

(Model.)

E. T. LUKENS.
Shutter Worker.

No. 243,278.

Patented June 21, 1881.

Fig: 1.

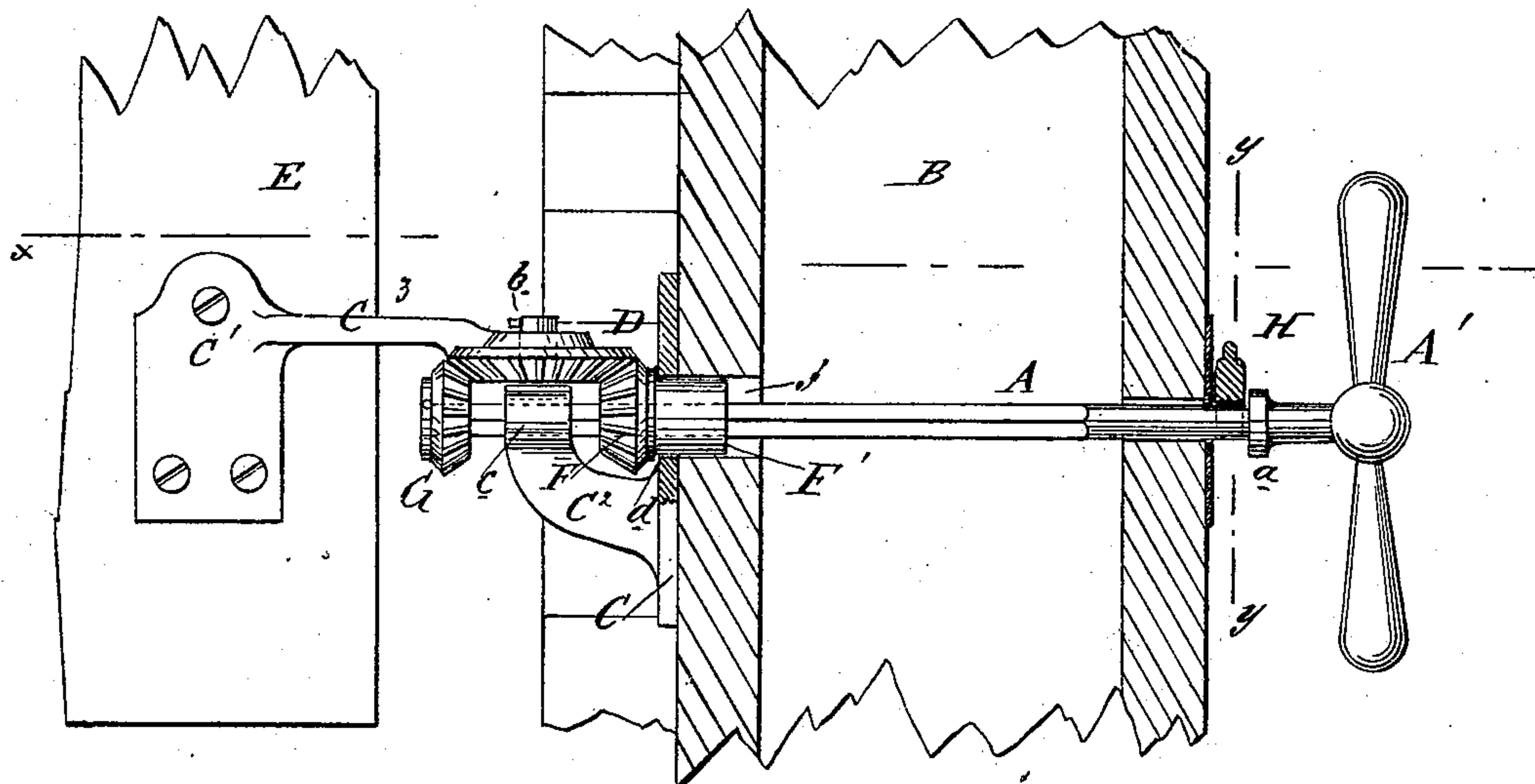


Fig: 2.

