

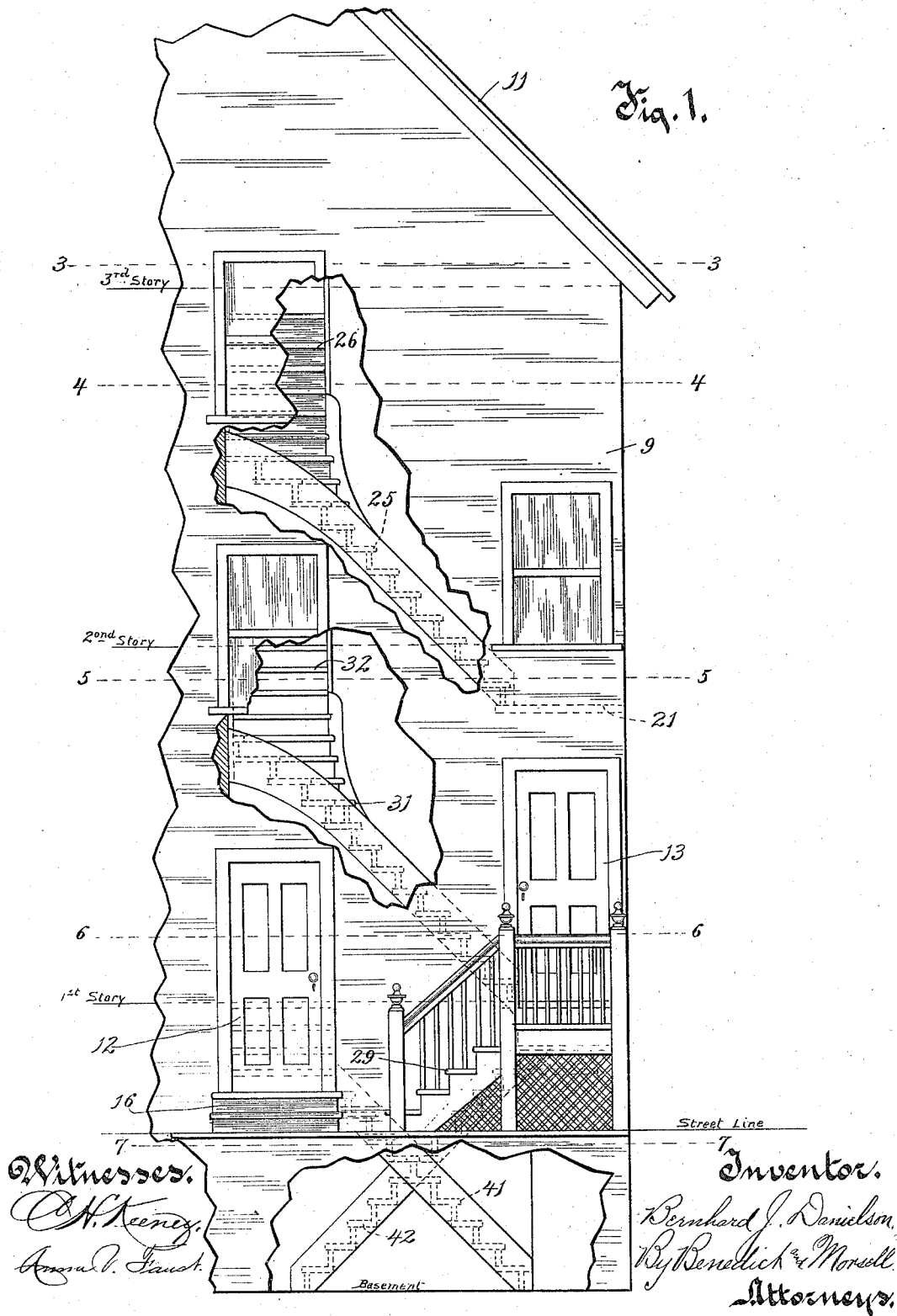
(No Model.)

5 Sheets—Sheet 1.

B. J. DANIELSON.  
STAIRWAY.

No. 579,137.

Patented Mar. 23, 1897.



(No Model.)

