

No. 725,179.

PATENTED APR. 14. 1903.

O. C. UEHLING.
STAIRWAY.

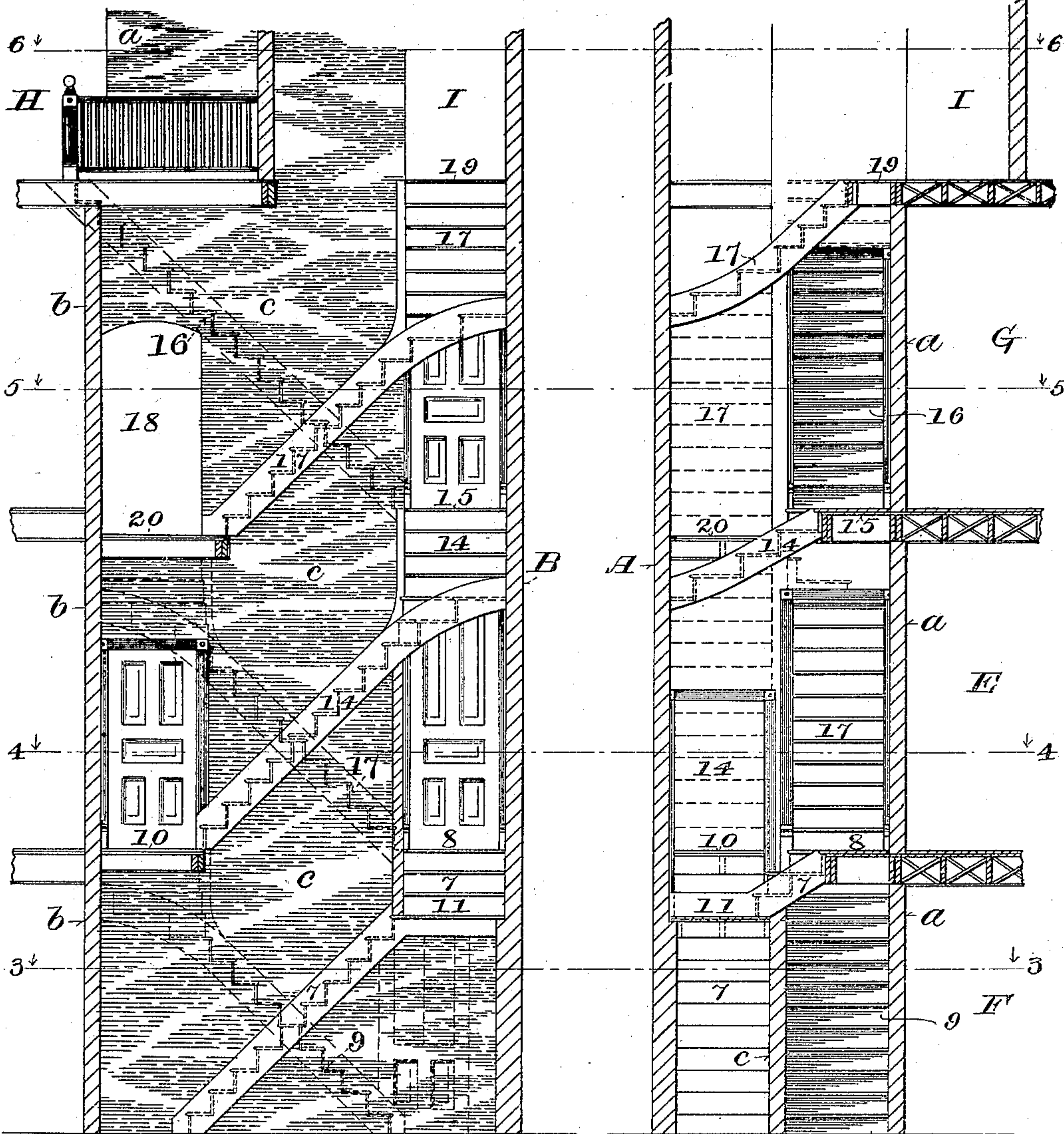
APPLICATION FILED SEPT. 13, 1897.

