(Model.)

J. W. HARRISON.

SHUTTER WORKER.

No. 270,310. Patented Jan. 9, 1883.

Fig. 1.

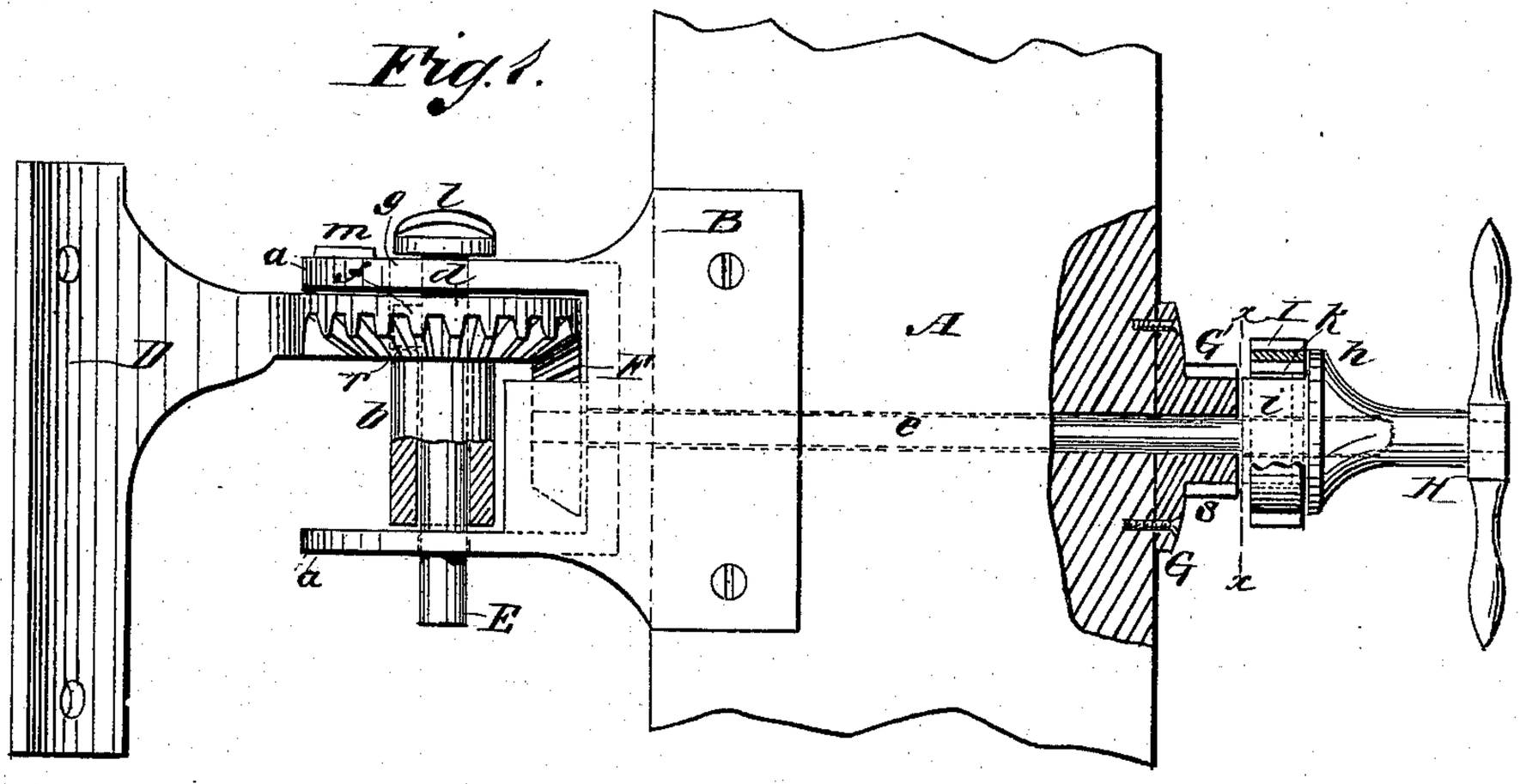

Fig. 2.