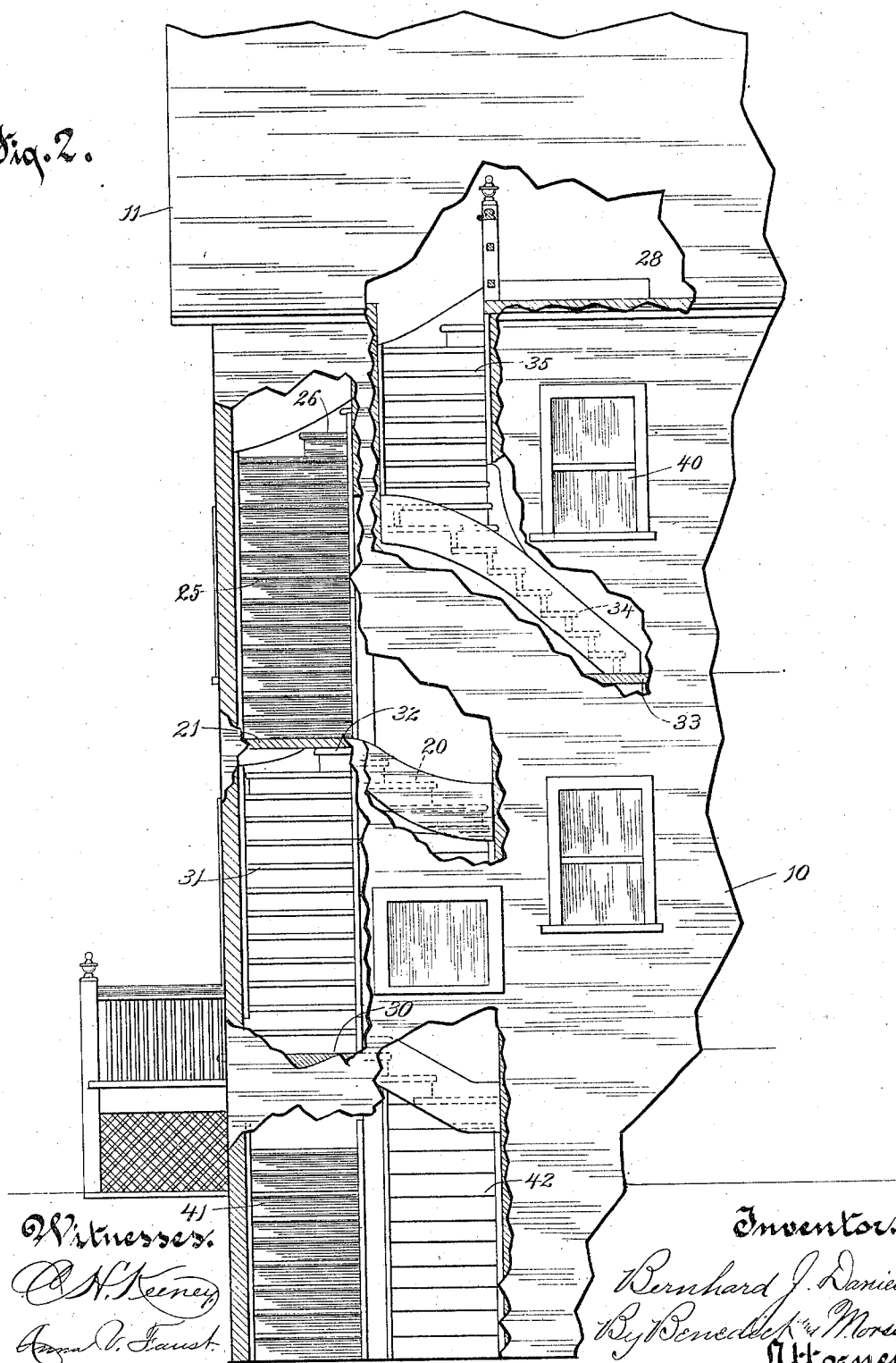
5 Sheets—Sheet 2.

B. J. DANIELSON.  
STAIRWAY.

No. 579,137.

Patented Mar. 23, 1897.

Fig. 2.



(No Model.)

5 Sheets—Sheet 3.

B. J. DANIELSON  
STAIRWAY.

No. 579,137.

Patented Mar. 23, 1897.

Fig. 3.

