(No Model.)

A. J. ARTHUR.

INSIDE BLIND.

No. 341,541. Patented May 11, 1886.

Fig. 1.

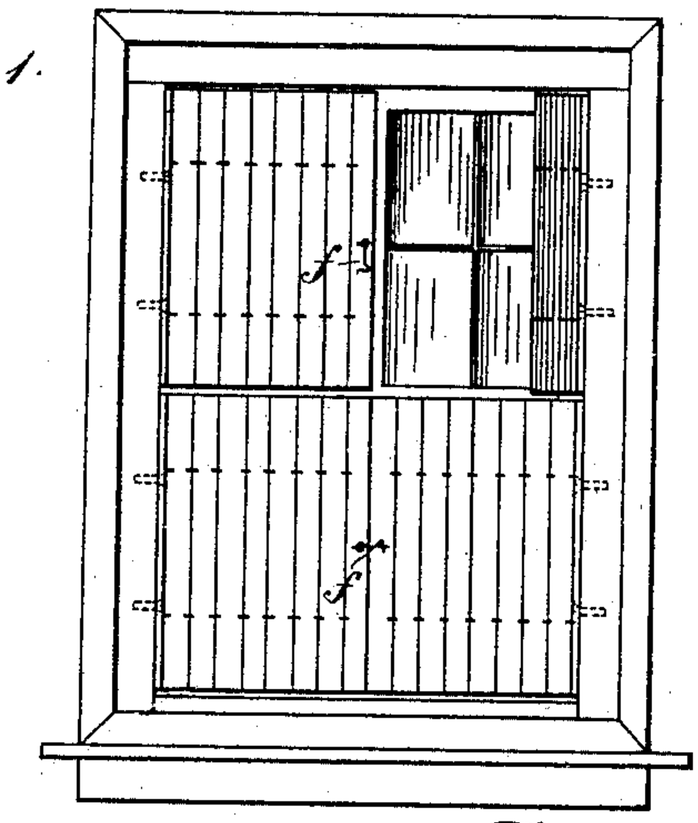


Fig. 3.

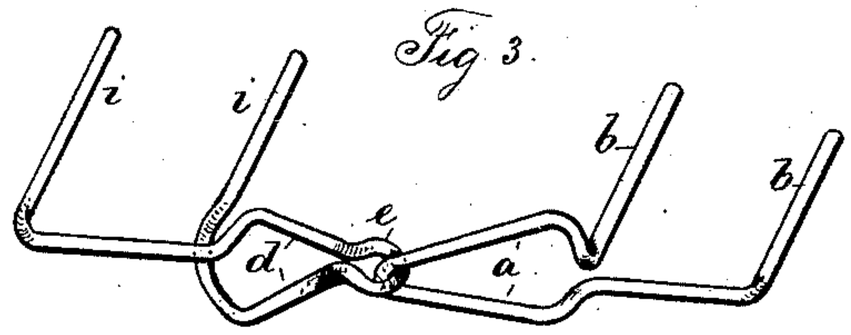


Fig. 4.

