(No Model.)

J. WOLF.

LOCK HINGE FOR SHUTTERS.

No. 305,260. Patented Sept. 16, 1884.

Fig. 1.

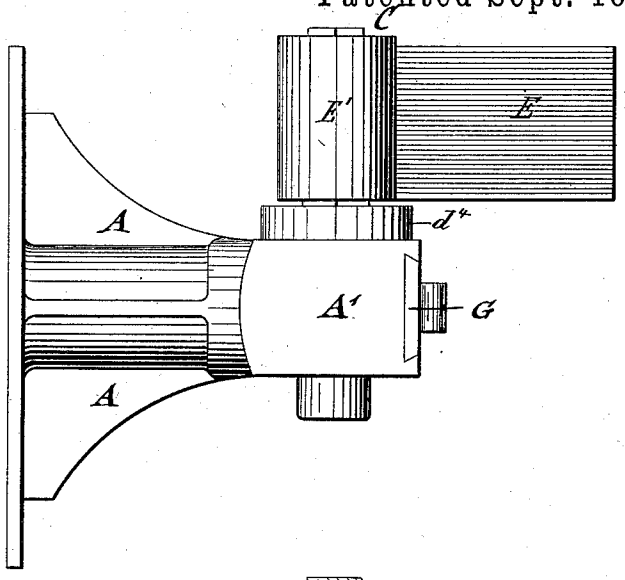


Fig. 2.

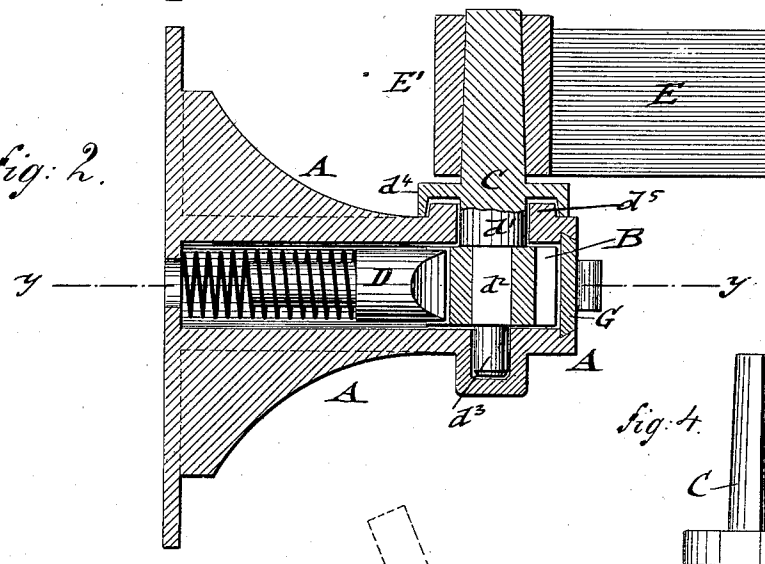


Fig. 4.

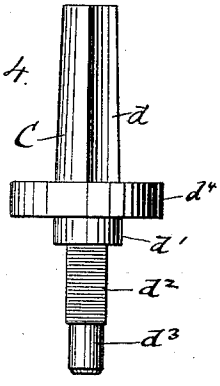
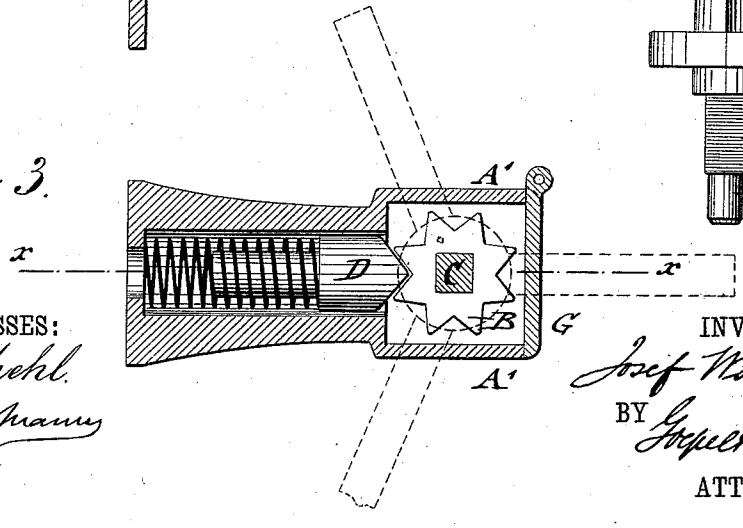


Fig. 3.



