

W. E. SPARKS.
Shutter-Hinges.

No. 156,184.

Patented Oct. 20, 1874.

fig. 1

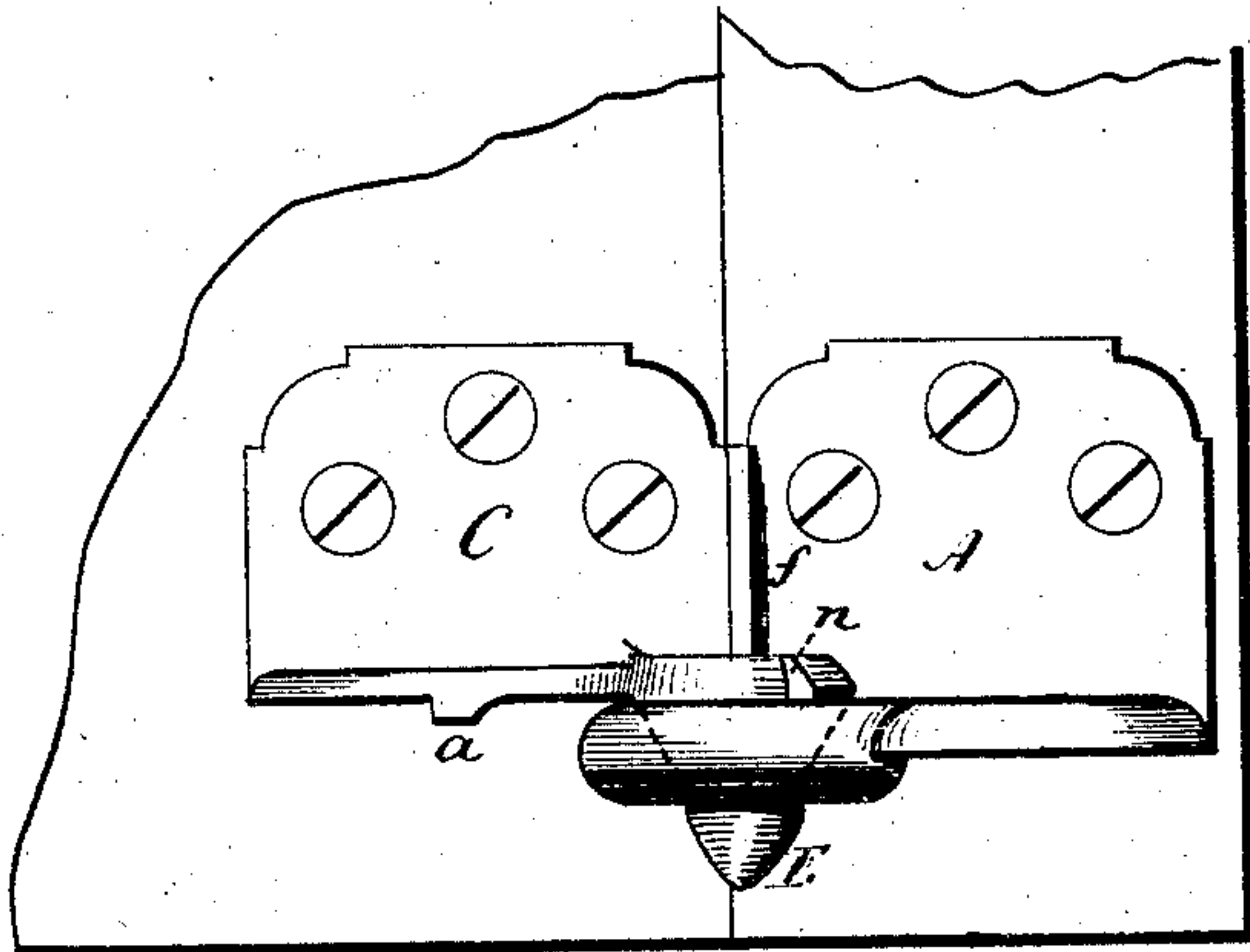


fig 2

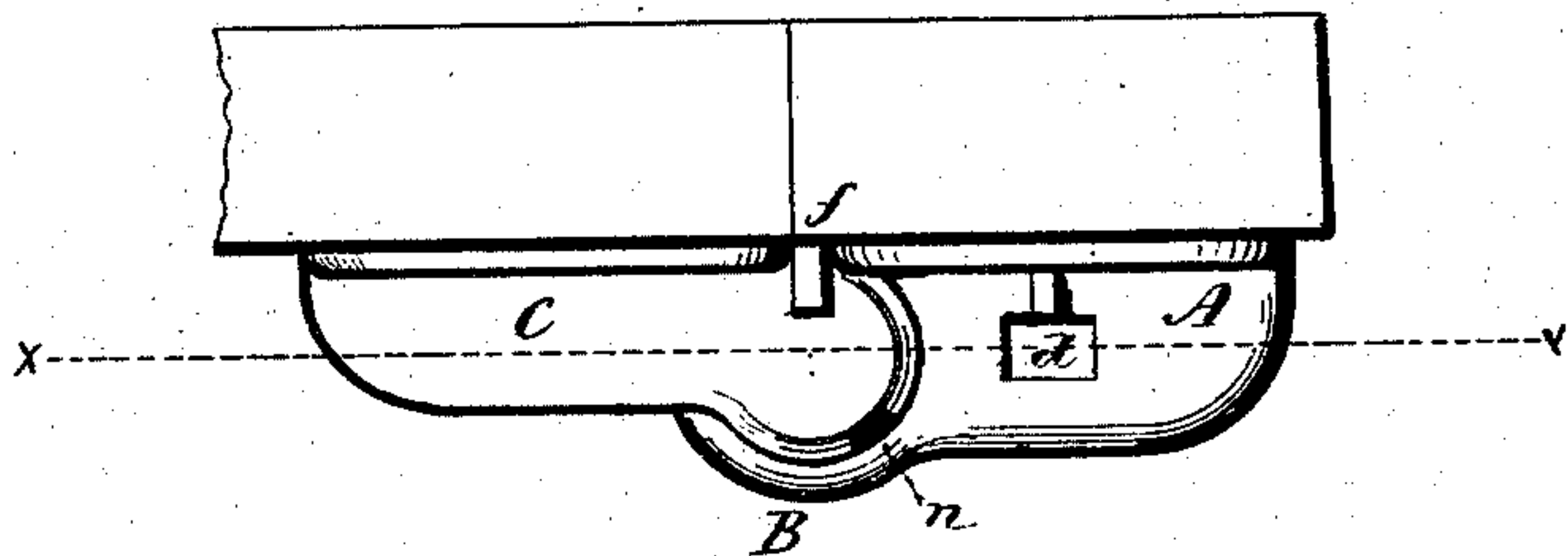