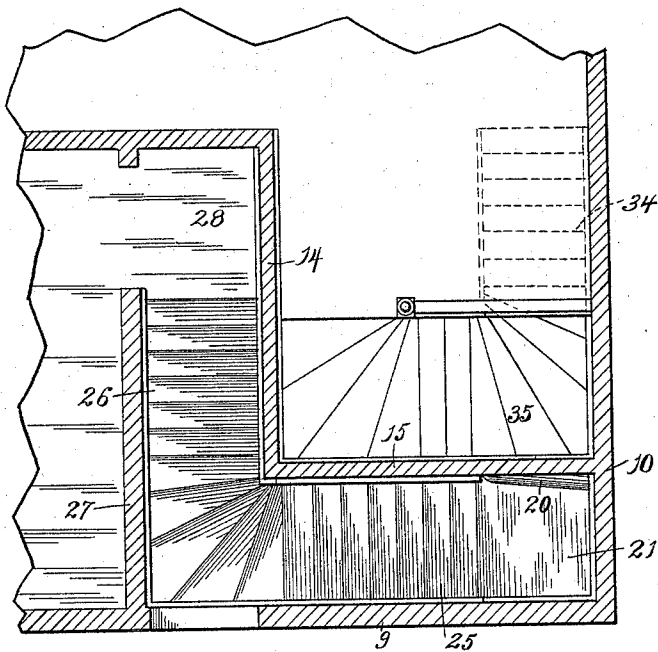
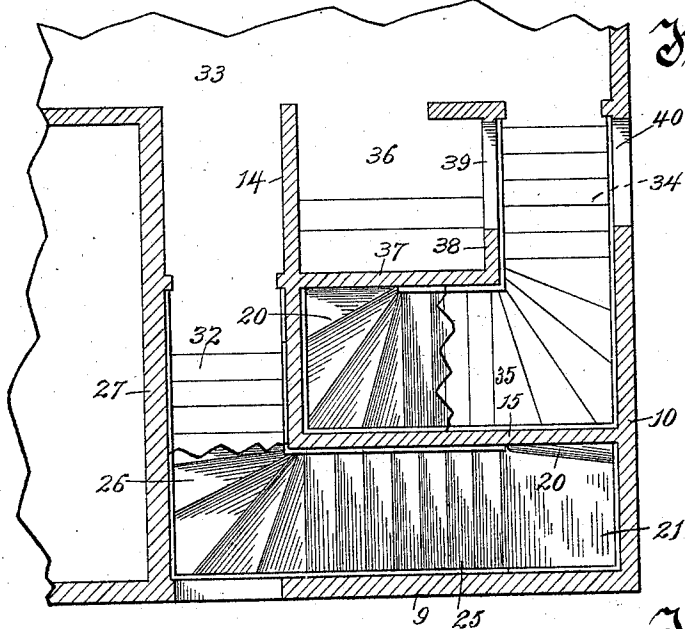


Fig. 4.



Witnesses:

*C. H. Keeney*  
*Anna C. Faust*

Inventor:

*Bernhard J. Danielson*  
By *Benedict and Mossell*  
Attorneys.

