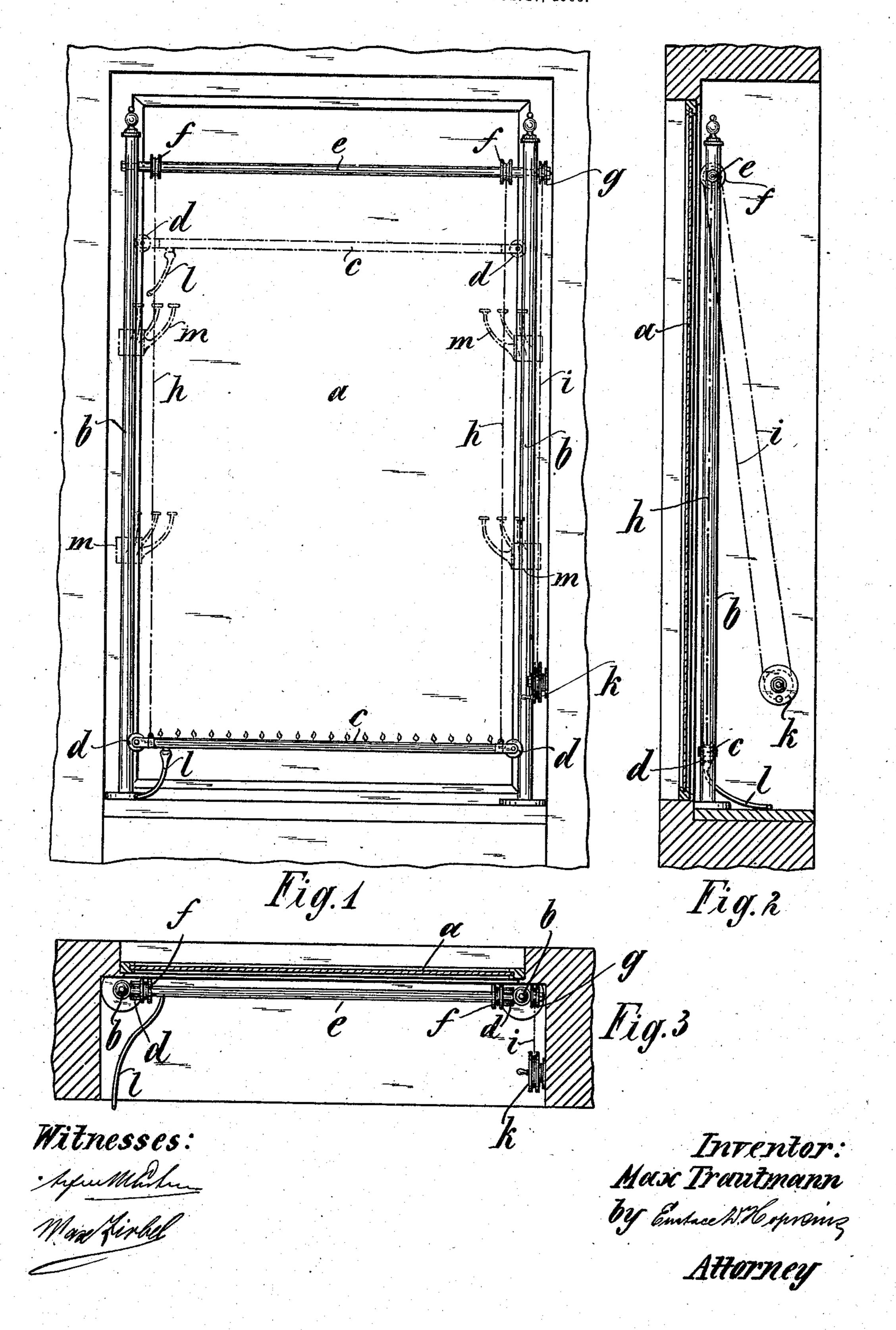
## M. TRAUTMANN. DEVICE FOR THAWING WINDOWS. APPLICATION FILED OCT. 17, 1903.



## UNITED STATES PATENT OFFICE.

MAX TRAUTMANN, OF LEIPZIG-NEUSTADT, GERMANY.

## DEVICE FOR THAWING WINDOWS.

No. 840,595.

Specification of Letters Patent.

Patented Jan. 8, 1907.

October 17, 1903. Serial No. 177,465.

To all whom it may concern:

Beitknown that I, Max Trautmann, a subject of the King of Saxony, residing at Leipzig - Neustadt, Saxony, Germany, have invented a certain new and useful Improved Device for Thawing Windows, of which the following is a full, clear, and exact description.

The present invention relates to devices for thawing frozen windows; and it consists, essentially, of a horizontal tube of jet-flames and means for moving the same up and down across the window and for adjusting it in any desired height across the window, as hereinafter set forth, and particularly pointed out in the claims.

In order to render the present specification easily intelligible, reference is had to the accompanying drawings, in which similar letters of reference denote similar parts throughout the several views.

Figure 1 is a front elevation of a show-window with the device applied to the same. Fig. 2 is a vertical section through the window, showing the device partly in side elevation and partly in section; and Fig. 3 is a sectional plan of the same.

Parallel vertical guide-rods b b are provided one at each side of the window, and between these a tube having a row of jet-holes c is adapted to slide vertically up and down, being guided on the said rods by means of guide-rolls d. The tube c is advantageously connected up to a gas-pipe system by means of a flexible pipe l, which should be sufficiently long to allow of the free movement of the tube up and down substantially the whole height of the window.

Supported in suitable bearings at the upper ends of the rods b b is a spindle e, carrying rolls ff, one at each side of the window, and to the rolls are attached flexible members, such as h h, the lower ends of which are attached one at each side of the tube c. Outside one of the guide-rods b the spindle e has a guide-roll a fixed thereto, over which an endless band i runs, connecting the said roll to a lower guide-roll k, having a crank-handle attached thereto adapted to be turned by

hand, and thus by winding up the cords or so chains hh on the rolls ff to raise the jet-tube c to any desired position across the window, as will be readily understood.

In summer-time the guide-rods b b may be employed for supporting stands for the exhibition of articles, as indicated in dotted lines in Fig. 1 of the drawings.

I claim as my invention—

1. A device for thawing windows, consisting of a horizontal tube having jet-holes 60 along its length adapted to be mounted horizontally across the window, means for guiding the said tube vertically and means for adjusting it at any desired height on the window.

2. A device for thawing windows consisting of a horizontal tube having jet-holes along its length and adapted to be mounted horizontally across the window, means for feeding gas to the said tube, lateral vertical 70 guide-rods at each side of the window and means for guiding the said tube between the said rods and means for adjusting the same at any position vertically on the window.

3. A device for thawing windows consist- 75 ing of a horizontal tube adapted to be mounted horizontally across the window and having jet-holes along its length a flexible connection to connect the same to a gas-feed, guide-rolls at each end of the said tube, verti- 80 cal guide-rods located one at each side of the window on which said rolls run, a spindle mounted at the top of the window and carrying rolls at each end, flexible members attached at one end to the jet-tube and at the 85 other each to one of said rolls, an upper pulley at one end of said spindle and a lower crank-pulley at the lower end of the window and an endless band passing over the said pulley and crank-pulley for the purpose substan- 90 tially as described.

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

## MAX TRAUTMANN.

Witnesses:

MORITZ SPREER, RUDOLPH FRICKE.