fig. 3

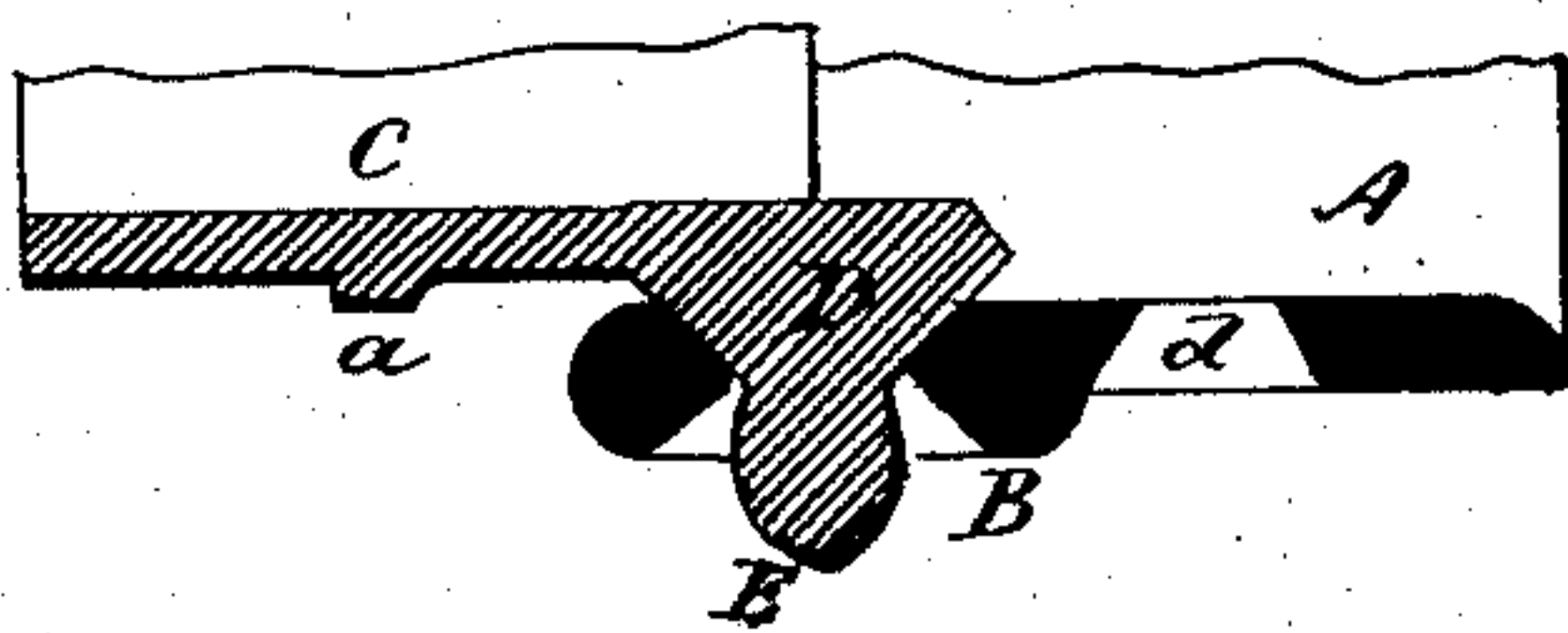
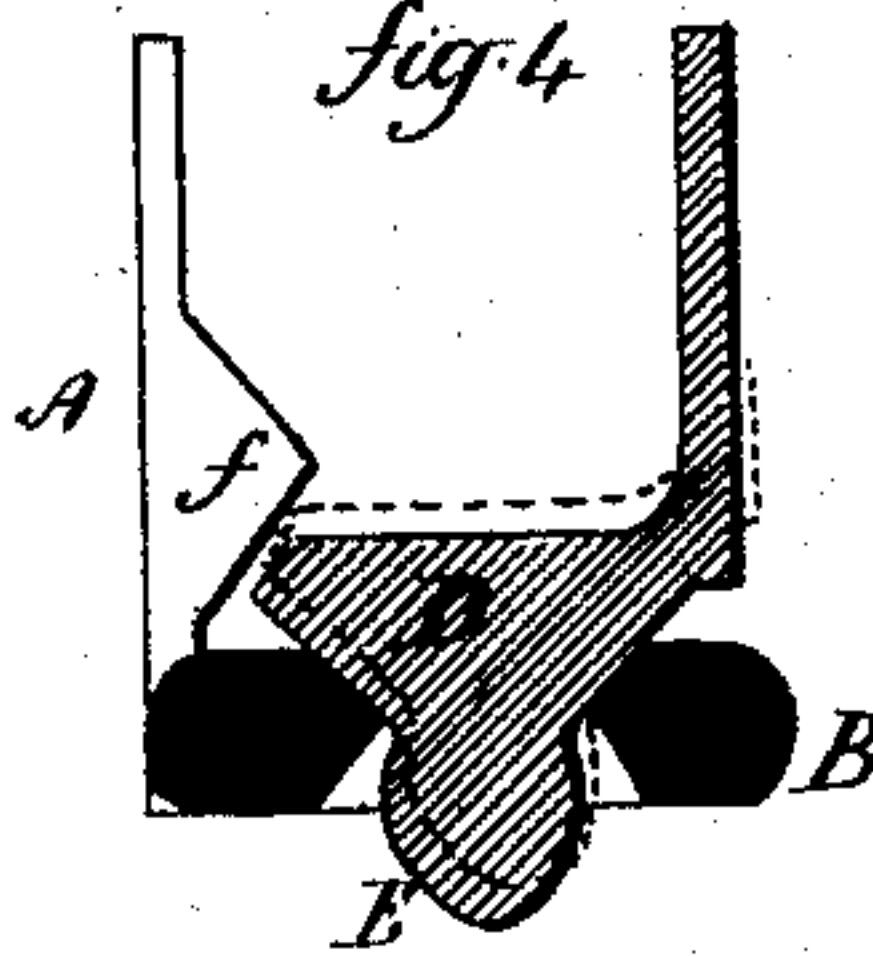