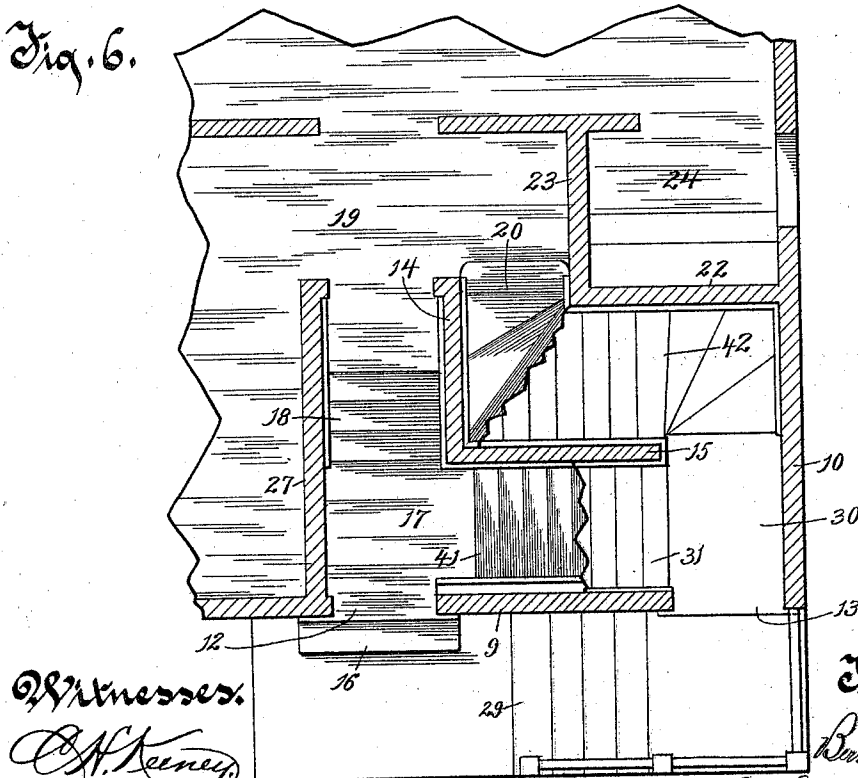
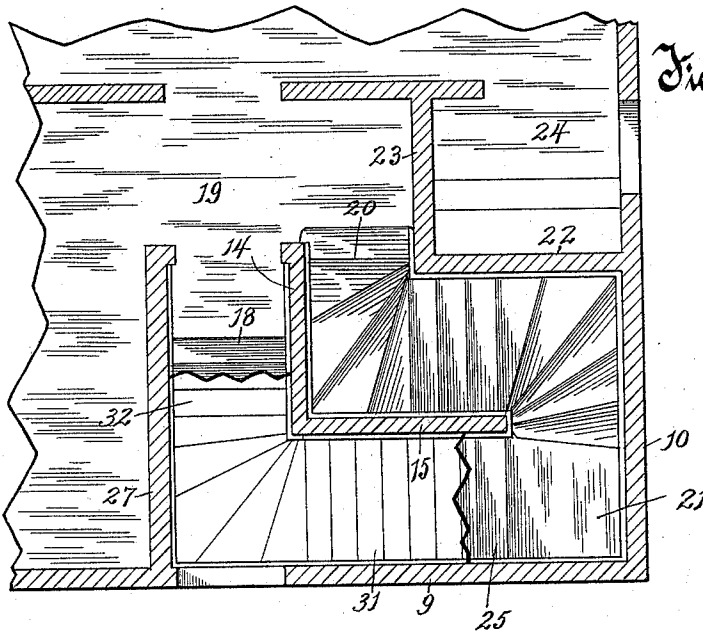
(No Model.)

5 Sheets—Sheet 4.

B. J. DANIELSON.  
STAIRWAY.

No. 579,137.

Patented Mar. 23, 1897.



*Witnesses.*

A. H. Keeney.  
Anna V. Faust.

*Inventor.*

Bernhard J. Danielson  
By Benedict <sup>per</sup> Morsell  
Attorneys.

B. J. DANIELSON.  
STAIRWAY.

No. 579,137.

Patented Mar. 23, 1897.

Fig. 7.