NO MODEL.

3 SHEETS—SHEET 1.

Fig. 1.

Fig. 2.



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3 SHEETS—SHEET 2.

Fig. 3.

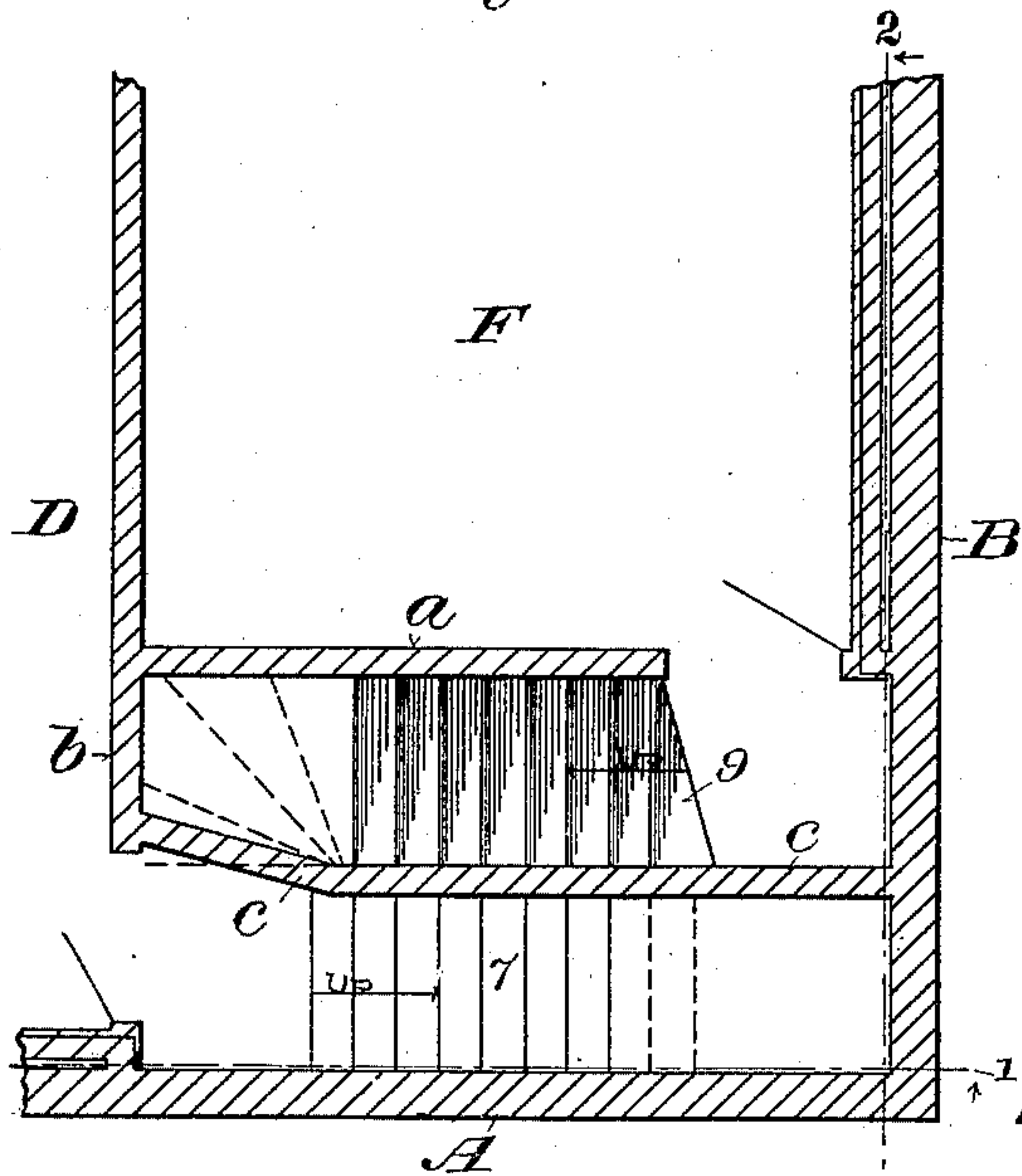


Fig. 4.