fig. 4



Witnesses.
J. W. Shumway
A. J. Tibbitts

William E. Sparks
Inventor
By atty.
John E. Case

UNITED STATES PATENT OFFICE.

WILLIAM E. SPARKS, OF NEW HAVEN, CONNECTICUT, ASSIGNOR TO SARGENT & COMPANY, OF SAME PLACE.

IMPROVEMENT IN SHUTTER-HINGES.

Specification forming part of Letters Patent No. **156,184**, dated October 20, 1874; application filed July 6, 1874.

CASE S.

To all whom it may concern:

Be it known that I, WILLIAM E. SPARKS, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Shutter-Hinge; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent in—

Figure 1 a front view; Fig. 2, a top view; and in Fig. 3, a longitudinal section on line *x x*.

This invention relates to an improvement in that class of shutter-hinges which, by their construction, possess the power to hold the blind open. This construction requires a slight vertical movement of the shutter, that one part of the hinge may interlock with the other part, as in the usual construction, but in the usual construction the bearing or seat for the pintle is elongated so as to allow the pintle to play transversely, that one part may ride up the incline of the other to raise the one part from the other to disengage them. This play unavoidably permits a disagreeable rattling of the shutter, which this invention overcomes; and it consists in constructing the pintle of a conical form, with an enlarged head upon the top of the cone, the other part of the hinge constructed with a seat corresponding to the conical portion of the pintle, and through which the head of the pintle will pass, combined with a lug on the part which makes the seat, which, when the shutter is raised, will force the pintle out of axial line with the seat, and cause the head to engage beneath the seat to prevent accidental removal, and yet allow the shutter to rise sufficiently to clear the lock.

A is the stationary part of the hinge. C the movable part formed with a pintle, D. This pintle is of conical-form, and fits the corresponding conical seat B, so that the pintle bears upon all sides. The cone is constructed with a top or head, E, and is of greater length than the thickness of the seat, so as to continue its contraction through the seat, but the

head is of substantially the same diameter as the opening through the seat. On the movable part C is a lug, *a*, and on the stationary part a corresponding opening or notch, *d*, so that when the movable part is turned around, as in opening, the lug *a* will pass into the notch *d*, the movable part rising to allow it so to do, substantially as in the usual construction. In thus rising, the movable part will be thrown forward, as seen in Fig. 4, in consequence of striking an incline, *f*, on the stationary part. In thus moving forward the neck of the pintle D catches beneath the seat B, and therefore prevents the possibility of the movable part being thrown from its bearing, but so soon as the shutter is free the pintle falls back into its seat, as seen in Fig. 3, and takes a bearing entirely around the seat, so that it will not allow a rattle any more than a close-fitting pintle.

In order to remove the shutter, or the one part from the other when occasion requires, a notch, *n*, is made at one point through the larger part of the pintle intermediate between the two extremes of movement, so that when the movable part is turned into position, that the notch *n* coincides with the flange *f*. In that position the two parts may be separated, but in no other, the head E, combined with the flange *f*, always preventing disengagement, except at the point described. The pintle D as it rises strikes the flange *f*, and is by that thrown outward so that the head E will come in contact with the seat B, and thus at any point prevent the parts from separating, and also prevent the rattling of the pintle within the seat.

I claim as my invention—

The herein-described lock-hinge, consisting of the two parts C A, the one constructed with the conical pintle D, having an enlarged top or head, E, thereon, the other with the corresponding conical seat B and flange *f*, substantially as set forth.

WILLIAM E. SPARKS.

Witnesses:

J. H. SHUMWAY,
A. J. TIBBITS.