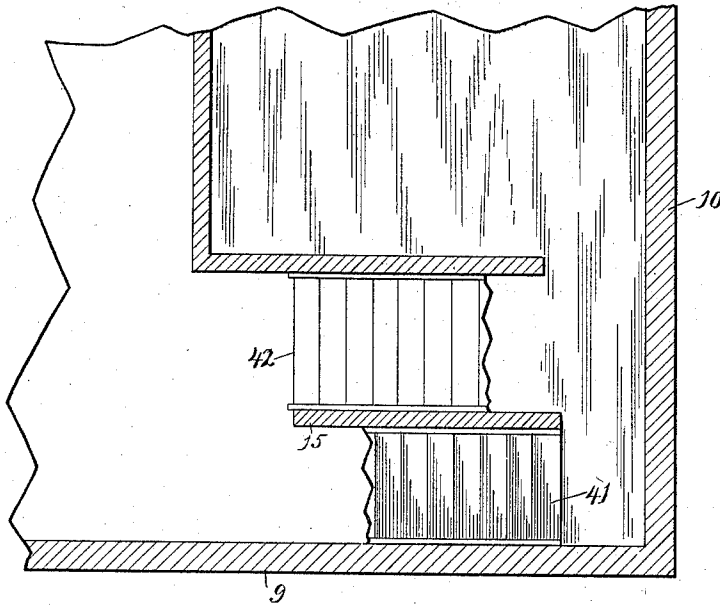
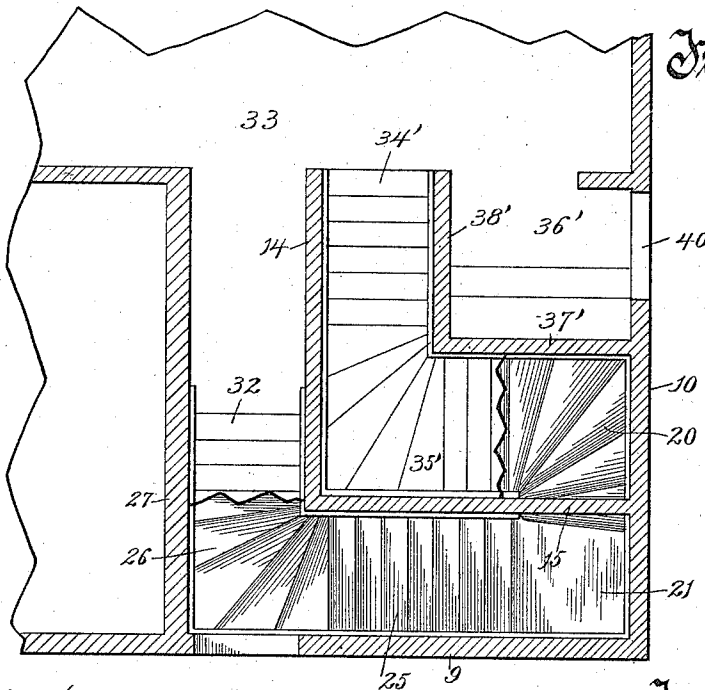


Fig. 8.



Witnesses.

*A. H. Keeney*  
*Anna V. Faust*

Inventor.

*Bernhard J. Danielson*  
*By Benedict & Morsell*  
*Attorneys.*

# UNITED STATES PATENT OFFICE.

BERNHARD J. DANIELSON, OF MILWAUKEE, WISCONSIN.

## STAIRWAY.

SPECIFICATION forming part of Letters Patent No. 579,137, dated March 23, 1897.

Application filed June 13, 1896. Serial No. 595,407. (No model.)

*To all whom it may concern:*

Be it known that I, BERNHARD J. DANIELSON, of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented a new and useful Improvement in Stairways, of which the following is a description, reference being had to the accompanying drawings, which are a part of this specification.

My invention has relation to improvements in stairways particularly adapted for flats or other buildings where it is desirable to have separate and distinct flights of stairs for the tenants or occupants of each flat or floor. These separate and distinct stairways are more especially intended for use at the rear of the house or building.

Buildings of the above character as now constructed are provided with a single common stairway at the rear. Separate and distinct stairways have not been generally adopted, owing to the great amount of space which they have heretofore necessarily required.

It is the object of my invention to provide a construction whereby a plurality of separate and distinct stairways may be employed with the necessity of taking up but very little more space than is now ordinarily required by a single stairway.

With the above primary object in view the invention consists of the devices and parts or their equivalents, as hereinafter more fully pointed out.

In the accompanying drawings, Figure 1 is a rear view of a fragment of a building or flat provided with my improvements, parts being broken away. Fig. 2 is a side elevation of Fig. 1 with parts broken away. Fig. 3 is a cross-section on the line 3 3 of Fig. 1. Fig. 4 is a cross-section on the line 4 4 of Fig. 1. Fig. 5 is a cross-section on the line 5 5 of Fig. 1. Fig. 6 is a cross-section on the line 6 6 of Fig. 1. Fig. 7 is a cross-section on the line 7 7 of Fig. 1; and Fig. 8 is a cross-section taken on the same plane as Fig. 4, but showing a slightly-modified construction.

Referring to the drawings, the numeral 9 indicates the rear of a house to which my improvements are applied, 10 the side wall, and 11 the roof thereof. The rear of the house is provided with two separate and distinct entrances 12 and 13, the former for the occu-

pants of the first story or flat and the latter for the occupants of the second story or flat.