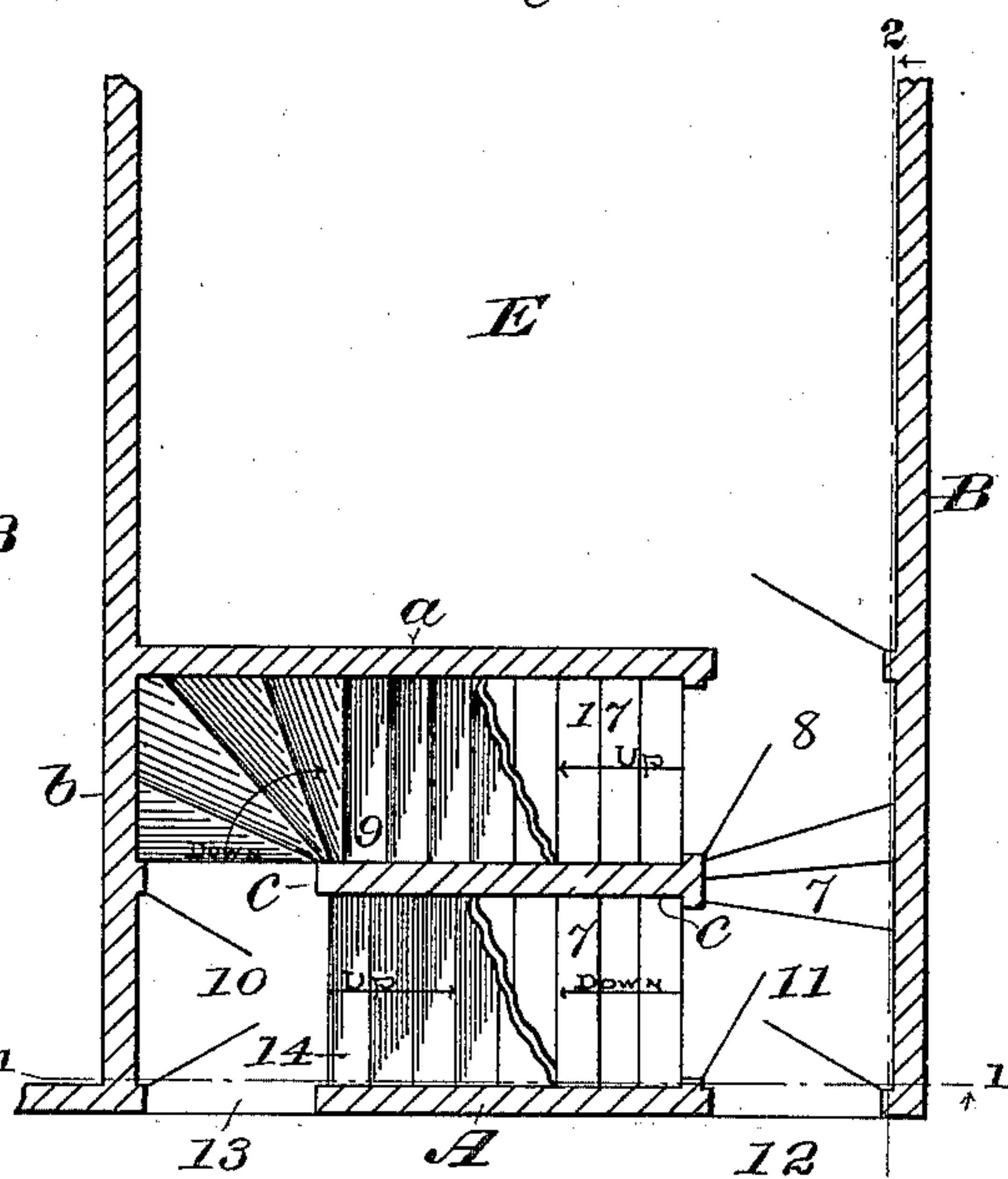


Fig. 5.

