

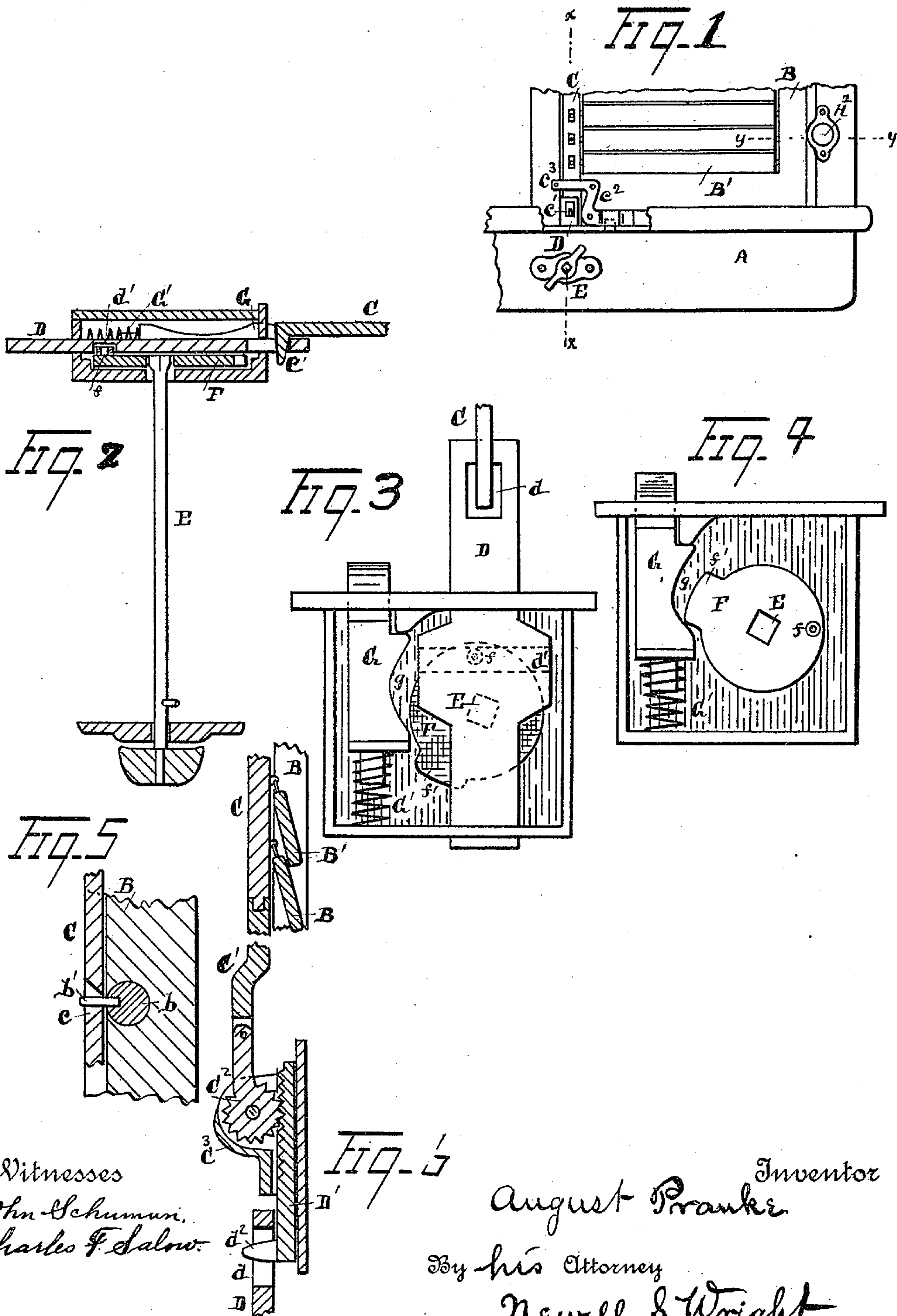
(No Model.)

A. PRANKE.

COMBINED SHUTTER FASTENER AND SLAT OPERATOR.

No. 438,425.

Patented Oct. 14, 1890.



Witnesses
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UNITED STATES PATENT OFFICE.

