

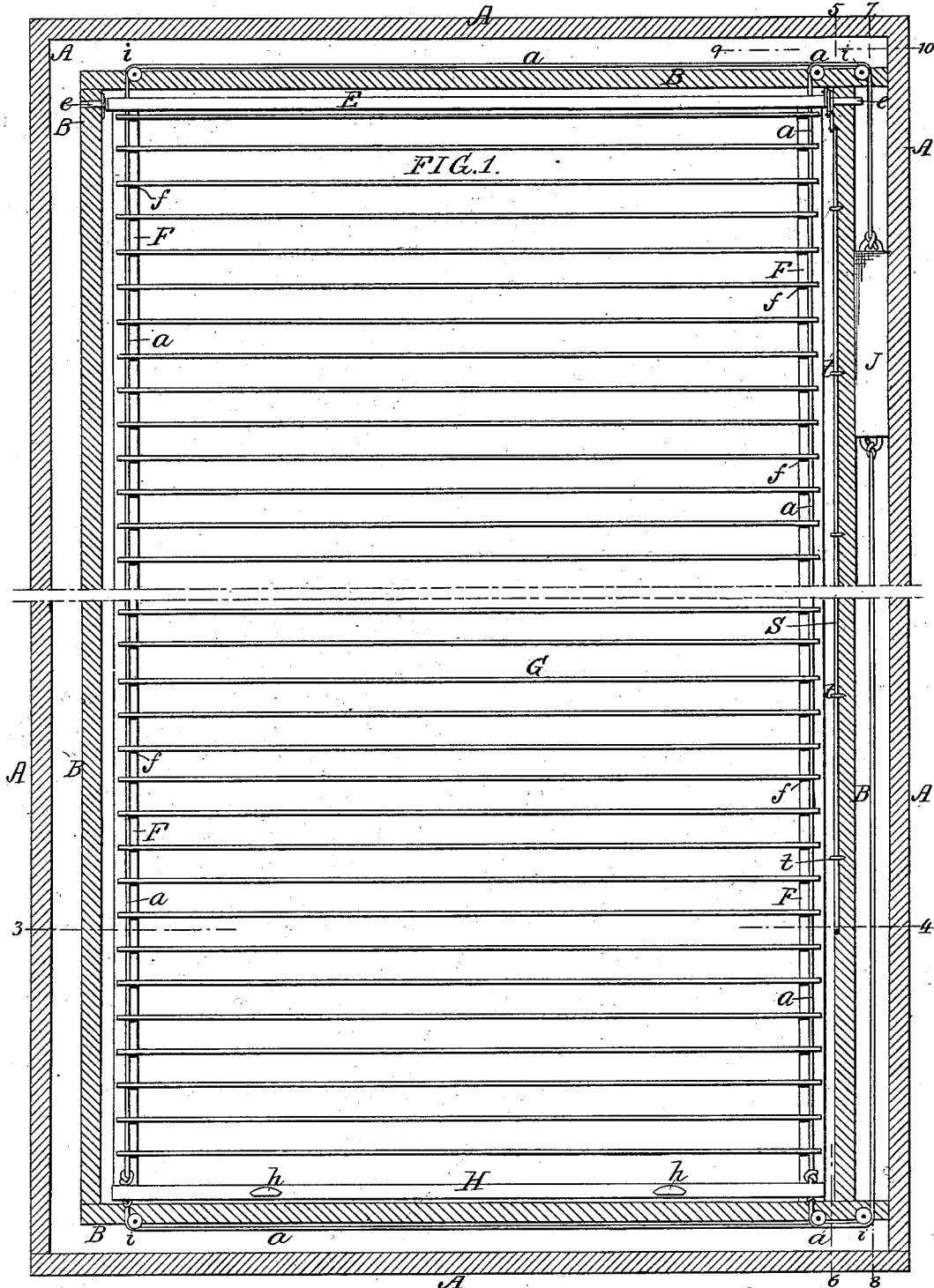
(No Model.)

2 Sheets—Sheet 1.

J. S. SMITH.
VENETIAN BLIND.

No. 279,835.

