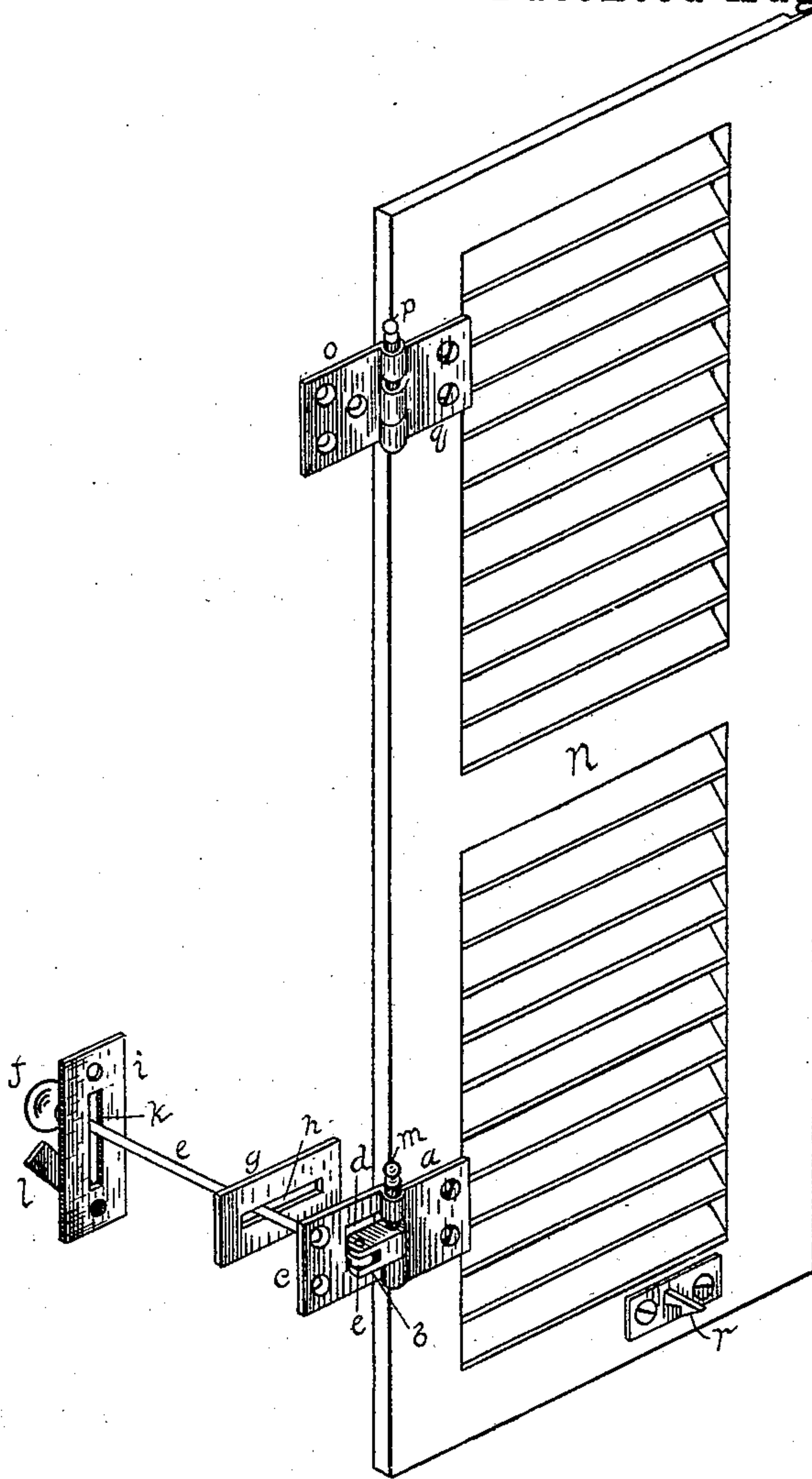


(No Model.)

L. SCHUERMANN.
SHUTTER WORKER.

No. 347,202.

Patented Aug. 10, 1886.



ATTEST
C. C. Clark
J. N. Bills

INVENTOR
LUDWIG SCHUERMANN
By L. P. Graham
att'y.

UNITED STATES PATENT OFFICE.

