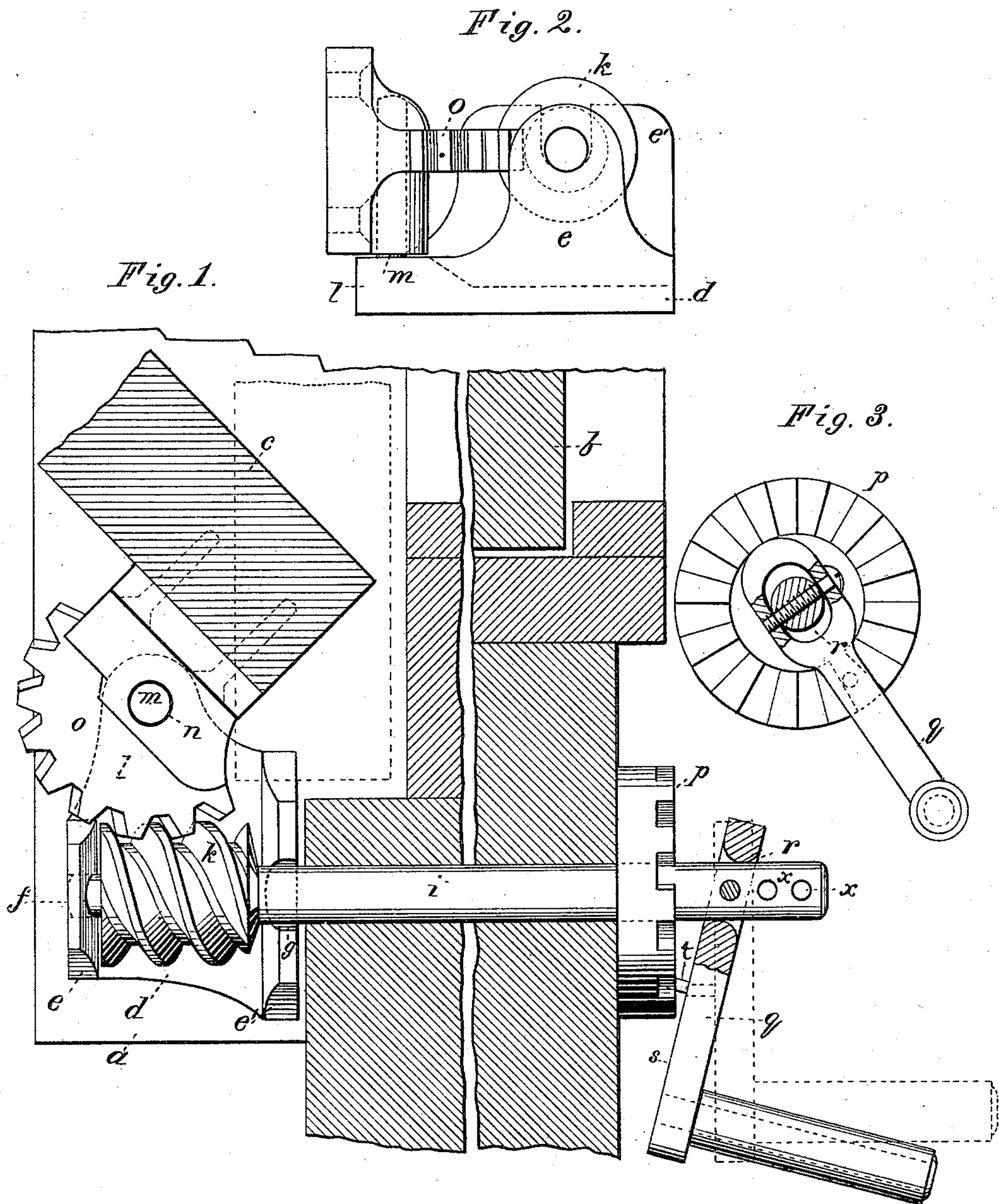


(No Model.)

D. F. OLIVER.
SHUTTER WORKER.

No. 299,001.

Patented May 20, 1884.



WITNESSES

Villette Anderson.
John T. Morrow.

INVENTOR

D. F. Oliver,
by Anderson and Smith
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UNITED STATES PATENT OFFICE.

DOCTOR FRANKLIN OLIVER, OF HUNTSVILLE, MISSOURI.

SHUTTER-WORKER.

SPECIFICATION forming part of Letters Patent No. 299,001, dated May 20, 1884.

Application filed December 15, 1883. (No model.)

To all whom it may concern:

Be it known that I, DOCTOR F. OLIVER, a citizen of the United States, residing at Huntsville, in the county of Randolph and State of Missouri, have invented certain new and useful Improvements in Shutter-Workers; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a representation of this invention, and is a top view of the device, with the portions of the window-shutter, window, and wall in section. Fig. 2 is an end view of the two parts of the hinge. Fig. 3 is an end view of the notched plate and the crank, with the shaft and a portion of the crank in section.

This invention has relation to shutter-workers designed to open and close the shutters from the inside of the room without raising the window; and it consists in the construction and novel arrangement of devices, as will be hereinafter fully described, and particularly pointed out in the claim appended.

Referring by letter to the accompanying drawings, *a* designates the window-casing, *b* the window-sashes, and *c* one of the blinds or shutters. The half-hinge *d*, secured to the window-casing *a*, is cast with lugs *e e'*, the former having a hole, *f*, and the latter an open bearing, *g*, for the operating-shaft *i*, provided with a worm, *k*, between the lugs *e e'*. This half-hinge *d* has also a bottom or base projection, *l*, provided with a pintle, *m*, for the eye *n* of the upper half of the hinge, which is provided with a segmental gear-wheel, *o*, on a horizontal plane, the teeth of which engage the threads of the worm *k*, to open and close the shutter to which the upper half-hinge is secured. The operating-shaft *i* extends through the wall of the house into the room, and through an annular notched plate, *p*, secured to the inner face of the casing or wall, according to the interior finish of the room.

Upon the shaft *i* a crank, *q*, is slipped. This crank is provided with an oval or oblong opening, *r*, which adapts the crank-arm to be slipped upon the shaft *i*, and prevents its turning on the shaft, but causes it to carry the shaft with it when it is turned. The inner face of the crank-arm *s* is provided with a stud, *t*, which may be caused to engage either of the notches of the plate *p* and lock the gearing to hold the shutter at any point to which it may have been moved.

To unlock the gearing the crank-arm must be slipped away from the notch which its stud engages, and turned to operate the worm and the segmental gear of the upper half-hinge, to open or close the shutter.

The crank is secured to the shaft by a screw passed through its eye and through either of a series of holes, *x*, to permit it to be adjusted to walls of different thicknesses.

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

In a shutter-worker, the combination, with the lower half-hinge, *d*, constructed substantially as described, provided with the lugs *e e'*, having bearings for the operating-shaft, as shown, and a bottom projection, *l*, having the pintle *m*, to engage the eye *n*, of the upper half-hinge, which is provided with a segmental gear, *o*, the shaft *i*, having the worm-gear *k* at its outer end, and its inner end provided with a plurality of perforations, the annular notched plate *p*, and crank *q*, having the oval slot *r* and pin *t*, whereby the crank-arm may be adjusted on the shaft with relation to the plate *p*, and the device adapted for window-casings or walls of various thicknesses, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

DR. FRANKLIN OLIVER.

Witnesses:

W. F. HAMMETT,
W. R. SAMUEL.