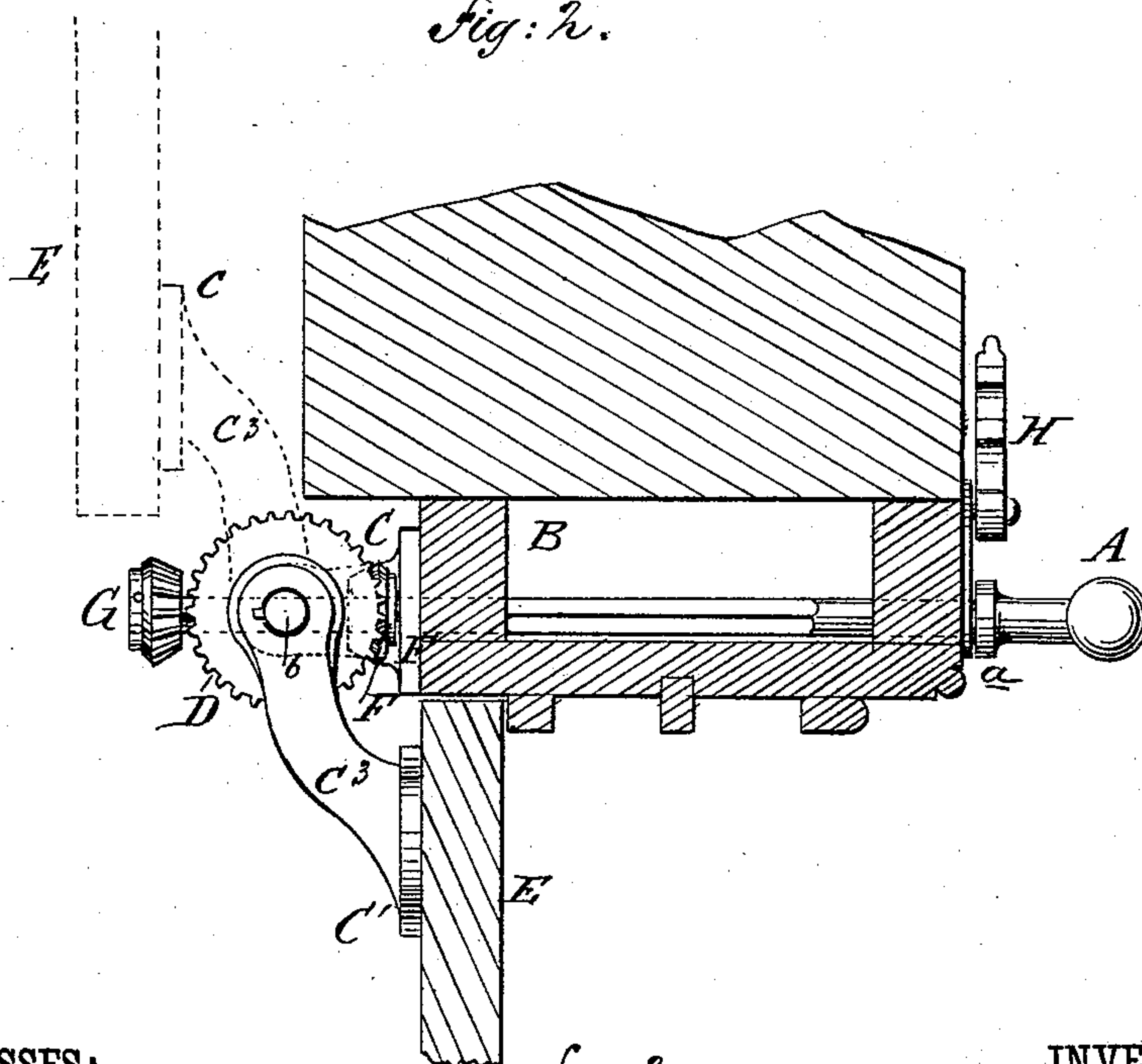
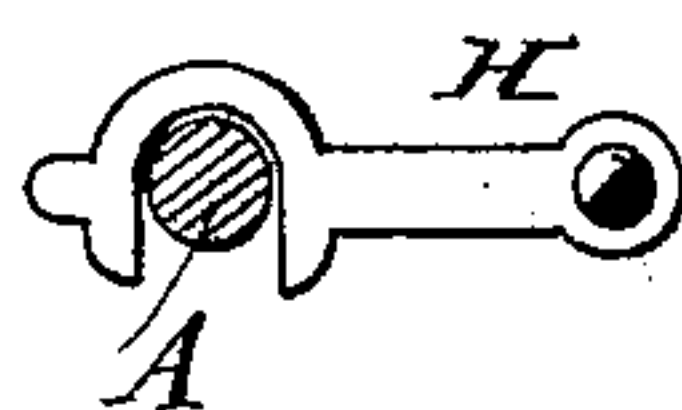


Fig: 3.