LUDWIG SCHUERMANN, OF DECATUR, ILLINOIS.

SHUTTER-WORKER.

SPECIFICATION forming part of Letters Patent No. 347,202, dated August 10, 1886.

Application filed May 3, 1886. Serial No. 200,964. (No model.)

To all whom it may concern:

Be it known that I, LUDWIG SCHUERMANN, of the city of Decatur, county of Macon, and State of Illinois, have invented certain new and useful Improvements in Shutter-Workers, of which the following is a specification.

My invention consists in certain details of construction and combinations of parts, whereby outside window-shutters may be opened, closed, and locked from the inside of the house without opening the window, as hereinafter claimed.

In the drawings accompanying and forming a part of this specification, *a* represents a leaf of the hinge attached to a shutter.

b is a rigid extension of leaf *a* on the opposite side of the pintle.

c is a hinge-leaf coacting with leaf *a*, and provided with a recess, *d*, to receive and permit the free operation of extension *b*.

e is a rod or bar having a pivotal connection with extension *b*.

f is a knob or handle on rod *e*.

g is a plate provided with a horizontal slot, *h*, which acts as a fulcrum for rod *e*.

i is a plate provided with a vertical slot, *k*, which permits the free operation of the rod *e*, and provides lateral fulcrums for the same.

l is a lock-plate pivoted on plate *i* in such a manner that when swung under rod *e* it will hold the inner end of the same at its greatest elevation.

m is the pintle for hinge-leaves *a* and *b*.

n represents the blind to which my hinge is attached.

o and *q* are leaves of an auxiliary hinge, and *p* is the pintle for the same.

r represents a hook, by means of which and a coacting catch the blind is held open.

Leaves *c* and *o* are to be secured to the outer surface of the window-frame.

Plate *g* is to be set into the window-frame, near the outer surface of the same.

Plate *i* is to be secured to the inner surface of the window-frame.

Each shutter is to be provided with a hook on each side, and catches for same are to be located in the window-frame and on the outer surface of the wall respectively.

The individual leaves of the hinges have each a limited amount of independent vertical motion, in order that the shutter may rise sufficiently to free the hooks from contact with the catches on the window-frame and wall.

In operation knob *f* is pressed downwardly until rod *e*, acting as a lever, with its fulcrum in plate *g*, raises the blind sufficiently to disengage the hook from its catch. Said knob is then drawn back until the shutter passes the dead-center, and then pushed forward until the blind is entirely opened or closed, as the case may be. Under ordinary circumstances the shutter will be swung past the dead-center by pulling the knob; but in case of a failure in this regard plate *i* may be used as a lateral fulcrum and the shutter be carried by side pressure to a point where the longitudinal motion of the rod will become effective. The shutter may be locked when closed by raising rod *e* to its greatest elevation at the inner end and swinging lock-plate *l* under the same, a sufficient degree of rigidity in bar *e* being presupposed.

The hooks *r* and their coacting catches may be constructed in any suitable manner, and the general form of the hinges may be modified to suit different circumstances.

I claim as new and desire to secure by Letters Patent—

1. A shutter-worker consisting in a leaf adapted to be attached to a blind, a suitable pivot for said leaf, an extension of said leaf on the opposite side of the pivot, and a bar pivoted in said extension and adapted to extend to the inner surface of the window-frame.

2. A shutter-worker consisting in a leaf adapted to be secured to a blind, a pivot for said leaf permitting a limited amount of free vertical motion therein, an extension of the leaf on the opposite side of the pintle, a bar pivoted in said extension and adapted to extend to the inner surface of the window-frame, and a horizontal fulcrum under the bar.

3. A shutter-worker consisting in a leaf adapted to be secured to a blind, a pivot for said leaf permitting a limited amount of free vertical motion therein, an extension of the leaf on the opposite side of the pivot, a bar pivoted in said extension and adapted to extend to the inner surface of the window-frame, a horizontal fulcrum under the bar near the extension, and vertical fulcrums on each side of the bar near its inner end.

In testimony whereof I sign my name in the presence of two subscribing witnesses.

Attest: LUDWIG SCHUERMANN.

I. D. WALKER,

L. P. GRAHAM.