

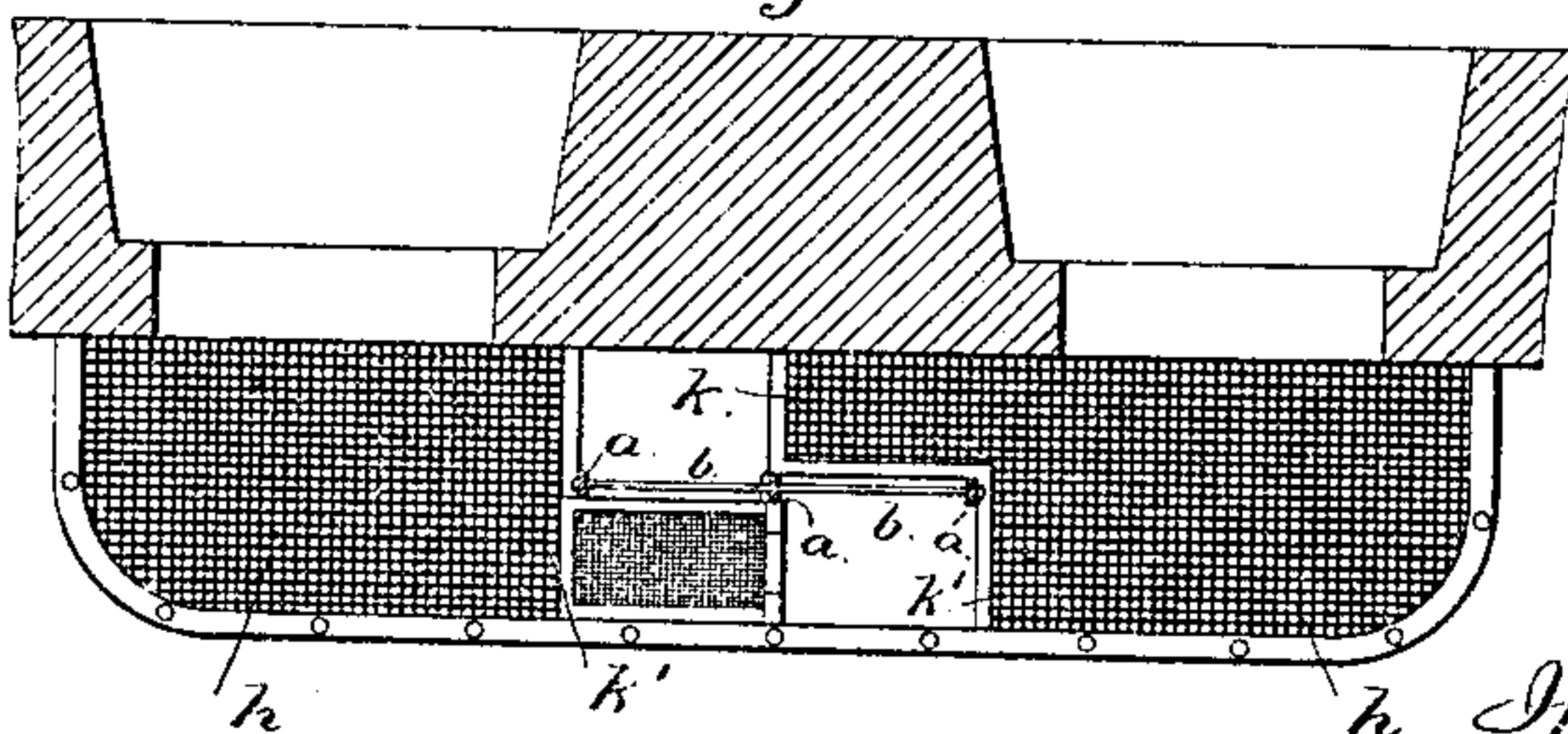