An L-shaped or angular partition extends from the top to the first floor of the building, one wall of said partition being indicated by the numeral 14 and the other wall by the numeral 15. This latter wall is advisably extended down into the cellar or basement, as indicated in Fig. 7. One or more steps ascend from the street-line to the door 12, the doorway leading to a platform 17, Fig. 6. From this platform a flight of stairs 18 ascends to the first floor proper, indicated by the numeral 19. (See Figs. 5 and 6.) In order to clearly distinguish the different flights of stairs for the occupants of the first floor from the different flights of stairs for the occupants of the second floor, I have throughout the drawings shown the former in dark or heavy shade lines. From the first floor a series of steps 20 lead upwardly, (see Figs. 2, 4, 5, and 6,) said steps ascending upwardly in the angle of the walls 14 and 15 and terminating at a platform 21. (See Figs. 3, 4, and 5.)

If desired, a partition-wall 22 may be provided adjacent to the steps 20, and extending out from this partition parallel with the side wall 10 of the house may be provided another partition 23. The space 24 between this partition 23 and the side wall 10 is conveniently utilized as a closet, as shown in Figs. 5 and 6. The steps 20 are shown in Fig. 6 as broken away in order to disclose the steps below of the other flat. Extending upwardly from the platform 21 is a series of steps 25. Other steps 26, forming an extension of steps 25, extend upwardly therefrom at right angles thereto between the upper widened portion of wall 14 and an extra inwardly-extending wall 27. These latter steps finally lead to the top story or garret 28. In Figs. 4 and 5 the steps 26 are broken away, so as to disclose the steps below of the other flat, and in Fig. 5 the steps 25 are also shown broken away for a similar purpose.

The different flights of stairs for the upper story or second flat will now be referred to. Outside of the rear of the house is a flight of stairs 29, leading to the door 13. This door opens onto a platform 30. (See Figs. 2 and 6.) From this platform extends upwardly a

series of steps 31, (see Figs. 1, 2, 5, and 6,) said steps winding around at right angles and lying between the wall 14 of the L-shaped partition and the extra partition 27, as indicated at 32, (see Figs. 1, 4, and 5,) finally leading to the second story or upper flat, as indicated by 33. (See Fig. 4.) In Fig. 6 the steps 31 are shown as broken away to disclose one set of steps leading down to the cellar, and in Fig. 5 the steps 32 are broken away to show the steps 18 below. Extending upwardly from the second story are a series of steps 34. (See Figs. 2 and 4.) Another series of steps 35, forming a continuation of the steps 34, extend upwardly therefrom and at right angles thereto. (See Figs. 2, 3, and 4.) The steps 35 are disposed in the angle formed by the walls 14 and 15 and lead directly to that portion of the garret 28 which is reserved for the occupant of the second story or upper flat. The steps 35 are shown in Fig. 4 as broken away to disclose the steps 20 beneath.

On the second floor a closet-space 36 (see Fig. 4) may be provided. A partition 37, between which and the wall 15 the steps 35 are arranged, forms the back of this closet, while the widened upper portion of the wall 14 forms one side wall of the closet, and another partition 38, extending out from partition 37, forms the other side wall of said closet. This side wall 38 is provided with a window 39, which receives light from a window 40 opposite thereto in the side wall 10 of the building. In Fig. 8 is shown a slightly-modified form wherein instead of providing the closet 36 between the partition 14 and the partition 38 said closet (designated in Fig. 8 by the numeral 36') is formed between a partition 38' and the side wall 10 of the building. The closet being so located receives its light directly from the window 40. This arrangement necessitates the moving of the steps 34 (which in Fig. 8 are designated by 34') to the space between the upper widened portion of the wall 14 and the partition 38' and the steps 35 (in Fig. 8 denoted by 35') between the back piece 37' of the closet 36' and the wall 15. This modification shown in Fig. 8 is only adapted for flats or buildings which are built on the colonial style, having flat roofs. In buildings with slanting roofs, however, the arrangement of steps 34 and closet 36 shown in Fig. 4 is necessary.

