A. W. MARTIN.

VENTILATING DEVICE FOR USE IN CONNECTION WITH WINDOWS.

APPLICATION FILED MAY 28, 1909.

955,178.

Patented Apr. 19, 1910.

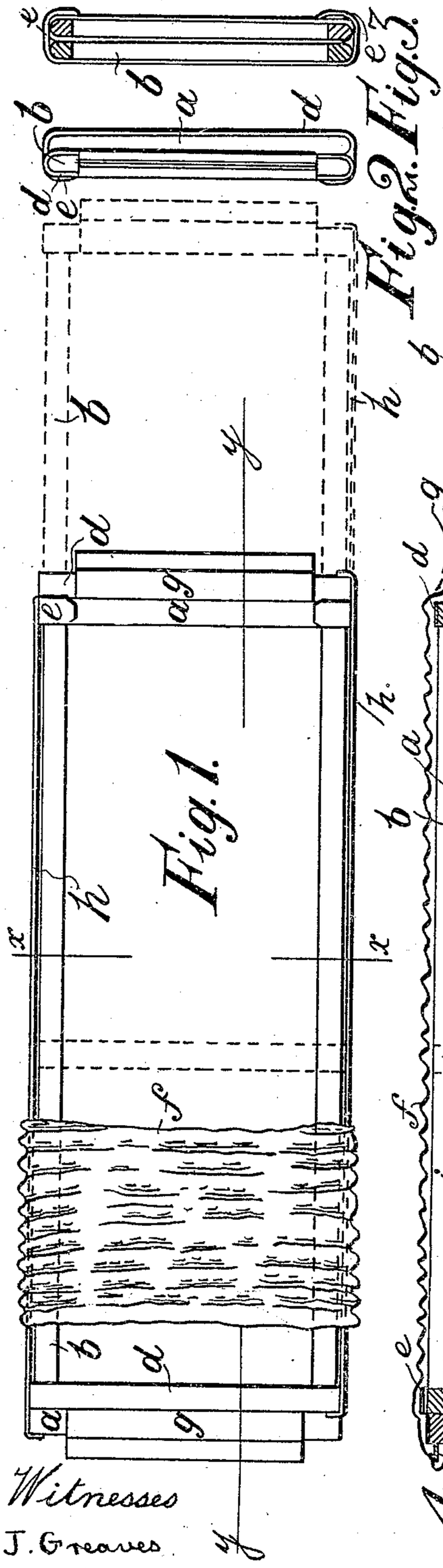

Fig. 1.

Fig. 2.

Fig. 4.

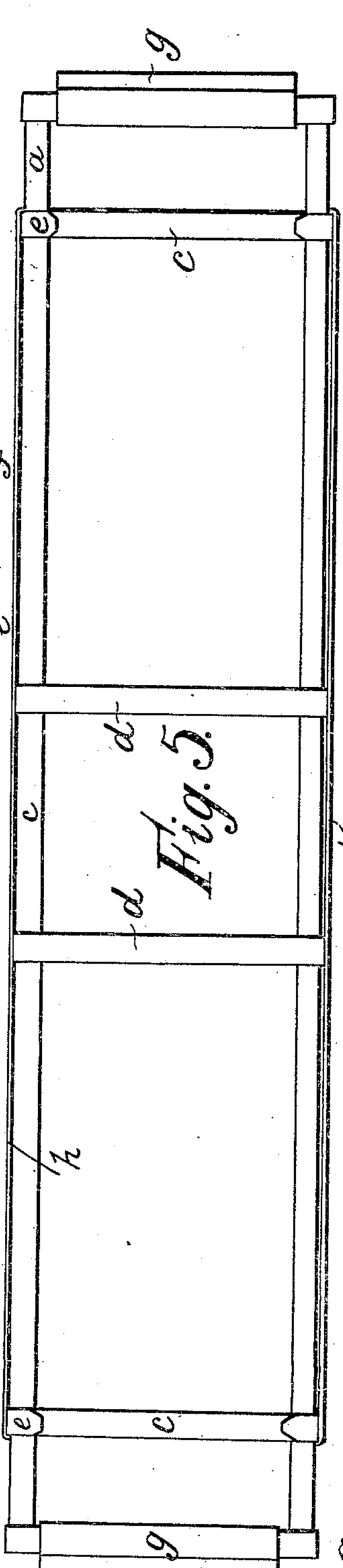

Fig. 5.

Fig. 6.

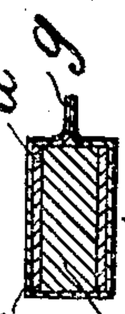

Fig. 7.

Witnesses

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UNITED STATES PATENT OFFICE.

ARTHUR WYNDHAM MARTIN, OF GORTON, MANCHESTER, ENGLAND.