WITNESSES:

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EDMUND T. LUKENS, OF OXFORD, NEW JERSEY.

SHUTTER-WORKER.

SPECIFICATION forming part of Letters Patent No. 243,278, dated June 21, 1881.

Application filed March 21, 1881. (Model.)

To all whom it may concern:

Be it known that I, EDMUND T. LUKENS, of Oxford, in the county of Warren and State of New Jersey, have invented a new and Improved Shutter Adjuster and Fastener, of which the following is a specification.

This invention relates to that class of devices that are designed for the purpose of opening, closing, and locking blinds and shutters from the inside of the house.

The invention consists of a sliding and rotating shaft passed through the window-casing, and carrying on its outer end two beveled pinions, the extreme one of which is fixed to the rotating shaft, while the other pinion is rotated by the shaft which slides longitudinally through the pinion, said pinions gearing at one and the same time with a horizontal gear-wheel that forms part of the shutter or blind hinge to hold said shutter or blind locked in any desired position, the extreme pinion being disengaged from the horizontal wheel when the said shutter or blind is to be opened or closed by the action of the inner and sliding pinion; and it consists, further, in combination with the fastener, of a device for preventing the unlocking of the blind or shutter through the longitudinal movement of the shaft.

Figure 1 is a side elevation of the device, partly in section, applied to a shutter. Fig. 2 is a plan of the same on line *xx*, Fig. 1. Fig. 3 is a side elevation on line *yy*, Fig. 1.

Similar letters of reference indicate corresponding parts.

In the drawings, A represents the shaft passed through the window-casing B, and having on its inner end a cross-handle, A', and an annular shoulder, *a*. The outward extension of said shaft A is of square or polygonal cross-section, as shown.

On the outside of the window-casing B is secured a leaf, C, whose upward curved arm C² terminates in a spindle or pintle, *b*, that serves as a pivot for the horizontal bevel-wheel D, in which the arm C³ of the leaf C' terminates, said leaf C' being fastened on the blind or shutter E in the usual manner. The arm C² of the leaf C is enlarged just below the pintle *b*, as shown at *c*, and is bored large enough to permit of the free rotation of the squared end of the shaft A that passes through it.

A bevel-gear wheel, F, provided with a sleeve, F', has its said sleeve F' inserted through a hole, *d*, in the leaf C into a corresponding opening, *f*, in the window-casing B, and fixed in such a position that the teeth of said gear-wheel F gear with the horizontal bevel-wheel D on the inner edge thereof. Through this sleeve F' and gear-wheel F, which have a square or polygonal bore corresponding with the shaft A, the shaft A is passed, and by them is its outer end supported. Passing also through the enlargement *c* of the arm C² of the leaf C, said shaft A has rigidly secured on its outer extremity a bevel-gear wheel, G, that gears with the teeth of the wheel D on the outer edge thereof.

When it is desired to open or close the shutter E the shaft A is thrust outward, so as to disengage the gear-wheel G from the wheel D, as shown in Fig. 2; then by turning said shaft A the gear-wheel F is revolved to the right or left, as the case may be, and the said shutter E thereby opened or closed or adjusted at any intermediate point. In order to lock the said shutter D in any position, open or closed, or in any intermediate position, the shaft A is drawn in, thus engaging the bevel-gear G with the wheel D, thus holding the latter, so that it cannot turn, between the wheels F G; then a latch or hook, H, which is pivoted on the inside of the window-casing B, is dropped on the shaft A, as shown in Fig. 3, between its shoulder *a* and said window-frame B, and thereby said shaft A is prevented from moving longitudinally to disengage the wheel G from the wheel D. On throwing up the said latch H, as shown in Fig. 2, the shaft A can be moved longitudinally and the shutter B be unlocked and turned in any direction, as set forth.

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

In combination with the latch H and a bevel-wheel arranged on the eye of a shutter-hinge, a sliding shaft carrying two bevel-pinions, one gearing constantly with the bevel-wheel and the other whenever it is desired to lock the shutter in any desired position, as described.

EDMUND TAYLOR LUKENS.

Witnesses:

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