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UNITED STATES PATENT OFFICE.

JOSEF WOLF, OF NEW YORK, N. Y.

LOCK-HINGE FOR SHUTTERS.

SPECIFICATION forming part of Letters Patent No. 305,260, dated September 16, 1884.

Application filed March 8, 1884. (No model.)

To all whom it may concern:

Be it known that I, JOSEF WOLF, of the city, county, and State of New York, have invented certain new and useful Improvements in Lock-Hinges for Shutters, of which the following is a specification.

This invention has reference to certain improvements in the lock-hinge for shutters for which Letters Patent were granted to me heretofore jointly with August Muller, under date of November 14, 1882, No. 267,448, the improvements being specially designed for the purpose of facilitating the removal of the shutter and for protecting the lock-hinge against the entrance of rain and moisture.

The invention consists of a bracket-shaped support having bearings for a vertical pintle, to the square lower part of which a spur-wheel is applied that is locked by a spring-actuated follower, the pointed or convex end of which projects into the recesses of said spur-wheel. The pintle is provided above the supporting-bracket with an annular cap that fits on a raised seat at the top of the bracket, so as to prevent the entrance of water. The upper part of the pintle above the cap is square, so as to apply thereto the sleeve of the lower shutter-strap, said sleeve having a square recess to fit on the square end of the pintle.

In the accompanying drawings, Figure 1 represents a side elevation of my improved lock-hinge for shutters. Fig. 2 is a vertical longitudinal section on line *x x*, Fig. 3. Fig. 3 is a horizontal section on line *y y*, Fig. 2; and Fig. 4 is a detail side view of the pintle detached.

Similar letters of reference indicate corresponding parts.

A in the drawings represents a bracket-shaped arm that is screwed or otherwise secured to the window-casing or wall. The arm A is formed of a hollow middle portion and of an outer box-shaped portion, A′, that is provided at the top and bottom with bearings for the pintle C. The pintle C is made square at its upper part, *d*, cylindrical at that part, *d′*, within the upper bearing of the box A′, then square, as at d^2, as far as the same is within the box A′, and round at the lower part, d^3, which turns in the lower bearing of the box A′. On the square intermediate portion, d^2, of the pintle C is placed a spur-wheel, B, which is engaged by a spring-actuated follower, D, having a convex or pointed end, so as to project into the notches between the teeth of the spur-wheel B. The pintle C is provided at a point where the upper square part, *d*, and intermediate round part, *d′*, meet with a flanged cap, d^4, that fits around a raised seat, d^5, at the top of the box A′. To the square upper part, *d*, of the pintle C is fitted the correspondingly-recessed sleeve E′ of the lower hinge-strap, E, of the shutter, so that the pintle C turns with the shutter in opening or closing the same. The spring-actuated follower D takes then into the teeth of the spur-wheel B, and locks thereby the shutter into an open, closed, or intermediate position, as shown in dotted lines in Fig. 3. The end of the box A′ is provided with a transverse slide-piece, G, which is guided in ways of the box A′, and which serves to open the end of the box A′, so as to admit the insertion of the follower D and spur-wheel B. The box A′ may also be closed at the front end, and the spur-wheel and follower inserted through the rear end of the hollow part of the bracket A.

With this construction of lock-hinge the shutter may be locked at any desired position, while dispensing with the usual shutter-fastening devices.

As the pintle does not form a part of the shutter, the latter can be removed and replaced without difficulty.

By the arrangement of the raised seat and flanged cap at the top of the box A′ the water is prevented from entering into the box, so that the same will work equally well in the summer and winter season without being liable to freeze up.

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

1. The combination of a bracket, A A′, a pintle, C, turning in bearings of the bracket, a spur-wheel, B, keyed to the pintle intermediately between the bearings, a spring-actuated follower, D, having a convex or pointed end engaging the spur-wheel, and a hinge-strap, E, that is adapted to lock the upper part of the pintle, substantially as and for the purpose set forth.

2. The combination of a bracket, A, having a box-shaped portion, A′, a pintle, C, supported in bearings of the box-shaped portion, said

pintle having a flanged cap fitting over a raised seat on the top of the box A′, a spur-wheel, B, keyed to the pintle, a spring-actuated follower, D, engaging said spur-wheel, and a hinge-strap, E, the sleeve of which is fitted to the square upper part of the pintle C, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

JOSEF WOLF.

Witnesses:
PAUL GOEPEL,
SIDNEY MANN.