Patented June 19, 1883.



WITNESSES:

Harry Grury
James J. Johns

INVENTOR:

John S. Smith
by his Attorneys
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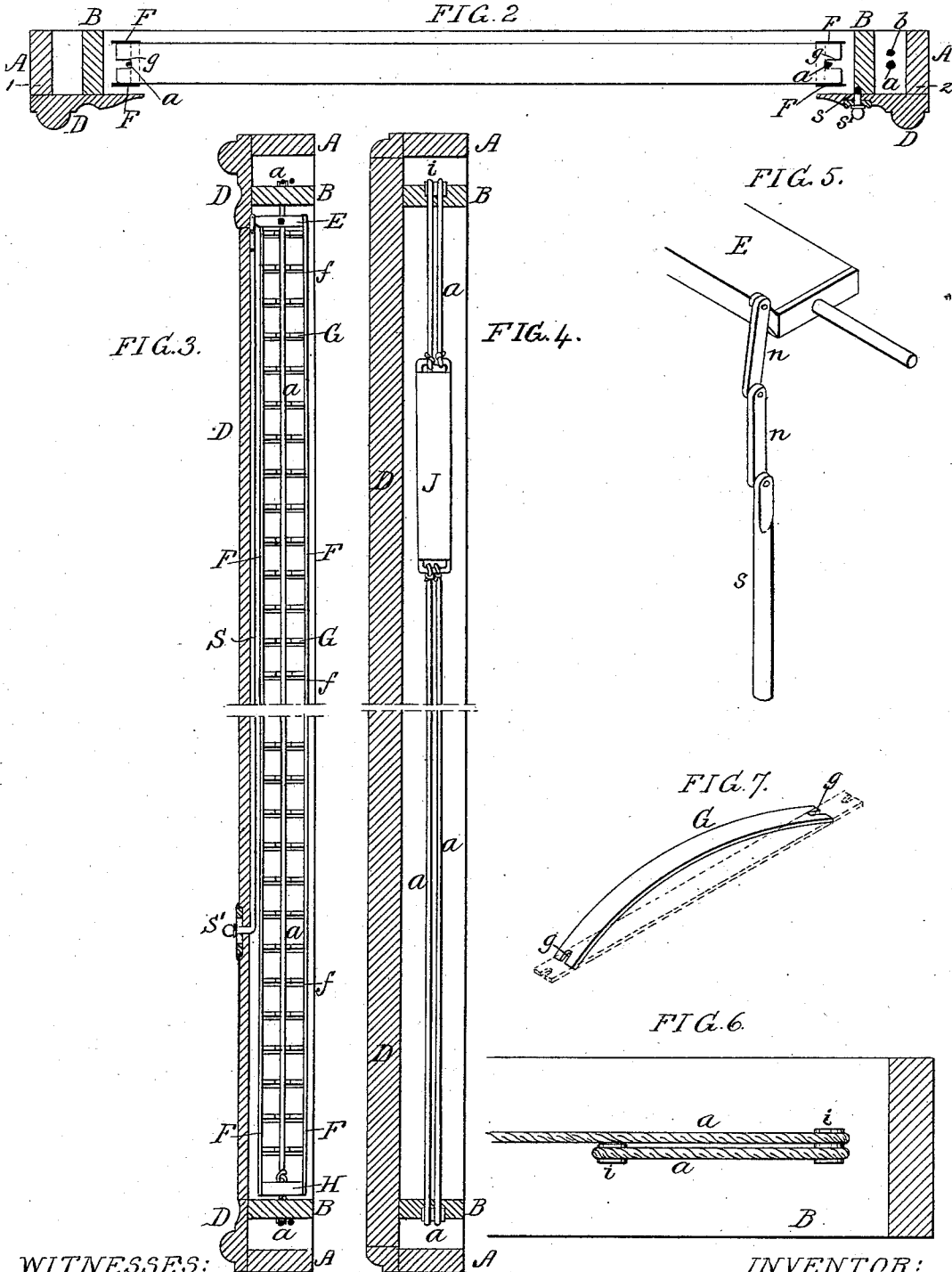
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WITNESSES:

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James J. Tobin

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UNITED STATES PATENT OFFICE.