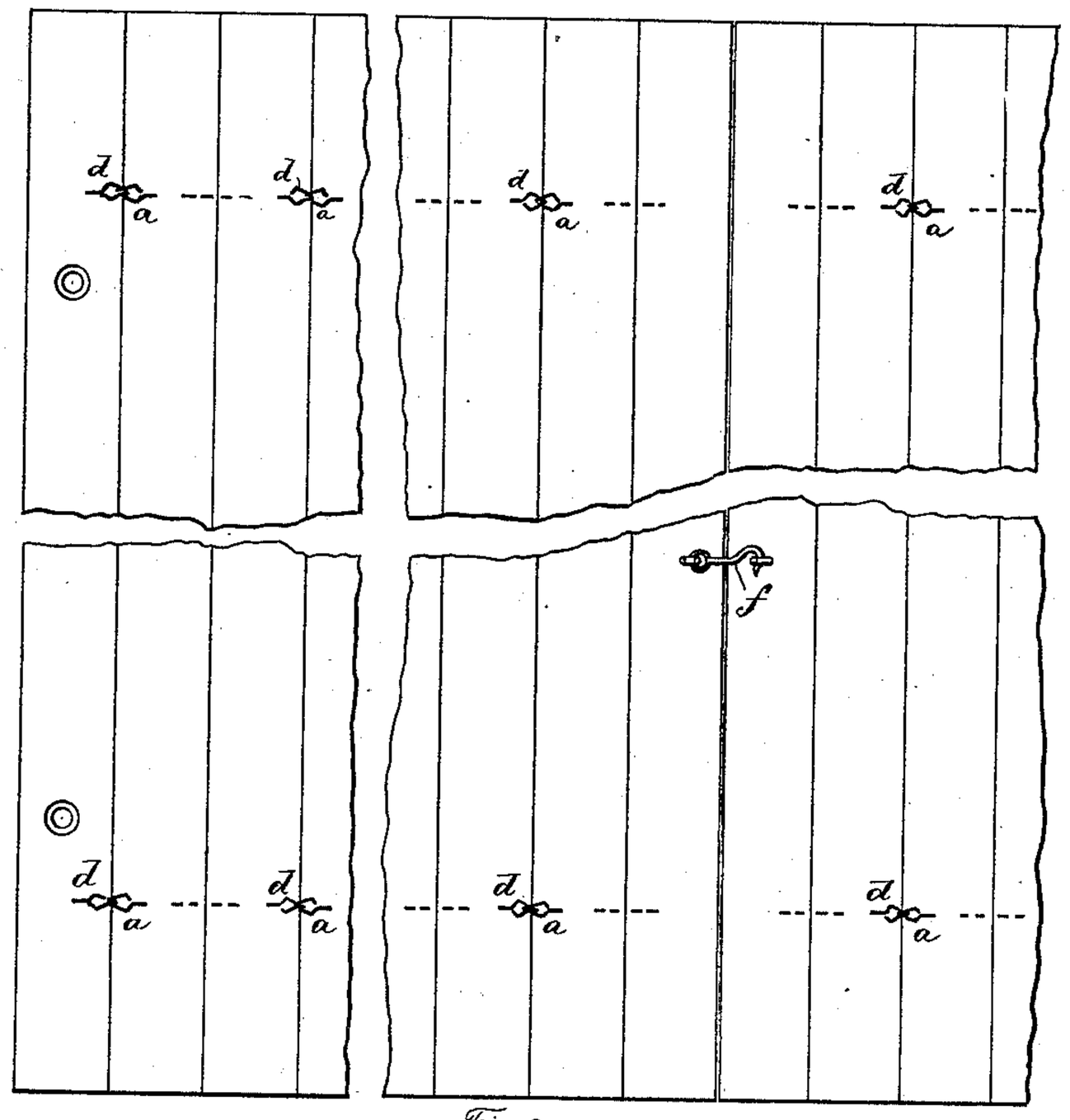


Fig. 5.

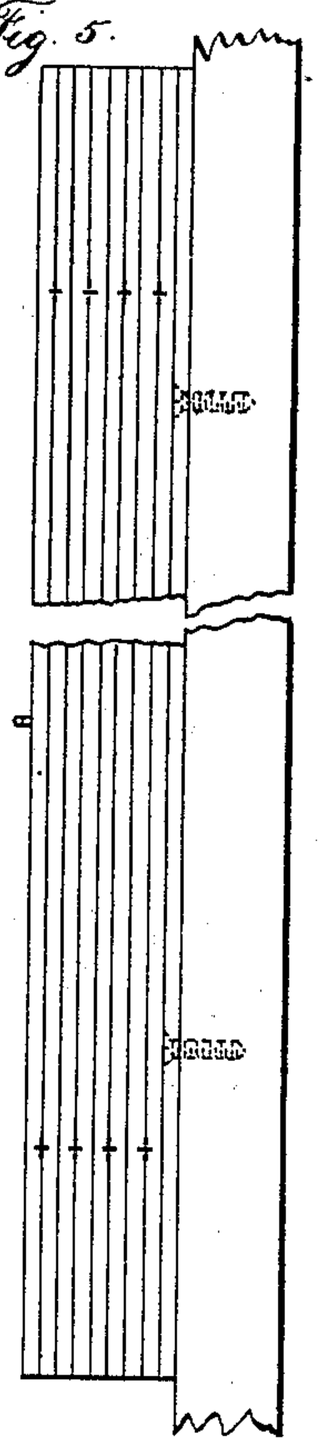
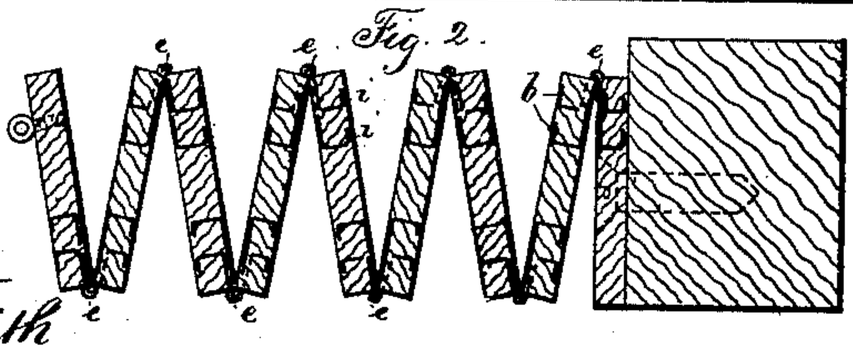


Fig. 2.



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Atty

UNITED STATES PATENT OFFICE.

ALEXANDER J. ARTHUR, OF FORT DODGE, IOWA.

INSIDE BLIND.