VENTILATING DEVICE FOR USE IN CONNECTION WITH WINDOWS.

955,178. Specification of Letters Patent. **Patented Apr. 19, 1910.**

Application filed May 28, 1909. Serial No. 499,012.

To all whom it may concern:

Be it known that I, ARTHUR WYNDHAM MARTIN, a subject of the King of Great Britain and Ireland, and resident of Gorton, Manchester, in the county of Lancaster, England, surgeon, and whose post-office address is Gorebrook House, Hyde Road, Gorton, Manchester, have invented an Improved Ventilating Device for Use in Connection with Windows, of which the following is a specification.

This invention relates to a new or improved device for enabling rooms or similar places to be ventilated at their window portions when the latter are partially open and at the same time to keep out of the room dust and other matter of a like kind.

My invention consists essentially of telescopic or slidable skeleton frames, two or more such frames being employed slidable upon or in one another, and a fabric of muslin or similar material entirely inclosing the frames loosely without interfering with their slidable action, and capable of being easily removed therefrom.

My invention will be fully described with reference to the accompanying drawings in which,

Figure 1 is a front elevation of an apparatus constructed in accordance with my invention and consisting of two slidable parts. Fig. 2 is an end view of the frame with the guide-strips and muslin curtain omitted. Fig. 3 is a cross-section, taken on line *x*—*x* in Fig. 1, with the guide-strips and curtain omitted. Fig. 4 is a section taken on the line *y*—*y* in Fig. 1. Fig. 5 front elevation of a device consisting of three slidable parts with the fabric removed, Fig. 6 plan of same and Fig. 7 sectional plan of one of the vertical arms of the device, to an enlarged scale.

The hereinbefore mentioned drawings indicate devices to be applied to windows having sashes under or above which they may be placed and the sash allowed to rest in each case on the ventilator or, in case of a top sash, be forced against it.

The device consists of an open frame of wood formed in two parts *a* and *b* as shown in Figs. 1 to 4 or with an additional central frame *c* as shown in Figs. 5 and 6. Each frame is composed of light wooden laths or laths of other suitable material braced together at the ends by metal plates *d* which are bent over and secured to the wooden frame so making a quite rigid construction. The plates *d* at one end of each frame are bent over in the form of a hook *e* so as to embrace both longitudinal bars at the top and bottom of the two frames while enabling them to be moved one on the other. The plates *d* and hooks *e* also act as stops to prevent the frames being entirely disconnected from each other. Over the skeleton framework I loosely place a sheet or tube of muslin or similar lightly woven fabric *f* which will allow of air passing through, but will at the same time arrest dirt, dust etc. and prevent it passing through the fabric with the air. The ends of the fabric are attached to the vertical bars of the frames *a* and *b*, that is to say one end of the fabric is attached to one end of one frame *a* and the other to the other end of the frame *b* as shown clearly in Fig. 4. The attachment may be by any suitable means, but I prefer to secure to the aforesaid vertical bars strips of fabric *g* so that the muslin fabric can be connected in such a manner as to be capable of easy removal for washing or exchanging. The fabric is sufficiently long to enable it to extend to the full length of the two frames when the latter are opened out to their fullest extent. A tape or thin strip of other suitable material *h* may be secured at the top edge of the frame *a* and bottom edge of the frame *b* to enable the fabric *f* to open out freely.

Figs. 5 and 6 show a device consisting of similar frames *a* and *b* to those already described and a central frame *c*, the former being slidable on the latter. In other respects the construction is the same as that already described.

In both constructions of apparatus the fabric *f* forms two layers with the frame between, leaving a chamber *i* between such layers which allows the air to expand a little after passing through one layer and before passing through the next into or out of the room.

A device of the character described is used as follows:—The bottom sash of the window is lifted up and the frames are extended to the full width of the window frame, their outer ends resting in the vertical grooves of the latter. The sash is then pulled down and allowed to rest on the device. Or the latter may be placed at the upper end of the top sash which may be forced against it. The device therefore forms a perfect

screen when in position and a filter for the incoming air, the arrangement breaking the flow of the latter to a gentle current.

I would have it understood that I do not confine myself to the exact details of the invention as such may be modified without departing from its essential features.

What I claim as my invention and desire to secure by Letters Patent is:—

In a ventilating screen, the combination, with a frame formed of slidable sections having longitudinal bars at their upper and lower portions, of upper and lower guide-strips formed of narrow bands of textile material secured to the ends of the frame sections and arranged at a little distance from the longitudinal bars of the said sections, and a curtain of thin textile material inclosing the said frame and carried by the said guide-strips.

In testimony whereof I have hereunto set my hand in the presence of two witnesses.

ARTHUR WYNDHAM MARTIN.

Witnesses:

WILLIAM H. TAYLOR,

FRANK HART.