The above description covers the stairs for both stories or flats, which extend from the first floor upwardly to the garret. It is also, of course, desirable to have separate and distinct steps for each flat leading down to the cellar or basement. The cellar-steps for the first floor are indicated by the numeral 41 and lead downwardly from the platform 17. (See Figs. 1, 2, and 7.) These steps are arranged between the wall 15 and the outer wall 9 of the building. The cellar-steps for the second-story flat are indicated by the numeral

42. (See Figs. 1, 2, 6, and 7.) These steps lead downwardly from the platform 30.

It will be seen from the above description that my invention presents a most convenient arrangement for the provision of separate and distinct stairways leading to different floors or different flats of a building, and that this arrangement is such that very little more space, if any, is required over the single stairway now ordinarily used. It will be further observed that the stairways are so disposed as to receive the full benefit of the light through the rear windows. It is of course obvious that the same principle can be carried out on a building constructed on a larger scale consisting of three, four, or more stories.

While my invention is perhaps better adapted for use at the rear of a building, yet it is not restricted to such application, as it might be used to advantage at other points where it is desirable to have separate and distinct stairways.

What I claim as my invention is—

1. The combination, of a building, an angular partition extending vertically from the first floor upwardly, a platform, a series of steps leading from said platform upwardly to the first floor, said steps arranged along the outer face of one wall of the angular partition, a series of steps arranged within the angle of the angular partition, and extending from the first floor upwardly to a platform, another series of steps leading from this platform and winding around the outer faces of the walls of the angular partition, and leading to a story above, another platform arranged in the first story, a series of steps ascending therefrom and leading to the second story, said steps adjacent to the outer faces of two walls of the angular partition, and a series of steps leading from the second story upwardly to an upper story, the upper portion of said steps arranged in the angle of the angular partition.

2. The combination, of a building, an angular partition therein extending from the first floor upwardly, a platform, a series of steps leading from said platform upwardly to the first floor, said steps arranged along the outer face of one wall of the angular partition, a series of steps arranged within the angle of the angular partition, and extending from the first floor upwardly to a platform, a vertical wall forming the side wall of the passage-way for these steps, and also forming a back wall for a closet, another partition extending outwardly from this back wall and forming one of the side walls of the closet, the other side wall of said closet being formed by the side wall of the building, another series of steps leading from the last-named platform and winding around the outer faces of the walls of the angular partition, and leading to the story above, another platform arranged in the first story, a series of steps ascending therefrom and leading to the second story, said

steps adjacent to the outer faces of two walls of the angular partition, and a series of steps leading from the second story upwardly to an upper story, the upper portion of said steps arranged in the angle of the angular partition.

3. The combination, of a building, an angular partition therein extending vertically from the first floor upwardly, a platform, a series of steps leading from said platform upwardly to the first floor, said steps arranged along the outer face of one wall of the angular partition, a series of steps arranged within the angle of the angular partition, and extending from the first floor upwardly to a platform, another series of steps leading from this platform and winding around the outer faces of the walls of the angular partition, and leading to a story above, another platform arranged in the first story, a series of steps ascending therefrom and leading to the second story, said steps adjacent to the outer faces of the walls of the angular partition, and a series of steps leading from the second story upwardly to an upper story, the upper portion of said steps arranged in the angle of the angular partition, and the space in the second story not taken up by this final series of steps being formed into a closet.

4. The combination, of a building, an angular partition extending vertically from the first floor upwardly, a platform, a series of

steps leading downwardly from said platform to the cellar or basement, a series of steps leading upwardly from said platform to the first floor, said steps arranged along the outer face of one wall of the angular partition, a series of steps arranged within the angle of the angular partition, and extending from the first floor upwardly to a platform, another series of steps leading from this platform and winding around the outer faces of the walls of the angular partition, and leading to a story above, another platform arranged in the first story, a series of steps descending therefrom and arranged against the inner side of a downwardly-extending portion of one of the walls of the angular partition, said steps leading to the cellar or basement, a series of steps ascending from this platform and leading to the second story, said steps adjacent to the outer faces of two walls of the angular partition, and a series of steps leading from the second story upwardly to an upper story, the upper portion of said steps arranged in the angle of the angular partition.

In testimony whereof I affix my signature in presence of two witnesses.

BERNHARD J. DANIELSON.

Witnesses:

ARTHUR L. MORSELL,  
ANNA V. FAUST.