SPECIFICATION forming part of Letters Patent No. 341,541, dated May 11, 1886.

Application filed March 23, 1885. Serial No. 159,762. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER J. ARTHUR, of Fort Dodge, in the county of Webster and State of Iowa, have invented an Improvement in Inside Blinds for Windows, of which the following is a specification.

Inside blinds for windows have been made to fold back against the window-frames; but such blinds have occupied considerable space and project inwardly, so as to usually require recesses in the window-frame for their reception.

My improvement is made for simplifying the construction and lessening the cost of inside blinds, and rendering them compact when folded, so that they can be applied to ordinary window-frames, and do not require to be incased.

My improved blinds can be made use of in place of ordinary rolling window-shades, and are much more durable and convenient, and they can be opened or closed for modifying the quantity of light admitted into the apartment, and they can be ornamented to any desired extent. I make use of narrow slats of wood or other material hinged together at alternate edges, so that the slats will fold zigzag and shut close together and out of the way when they are not in use, and when distended they serve to exclude light. Usually the blinds for each window will be made in four sections, the slats being vertical, and each section of slats being fastened to the window frame or casing, so that when folded the blinds will be out of the way and project but little from such casing.

In the drawings, Figure 1 is an elevation of a window with the blinds applied thereto, one section being folded back and the other section opened out for use. Fig. 2 is a section in larger size of several of the blind-slats and the hinges connecting the same. Fig. 3 is a perspective view of one of the wire hinges. Fig. 4 is an elevation in larger size of part of two sections of blinds opened, and Fig. 5 is an edge view in larger size of one of these sections folded back and of part of the window-casing.

The slats are made of thin material, preferably wood, and one or more inches wide and about one-quarter of an inch thick, (more or less,) and of a length adapted to the size of the window to which they are to be applied. These wooden slats are united together by hinges, so that they fold backward and forward into zigzag positions as they are closed, and are self-sustaining from one edge. The number of slats made use of in each section will depend upon the width of the window. The hinges I employ are formed of wire. Each hinge is made with two sides or leaves, in one of which there in a bow, *a*, to lie flat upon the surface of the wood, and two points, *b b*, that pass through the wood and are turned up or clinched, as indicated in Fig. 2. The end of the bow or loop *a* is in line with one edge of the slat. The other leaf of the hinge is made with a bow, *d*, to lie flat upon the surface of the slat, and with an eye, *e*, at the outer end of the bow, that is bent up at right angles to the surface of the wood, and this leaf of the hinge has two penetrating points, *i i*, to pass through the slat and be clinched. It is to be understood that the bow *a* is to be threaded through the eye *e*, and that the two parts of the hinge are to be applied at the proper place to unite the slats together. There should be two, three, or more hinges between each two slats, and the hinges are applied at the outer edges of two adjacent slats, and similar hinges at the inner portions of the next two adjacent edges of the slats, as indicated in Fig. 2, so that the slats fold together in alternate or zigzag directions.

The blind-sections are made up in the manner before described, and are very light and inexpensive. These sections are to be made up of various sizes, so as to be easily fitted to different windows. When these blind-sections are put in place the outer slats or leaves of the respective sections are to be connected to the window frame or casing by screws or any other convenient device, and hooks may be made use of, as at *f*, to fasten the moving edges of the blinds together when they are closed. When the blinds are opened back the slats lie close against each other and occupy very little space, and can be secured by hooks. The surfaces of the blind-sections may be painted, varnished, or otherwise ornamented.

I do not claim horizontal slats having suspending-tapes and means for connecting such slats so that they open or fold in a zigzag form; neither do I claim shades or curtains folded back and forth, and placed vertically so as to open and close like a fan. In my improve-

ment the slats are rigid, and the hinges permanently connect the slats, so that the same form blinds that are easily closed or opened laterally of the window and are self-supporting.

By my improvement the blind is better adapted to dwellings, because it is much cheaper and lighter than the metal blinds, and occupies less space, and rays of light are admitted between the slats to a small extent, and the window-curtains are not liable to injury by contact with the wooden slats.

I claim as my invention—

1. The combination, in a folding blind-section, of thin, flat, narrow, vertical wooden slats and metallic hinges having penetrating points driven into the wooden slats at alternate sides, so that the slats will fold together laterally, and open out flat and edge to edge, substantially as specified.

2. The combination, with the thin narrow slats, of wire hinges having the bows *a d*, eye *e*, and penetrating points *b b i i*, substantially as set forth.

3. The two-part wire hinge made with the loop *a d*, penetrating points *b b i i*, and the eye *e* at the end of the loop *d*, for uniting the two parts of the hinge, in combination with the wooden slats that are connected by said wire hinges, substantially as set forth.

Signed by me this 16th day of March, A. D. 1885.

ALEX. J. ARTHUR.

Witnesses:

FRED. HUMPHREYS,
ANSEL HUMPHREYS.