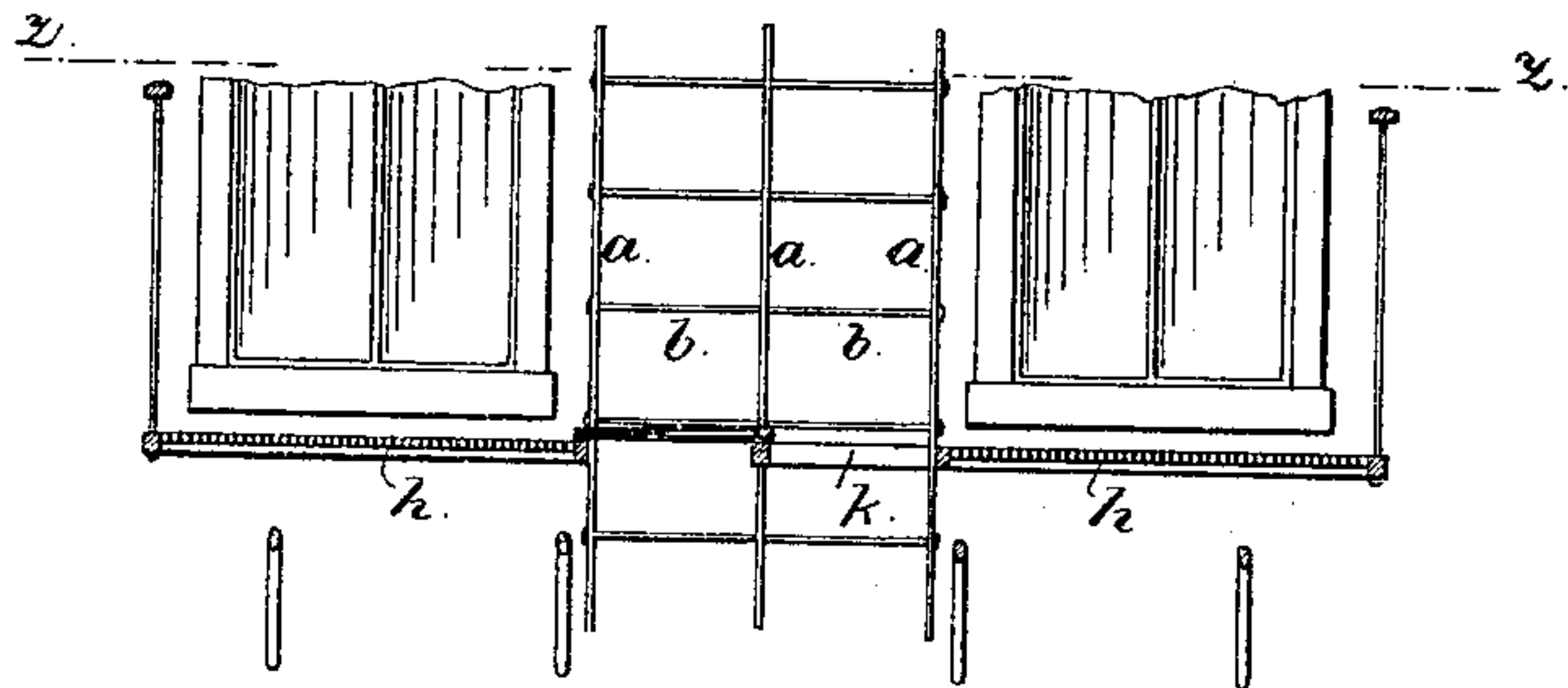
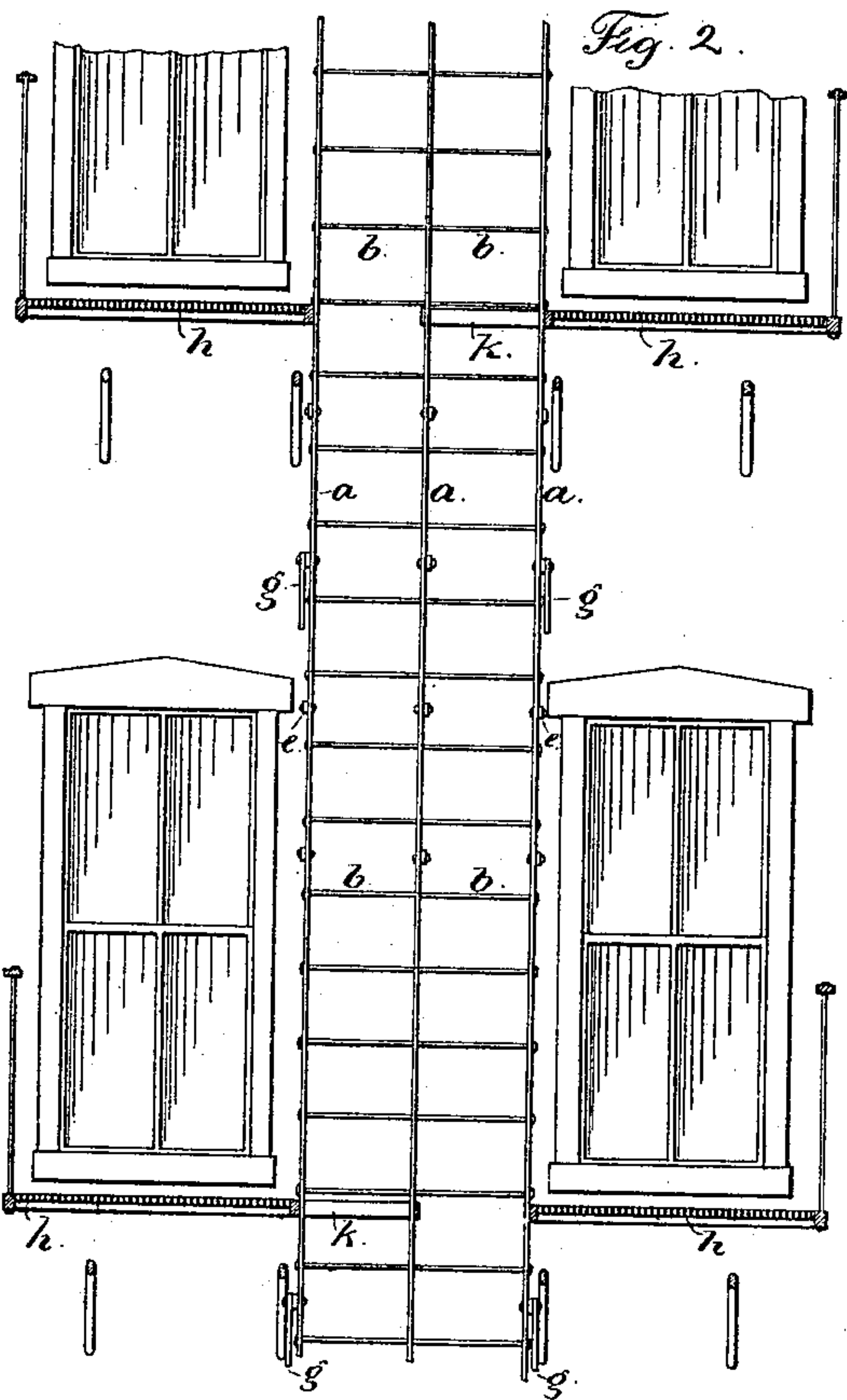
