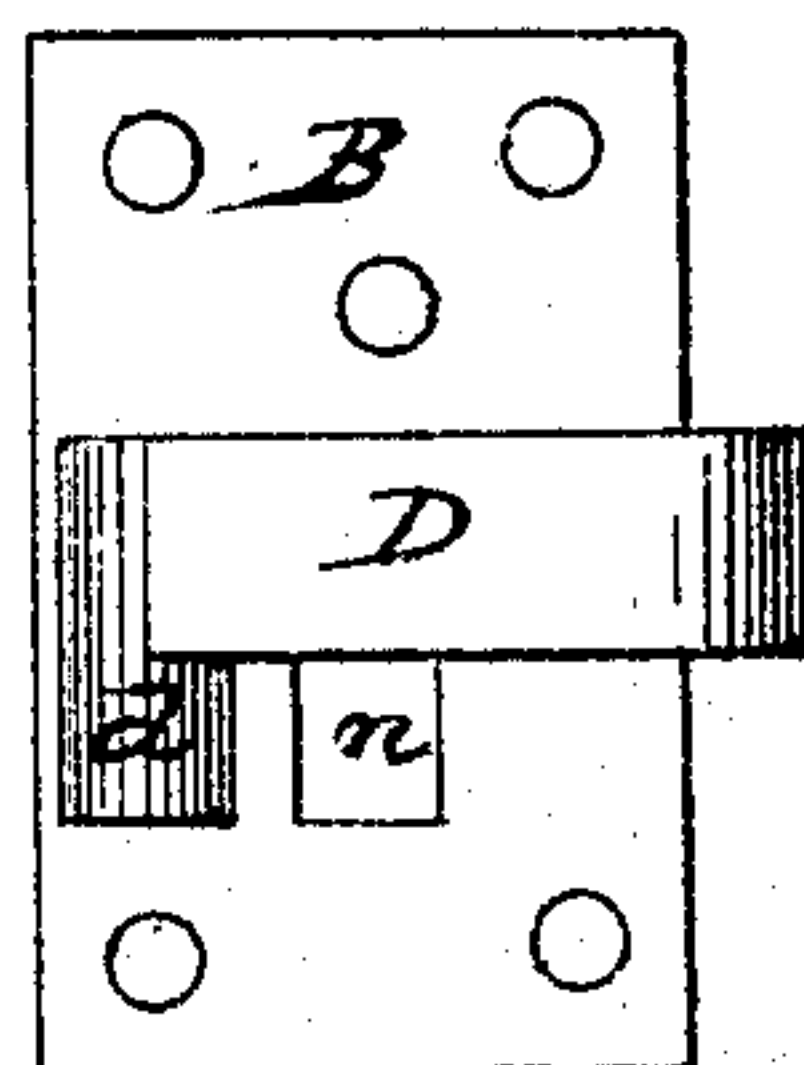


fig. 3.



fug. In



Witnesses

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IMPROVEMENT IN CONCEALED HINGES FOR CARRIAGE-DOORS.

Specification forming part of Letters Patent No. 122,977, dated January 23, 1872.

To all whom it may concern:

Be it known that I, EDWARD WELLS, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Concealed Hinges for Carriage-Doors; and I do hereby declare the following, when taken in connection with the accompanying drawing and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawing constitutes part of this specification and represents, in—

Figure 1, a view of the hinge in the position as when the door is open; Fig. 2, a top view of the hinge in the same position; Fig. 3, a transverse section of the post-plate on the line *x x*; Fig. 4, an inside view of the door-plate of the hinge.

This invention relates to an improvement in that class of door-hinges known as "concealed hinges," and especially designed for the hanging of carriage-doors. In hinges as heretofore constructed for detachment it has usually been necessary to remove some part of the hinge or to lift the door when required to take the door from its hinges. The object of my invention is to construct a hinge so that the door-plates may be removed from the post without detaching any parts of the hinge, raising the door, or other manipulation requiring the use of instruments; and it consists in the arrangement of a latch upon the ear of the post-plate, so that the trunnion on the arm of the door-plate will pass the said latch to its seat and be there secured in position by the said latch, so that when the latch is turned away from the trunnion the arm of the door-plate may be drawn out.

A is the post-plate, B the door-plate, the post-plate constructed with an inwardly-projecting ear, C, similar to the common construction, the said ear having a seat, *a*, for the introduction of the trunnion *d* on the arm D of the door-plate, which said arm works through an opening, E, in the post-plate in the usual manner. Between the seat *a* on the ear C and the

plate I form a recess, F, in depth about equal to the length of the trunnion *d*, and in this recess I arrange a latch, L, upon a pivot, *f*, with a thumb-piece, *b*, extending through an opening in the plate, so as to be reached by the finger, as seen in Figs. 2 and 3. A spring, S, or its equivalent, serves to retain the latch in the position denoted in Fig. 3, but so as to allow the latch to be turned upon its pivot, as denoted in broken lines, Fig. 3. When desired to attach the two parts, place the arm D through the opening E, the trunnion passing in beside the latch, as denoted in broken lines, Fig. 2, and press the trunnion through until beyond the latch into the position denoted in Fig. 2; then the latch will be thrown forward of the trunnion and secure it in position. To detach the parts, turn the latch away from the trunnion, as denoted in broken lines, Fig. 3, and the trunnion will be withdrawn; hence, when the plates are once attached to the post and door they are very easily separated the one from the other to remove the door without raising or detaching any of the parts or by the use of implements of any character.

I have represented the latch as protruding from the post-plate, and consequently make a recess, *n*, in the door-plate to receive it; but this is not essential, as a recess may be made in the post-plate, so that the latch may be reached without the latch protruding beyond the face of the plate.

I claim as my invention—

The coach-hinge, consisting of the plates A and B, having a pivot formed by the arm of the first plate passing through the second plate and resting in a seat on the arm of the same, in combination with the latch L, arranged with the spring S or its equivalent on the said second plate to lock the trunnion in its seat or to release it therefrom, substantially as described, and for the purpose set forth.

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Witnesses:

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