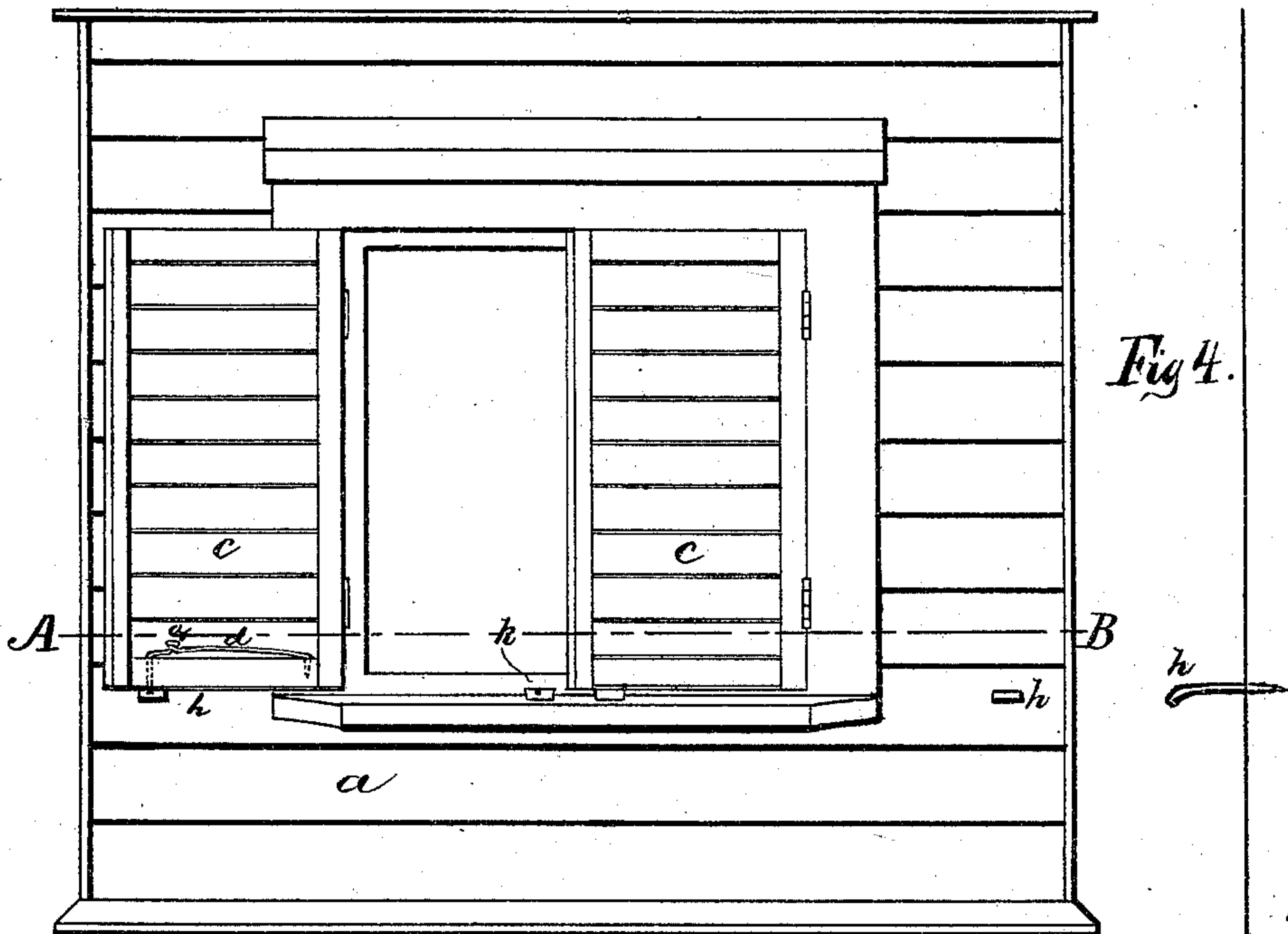


A. J. PALMBERG.  
Shutter-Fastenings.

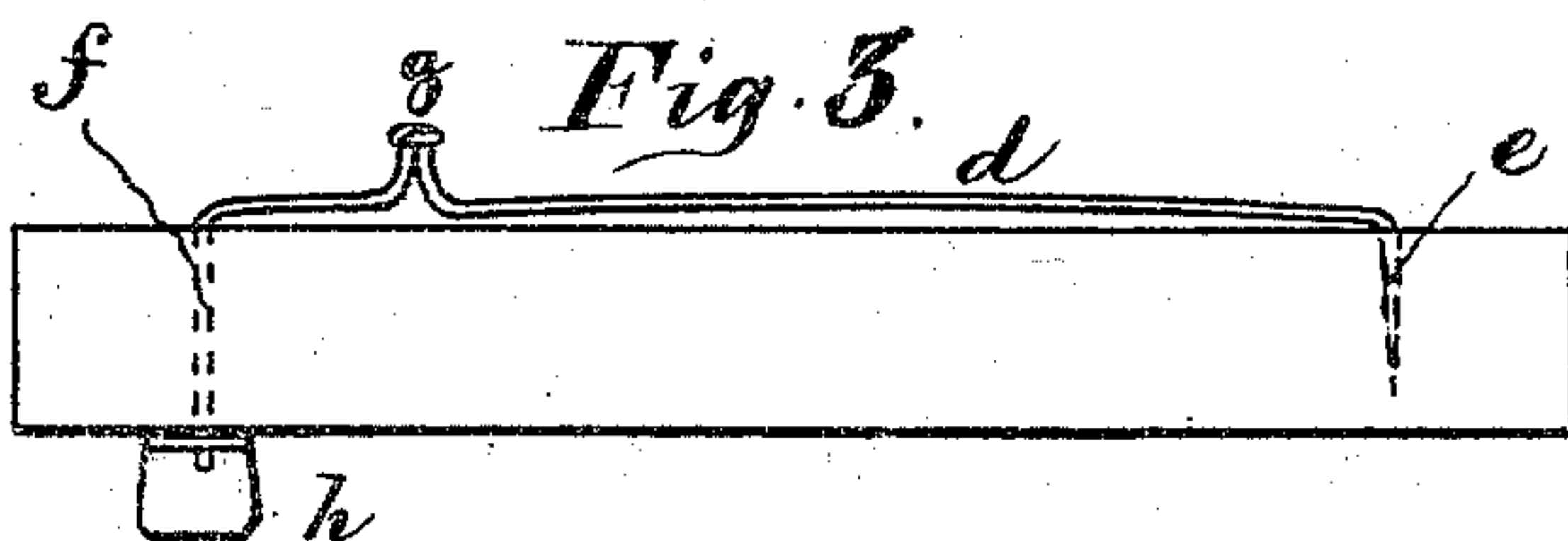
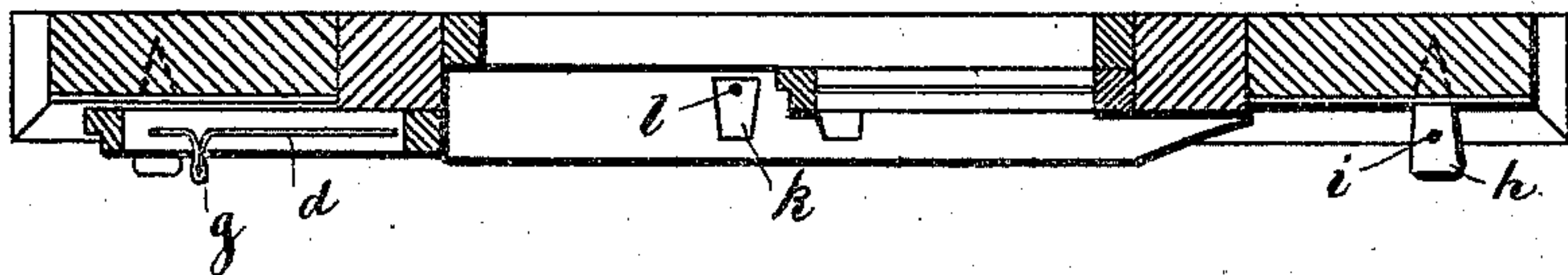
No. 143,460.

Patented Oct. 7, 1873.

*Fig 1.*



*Fig 2*



Witnesses:  
George C. Phelps.  
Horace M. Sprout

Inventor:  
Andreas J. Palmberg  
by Arvan Fredén  
attys.