AUGUST PRANKE, OF DETROIT, MICHIGAN.

COMBINED SHUTTER-FASTENER AND SLAT-OPERATOR.

SPECIFICATION forming part of Letters Patent No. 438,425, dated October 14, 1890.

Application filed March 28, 1890. Serial No. 345,640. (No model.)

To all whom it may concern:

Be it known that I, AUGUST PRANKE, a citizen of the United States, residing at Detroit, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Mechanism for Operating Shutters or Blinds; and I 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, which form a part of this specification.

My invention relates to certain new and useful improvements in mechanism for operating shutters or blinds; and it consists of the devices and appliances with their combinations and arrangements, as hereinafter specified and claimed, and more fully illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation showing features of my invention. Fig. 2 is a cross-section on the line $x x$, Fig. 1. Fig. 3 is a view in detail of the locking device and slat-operating device. Fig. 4 is a view similar to Fig. 3 with the latch removed. Fig. 5 is a vertical cross-section at the end of one of the slats. Fig. 6 is a vertical section illustrating a modification.

My object contemplates means for opening and closing the slats of a blind from within without the necessity of removing a screen or raising a window. With this mechanism I also provide means for locking and unlocking the shutter or blind also from within and preferably simultaneous with the operation of the slats. These objects I secure as follows: A represents a window-casing, and B is a shutter or blind. B' denotes the slats of a blind constructed with a spindle end b , journaled in the frame of the blind in the ordinary manner.

C represents a connecting-rod uniting the several slats and by which they are simultaneously operated. I do not limit myself to any particular manner of engaging the slats with said bar. It may be done in the usual manner hitherto employed, or where new blinds are to be manufactured and provided with my improved operating mechanism the bar may lie at the ends of the slats instead

of at the middle, as hitherto common. In this case the slats may each be provided with an engaging pin b' , extended at right angles to the length of the slat, the connecting-bar C being recessed, as shown at c , to receive the same. At its lower end the said connecting-rod is provided with a spur or shoulder c' to engage a vertically-reciprocating latch D, which may be recessed, as shown at d , to receive said shoulder.

To operate the latch, I provide an arm E, extended through the window-casing to the interior of the building, and engaged at its outer end with a cam F, provided with a roller-arm f , engaged in a lateral recess d' on the face of the latch and shown in dotted lines, Fig. 4, as well as in Fig. 3. The roller-arm f being connected eccentrically upon the cam, it will be obvious that the latch will be reciprocated as the cam is rotated.

G denotes the locking-latch provided with a spring G' , whereby it is self-retracting, the upper end of the locking-latch engaging the blind in any suitable manner. I construct the side of the locking-latch with a recess, as shown at g , and the cam F with a shoulder f' to engage in said recess to operate the lock in withdrawing it from the blind to permit its being opened, the spring retracting the latch. It will be seen that the blind is thus unlocked and the slats turned simultaneously, if desired. By providing for a proper reciprocation of the operating-arm E it is evident that it may readily be disengaged with the cam, so that the slats will also be locked, when desired, in a given position. Thus they may be closed and locked so as not to be opened from outside.

Where it is desired to engage the operating mechanism above described with the customary connecting-rod on blinds already constructed, said rod may be suitably connected with the reciprocating latch D in any proper manner. Thus, as shown in Fig. 7, an auxiliary sliding latch D', provided with a spur d^2 answering to the spur c' , may be employed to engage the latch D. With the connecting-rod C is engaged a stem C', provided with a toothed segment C², jointly connected therewith, over which may be located a housing C³. The auxiliary latch D' is toothed at its

upper end in the nature of a rack-bar, as shown, to mesh with said segment. By this means it will be seen that the connecting-rod on the slats may be readily operated.

5 To engage the locking-latch, the blind may be provided with a suitable plate c^2 , which may also be extended to form a guide for the connecting-rod, as shown at c^3 .

What I claim as my invention is—

10 The combination, with the latch D and lock-

ing-latch G, of a cam engaged to operate said latches, and means to rotate said cam, substantially as set forth.

In testimony whereof I sign this specification in the presence of two witnesses.

AUGUST PRANKE.

Witnesses:

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