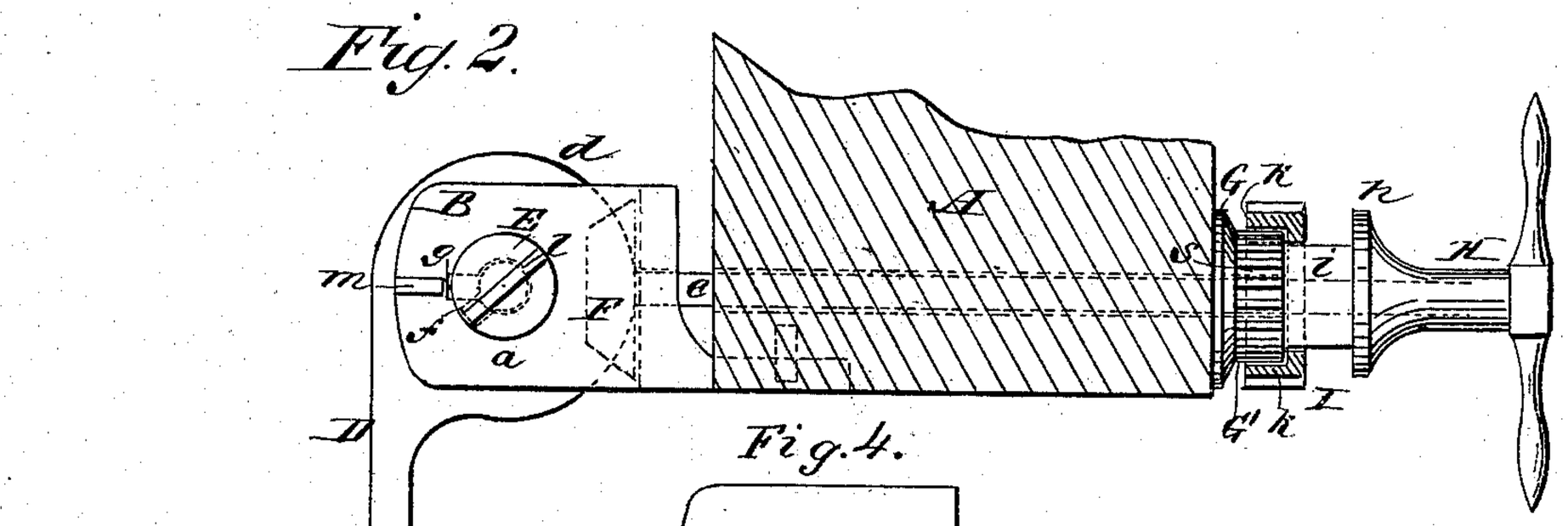

Fig. 4.

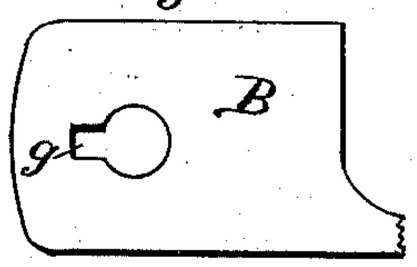

Fig. 3.

Fig. 5.

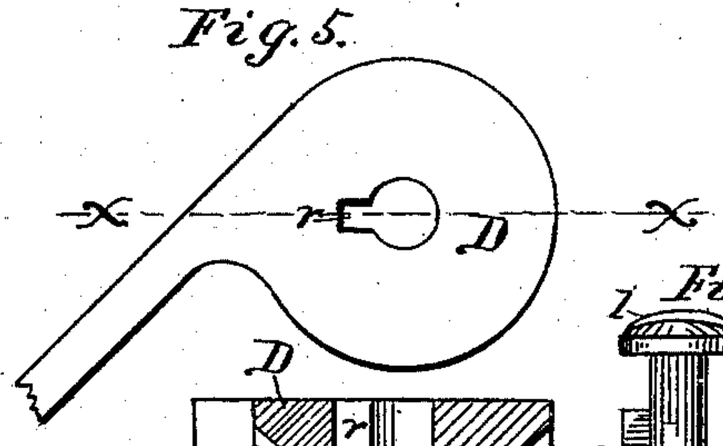

Fig. 6.