# UNITED STATES PATENT OFFICE.

ANDREAS JOHANSON PALMBERG, OF BOSTON, MASSACHUSETTS, ASSIGNOR  
TO CHARLES S. HICKS, OF SAME PLACE.

## IMPROVEMENT IN SHUTTER-FASTENINGS.

Specification forming part of Letters Patent No. **143,460**, dated October 7, 1873; application filed August 29, 1873.

*To all whom it may concern:*

Be it known that I, ANDREAS JOHANSON PALMBERG, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Blind-Fasteners; and I do hereby 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to improvements in blind-fasteners, consisting in the employment of a metallic wire secured in one of its ends to the blind-frame, and its other end projecting as a bolt through a hole in the same frame, in combination with metallic plates, each provided with a hole for the insertion of the projecting or bolt end of the wire. One of these plates is attached to the wall, and one to the window-sill, in the usual manner.

On the drawing, Figure 1 represents a front elevation of a window, having one blind open and one closed. Fig. 2 represents a cross-section on the line A B, as shown in Fig. 1. Fig. 3 represents an enlarged view of the fastener, and Fig. 4 represents an end view of the metallic locking-plate attached to the wall.

Similar letters refer to similar parts wherever they occur on the drawing.

The objections to the ordinary blind-fasteners are, that the blinds are not attached firmly enough to prevent their rattling in windy weather, that they are liable to sag down in their outer ends, and that they can as readily be opened from without as from within, which in many cases is objectionable. To overcome these objections, and, at the same time, produce a simple and durable fastener, I construct my invention as follows:

*a* on the drawing represents an outer wall, and *b* a window. *c c'* represent a pair of ordinary blinds, hung in the usual manner—the blind *c* shown as open and the blind *c'* as closed. To the inner end of the lower

frame of the blind is attached a metallic wire, *d*, in a manner as shown at *e* in Fig. 3, said wire being for this purpose pointed and bent at a right angle and driven into the frame. The opposite end of the wire is also bent at a right angle and projects as a bolt loosely through a hole made in the lower frame-work of the blind, as fully shown at *f* in Fig. 3. The extreme end of the wire *f* projects a little below the under side of the blind. Between the ends *e* and *f* the wire *d* is doubled upon itself, so as to form a suitable handle, *g*, for the operation of the fastener. Into the wall *a* is driven a curved metallic plate, *h*, provided with a perforation, *i*, for the reception of the projecting end *f* to hold the blind firmly in position when opened. The object of the curved or inclined plate *h* is for the purpose of raising the blind slightly and supporting it in position while open. The wire *d* may be made linear or slightly curved between its ends, so as to obtain the proper elasticity for its operation. Another inclined metallic plate, *k*, provided with a perforation, *l*, is secured to the window-sill for the purpose of raising, supporting, and holding the blind firmly in place while closed.

From the above it will be seen that when the blind is to be opened all that is necessary is to raise the handle *g* of the wire *d*, so that the lower or bolt end *f* is released from the hole *l* in the metallic plate *k*. When the blind is swung open to its full extent the projection *f* is gradually raised by the inclined plate *h*, and, dropping as a bolt into the perforation *i*, secures and supports the blind firmly in place. When the blind is to be closed I relieve the wire *f* from the perforation *i* by raising the handle *g*, and when the wire *f* reaches the plate *k* it enters the perforation *l*, thus preventing the blind from being opened from without. The metal wire *d* may be made of any suitable shape or size that will give it the necessary elasticity.

Having thus fully described the nature, construction, and operation of my invention, I wish to secure by Letters Patent, and claim—

A blind-fastener consisting of a metallic



spring-wire, *d*, attached at one end to the blind, and provided with a handle, *g*, formed upon it, and having its other end, *f*, projecting as a bolt through a hole in the lower part of the blind, in combination with the perforated fastening-plates *h* and *k*, or their equivalents, as and for the purpose herein set forth and described.

In testimony that I claim the foregoing I have hereunto set my hand this 22d day of August, 1873.

ANDREAS JOHANSON PALMBERG.

Witnesses:

GEORGE E. PHELPS,  
ALBAN ANDRÉN.