JOHN S. SMITH, OF PHILADELPHIA, PENNSYLVANIA.

VENETIAN BLIND.

SPECIFICATION forming part of Letters Patent No. 279,835, dated June 19, 1883.

Application filed March 26, 1883. (No model.)

To all whom it may concern:

Be it known that I, JOHN S. SMITH, a citizen of the United States, and a resident of Philadelphia, Pennsylvania, have invented certain Improvements in Venetian Blinds, of which the following is a specification.

The main object of my invention is to so construct a Venetian blind that it can be raised or lowered by operating the bottom slat, and will be self-supporting in any position to which it is adjusted.

Another object of my invention is to facilitate the erection of the blind and the introduction and replacing of the slats. These objects I attain as described hereinafter, reference being had to the accompanying drawings, in which—

Figure 1, Sheet 1, is a vertical section on the line 1 2, Fig. 2, of a window-frame with my improved Venetian blind; Fig. 2, Sheet 2, a sectional plan on the line 3 4, Fig. 1; Fig. 3, a section on the line 5 6, Fig. 1; Fig. 4, a section on the line 7 8, Fig. 1; Fig. 5, a detached perspective view; Fig. 6, a section drawn to an enlarged scale on the line 9 10, Fig. 1, showing the arrangement of cords; and Fig. 7, a perspective view, illustrating the manner of introducing the slats into position.

A is the outside casing of a window-frame, B the inside casing, and D the molding, the whole forming the frame of a window inside the sash-frame. The uppermost slat, E, from which the other slats of the blind are suspended, is provided with journals *eee*, adapted to bearings in the frame B, as illustrated in Fig. 1. From the slat E are suspended the usual tapes, F, provided at regular intervals with cross-tapes *f'*, on which are supported the slats G of the blind. Between each pair of tapes passes a vertical cord, *a*, said cords passing through openings in the top and bottom frames B and over pulleys *i i*, and having their opposite ends attached to a counterweight, J, which is adapted to slide vertically in the hollow side frame on the movement of these cords. The cords *a* are also connected to the opposite ends of the bottom slat, H, Fig. 1, of the blind, which is preferably somewhat heavier than the other slats, and is also provided with handles *h*, by which it can be raised

or lowered. By raising the bottom slat it will carry with it one slat, G, after another, and when raised to the desired height the counterbalance-weight J will retain said slats in the position to which they have been adjusted, and the tying of the usual lifting-cords is thus dispensed with.

In order to facilitate the erection of the blind and the introduction and replacing of the slats, I make notches *g g* in the ends of the slats G to receive the lifting-cords *a*. It will thus be seen that the slats can be readily removed and replaced by bending them, as illustrated in Fig. 7, and allowing them to straighten out and spring into position.

The tilting of the slats to different angles to admit more or less light to the room is accomplished by means of a vertical rod, *s*, connected by links *n* to the top pivoted slat, E, this vertical rod *s* being held in position and guided by means of staples *t*, Fig. 1, and having at its lower end a handle, *s'*, projecting through a slotted plate in the side molding of the window-frame. (See Figs. 2 and 3.) By raising or lowering the handle *s'*, the slat E, and consequently all the slats depending from it, are tilted to the angle required.

I claim as my invention—

1. The combination of slats of a Venetian blind with lifting-cords connected to the bottom slat, and a counterbalance-weight to which opposite ends of the lifting-cords are connected, substantially as described.

2. The combination of the slats of a Venetian blind, with lifting-cords *a*, connected to the bottom slat, H, pulleys *i*, and counterbalance-weight J, to which the cords are connected, substantially as specified.

3. The combination of the suspending-tapes of a Venetian blind and lifting-cords *a* with flexible cross-slats having notched ends to receive the lifting-cords, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN S. SMITH.

Witnesses:

HARRY L. ASHENFELTER,
HARRY SMITH.