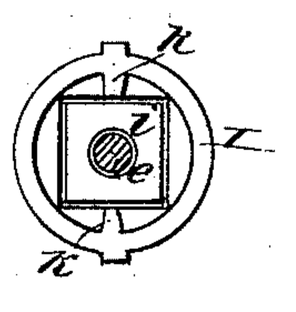

Fig. 7.

WITNESSES:

F. McArdle

C. Sedgwick

INVENTOR:

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UNITED STATES PATENT OFFICE.

JOHN W. HARRISON, OF WHEELING, WEST VIRGINIA.

SHUTTER-WORKER.

SPECIFICATION forming part of Letters Patent No. 270,310, dated January 9, 1883.

Application filed April 6, 1882. (Model.)

To all whom it may concern:

Be it known that I, JOHN W. HARRISON, of Wheeling, in the county of Ohio and State of West Virginia, have invented a new and useful Improvement in Window-Blind Opening and Holding Devices, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 represents a partly-sectional side elevation of the invention applied to a window-frame and lower-blind hinge. Fig. 2 is a partly-sectional horizontal view of the same, with the blind shown only in part attached; and Fig. 3 is a transverse section on the line *x x* in Fig. 1, in illustration of the blind holding or locking portion of the invention. Figs. 4, 5, 6, and 7 are detail views.

The invention relates to devices for controlling from the interior of a building window blinds or shutters which are on the exterior thereof; and the invention consists in a novel construction and combination of parts, as hereinafter fully described, and pointed out in the claim.

In the drawings, A indicates a portion of one side of the window-frame, and B the section of the lower hinge of the blind, secured thereto and provided with the arms *a*.

C is a portion of the blind, and D the section of the lower hinge attached to it. The portion of the section D through which and through the jaw portion of the fixed section B of the hinge the hinge-pin E passes is cast with a socket, *b*, for said pin, and with an inverted toothed sector or horizontal bevel crown-wheel, *d*, all in one piece with said moving section D.

F is the wheel or bevel pinion, which engages with the toothed portion *d* of the hinge-section D, and by which said section, with its attached blind C, is operated to open and close the blind. This pinion F is fast on a horizontal spindle, *e*, which passes through the window-frame A and through a box, G, secured to the inner side of said frame on the interior of the building. Said box G has a corrugated or toothed projection, G′, on its exposed face, the same forming a fixed locking device of circular form, with corrugations *s* on its outer circumference, parallel with the spindle *e*.

Secured on the inner end of the spindle *e* is a handle, H, for turning said spindle to operate the blind. This handle is fitted on or formed with a sleeve having a flange, *h*, and externally square or angular shouldered portion *i*, which, when the handle is in its place, abuts against the face of the fixed corrugated projection G′. Fitting so as to be capable of sliding along the same on this angular, or it might be feathered, shouldered portion *i* of the handle is a movable locking ring or device, I, having inner teeth, *k k*. By sliding this locking-ring I on the shouldered portion *i* of the handle so that its teeth *k k* enter within certain of the teeth or corrugations of the fixed locking device G′, the blind may be locked at any angle to admit air or light, or to limit its movement when prevented from being thrown completely open by an adjoining building, and may be fastened either in its open or closed positions from the inside of the apartment, so that it cannot be interfered with from the outside.

The above-described construction for locking the shutter at any angle is old.

On the hinge-pin E is a feather, *f*, which is entered down through a slot, *g*, in the upper portion of the fixed section B of the hinge and into a corresponding slot or recess, *r*, in the socket *b* of the moving section D.

This construction prevents the blind from being taken off its hinges, except by bringing it in a certain position, which may be indicated by a rib, *l*, on the top of the hinge-pin coming in line with a projection, *m*, on the top of the fixed section B, when the pin E may be lifted out by its feather *f* coming in line with the slot *g*. The blind may then be removed.

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

In a shutter-worker, the combination, with the movable section D, provided with the toothed portion *d*, and the elongated socket *b*, having recess *r*, of the fixed section B, provided with the arms *a*, the upper one of which is provided with the slot *g*, the pin E, provided with the feather *f*, the pinion F, and the rod *e*, provided with the handle H, substantially as and for the purpose set forth.

JOHN W. HARRISON.

Witnesses:

EDWARD P. OSBORNE,

LOUIS DECHERT.