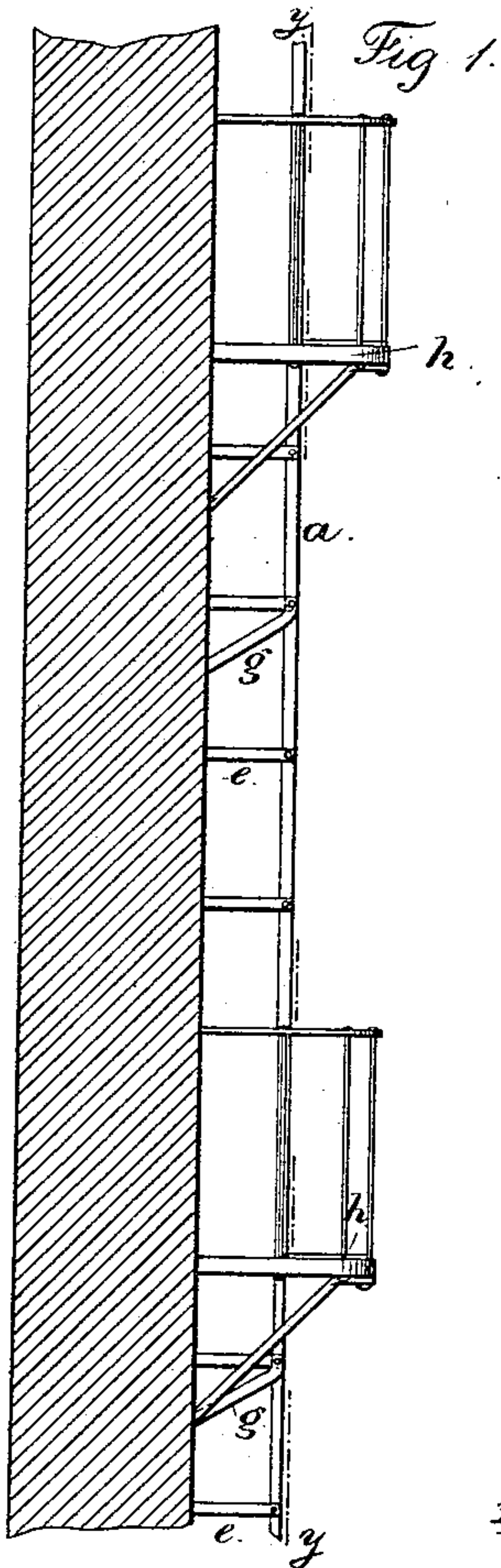
(No Model.)

J. B. WICKERSHAM.

FIRE ESCAPE.

No. 266,570.

Patented Oct. 24, 1882.



Witnesses

Chas. H. Smith
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Att'y

UNITED STATES PATENT OFFICE.

JOHN B. WICKERSHAM, OF PHILADELPHIA, PENNSYLVANIA.

FIRE-ESCAPE.

SPECIFICATION forming part of Letters Patent No. 266,570, dated October 24, 1882.

Application filed February 10, 1882. (No model.)

To all whom it may concern:

Be it known that I, JOHN B. WICKERSHAM, of Philadelphia, in the State of Pennsylvania, have invented an Improvement in Fire-Escapes, of which the following is a specification.

This invention relates to that class of fire-escapes in which the ladder is vertical and parallel, or nearly so, to the surface of the wall or backing against which the back of the person may rest when descending such fire-escape. This feature in itself does not constitute the present invention. I combine with the ladder of the aforesaid character guards extending from the building to the ladder, formed of bars at such distances apart as to prevent a person falling out laterally in case of becoming momentarily unconscious or nervous while descending such ladder, thereby affording an additional protection and giving firemen opportunity to climb from one support to the other outside the fire-escape without interfering with the descent of persons from the burning building. Such guards may be of any suitable material; and I construct the balcony in such a manner that it forms a landing that will arrest the fall of a child or small person, and will form a resting-place at each story, so that a person, in descending on one part of the ladder, is obliged to step over to the other part of the ladder at each balcony.

In the drawings, Figure 1 is a vertical section of the part of a building and an elevation of the ladder. Fig. 2 is a section at the line *y y* of Fig. 1. Fig. 3 is a sectional plan of the ladders at the line *z z*, and Fig. 4 is a perspective view.

The ladders are formed of iron bars *a*, with cross rails or rungs *b*, and said ladders may be single or formed double, as shown, by the use of three bars *a a a*, one at each edge and one in the middle of the ladder. The ladder is placed vertically, or nearly so, and parallel with the building, at about twenty inches from the surface, so that the person, in descending, will be supported with the back against the building, even if faintness, nervousness, or temporary unconsciousness comes over such person. The rungs, when made of metal, may be coated with paper or other non-conductor to prevent injury by cold, such material being rendered water-proof. The ladders are supported by iron stays *c c*, each of which is fastened at one

end to the building and at the other end to the vertical bar *a* of the ladder, and there are inclined braces at *g* to stiffen the structure and aid in supporting the ladder.

The balconies *h* extend from the window or windows upon each floor where the fire-escape is applied, and the fire-escape is preferably placed between the windows, so that the surface of the building will form a support to the back of the person descending the ladder, and the guards *c* prevent the person falling out laterally, if presence of mind is momentarily lost or the person slips. I provide on the balconies resting-places at *k*. They are extensions of the floors of the balconies alternately from first one side, then the other, of the balconies, so that a person descending the ladder at the right side of the central bar *a* is arrested by the balcony, and is obliged to step off the same to the left upon the other range of rungs and then descend to the next story, and so on. These resting-places lessen the risk of accident and divide the well-hole into sections, instead of being open from top to bottom.

In addition to the foregoing provisions for the use of fire-escapes by the inmates of a building, I make provisions for firemen and others engaged in the rescue of the inmates and in saving goods and extinguishing the fire, by extending the balcony outside the fire-escape, as seen at *k'*, and providing an opening in the floor of the balcony sufficient for a person to pass through the balcony in going up or down upon the outside of the ladders, and this opening may have a hinged flap that can be turned back when it is desired to use the outside of the ladders. I also use, in connection with the double ladder, the resting-places at the respective balconies, extending alternately from the right and left, so that one side of the ladder has a resting-place at one floor or balcony, and the other side of the ladder has its resting-place at the next balcony, and so on. The resting-places that extend partially across the ladder or ladders may be placed nearer together, if desired, and may be separate from the balconies.

I claim as my invention—

1. In combination with the ladder having two ranges of rungs and placed parallel, or nearly so, with the surface of the building, the resting-places *k*, between the ladder and

the building, and extending in from the balcony half the width of the ladder, substantially as set forth.

2. The combination, with a ladder placed
5 vertically, or nearly so, of a backing that is parallel with the ladder and in such close proximity to the same as to form a support for the back of the person descending such ladder, and braces or guards between the edges of the
10 ladder and the building to prevent a person falling out laterally, substantially as specified.

3. The combination, with a ladder placed vertically, or nearly so, of a backing that is

parallel with the ladder and in such close proximity to the same as to form a support for the
15 back of the person descending such ladder, a balcony extending outside the ladder, and having an opening through it to allow for passing up or down the outside of the ladder, as well as the inside, substantially as set forth. 20

Signed by me this 4th day of February, A.
D. 1882.

J. B. WICKERSHAM.

Witnesses:

GEO. T. PINCKNEY,
CHAS. H. SMITH.