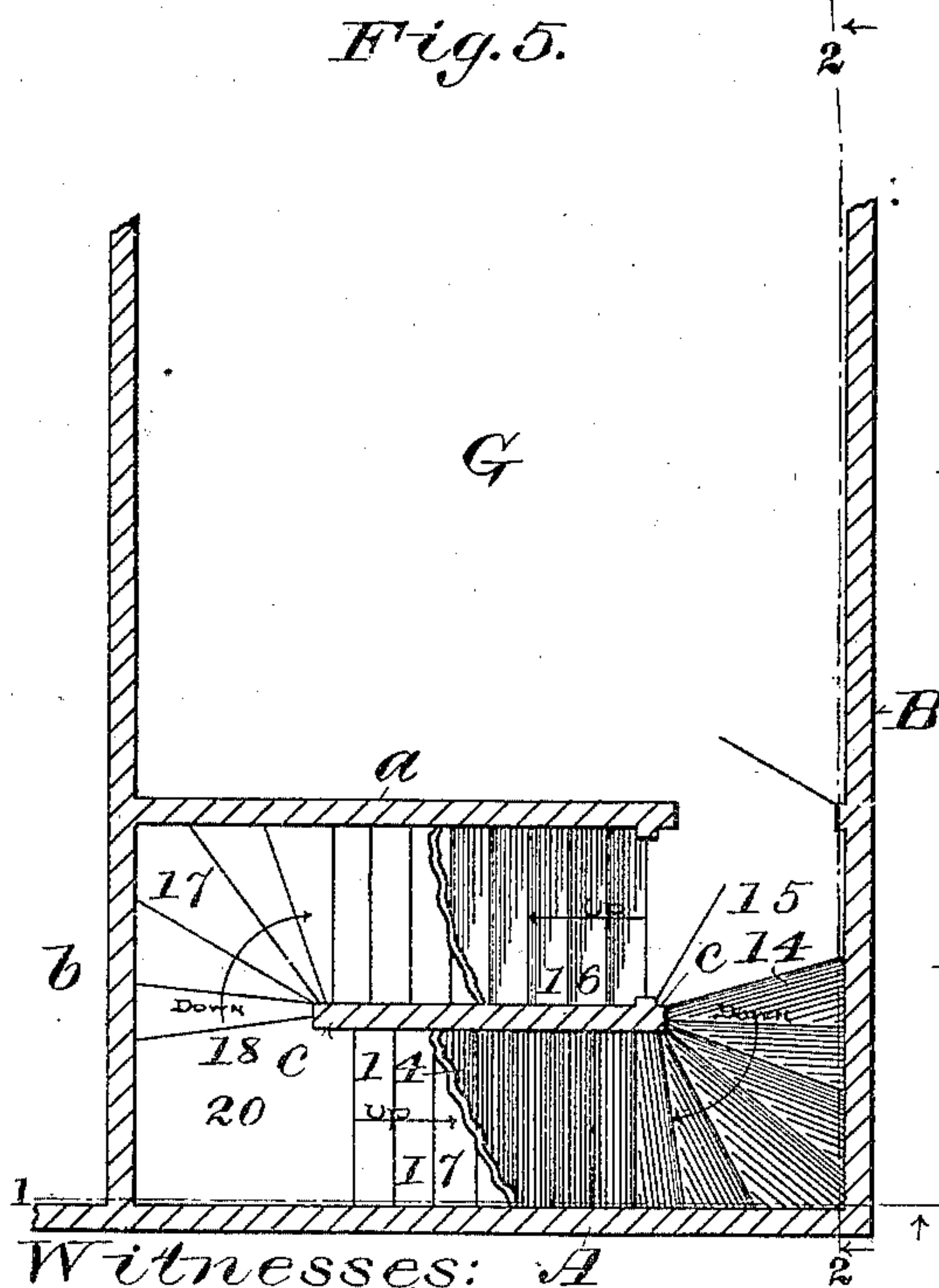
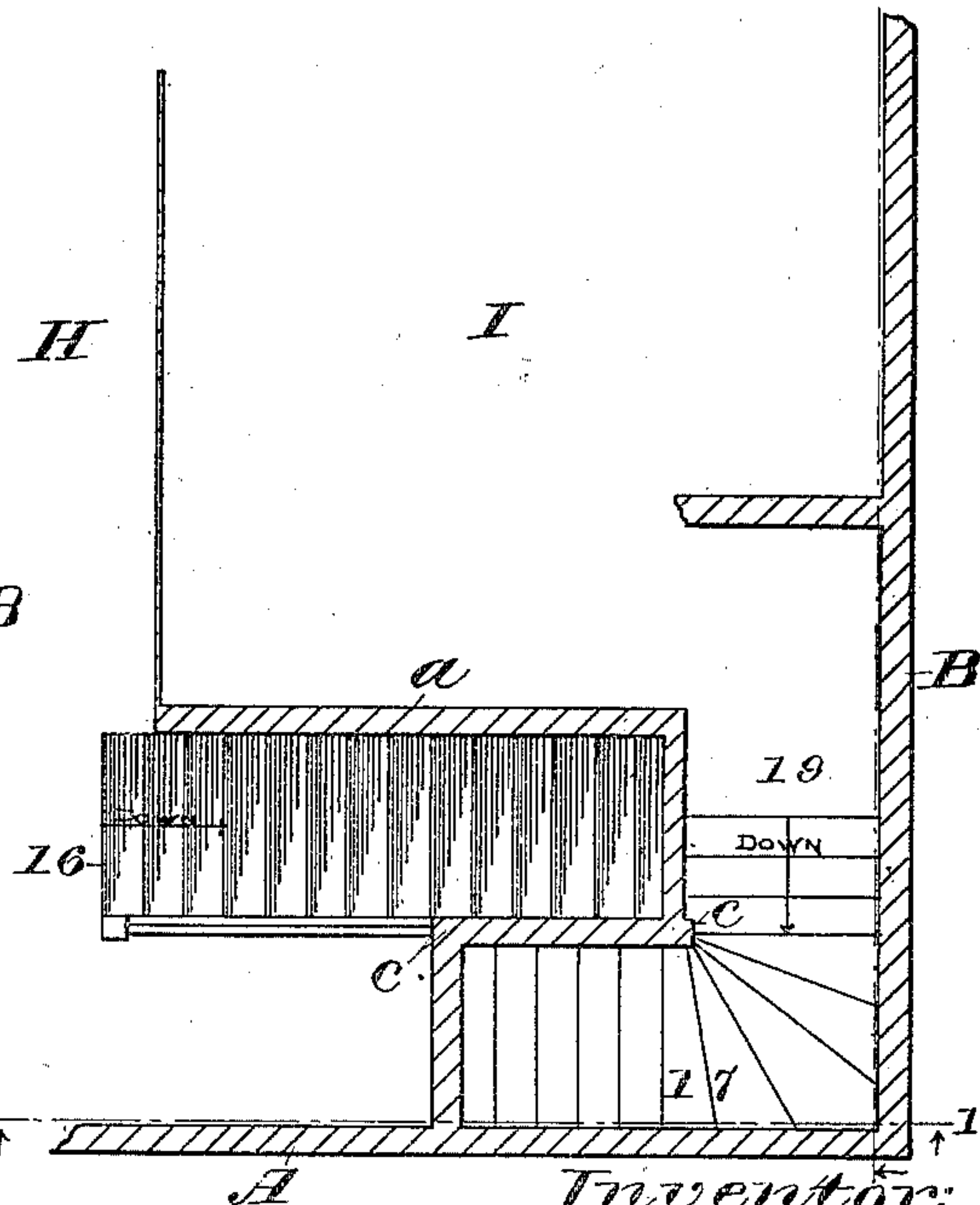



Fig. 6.



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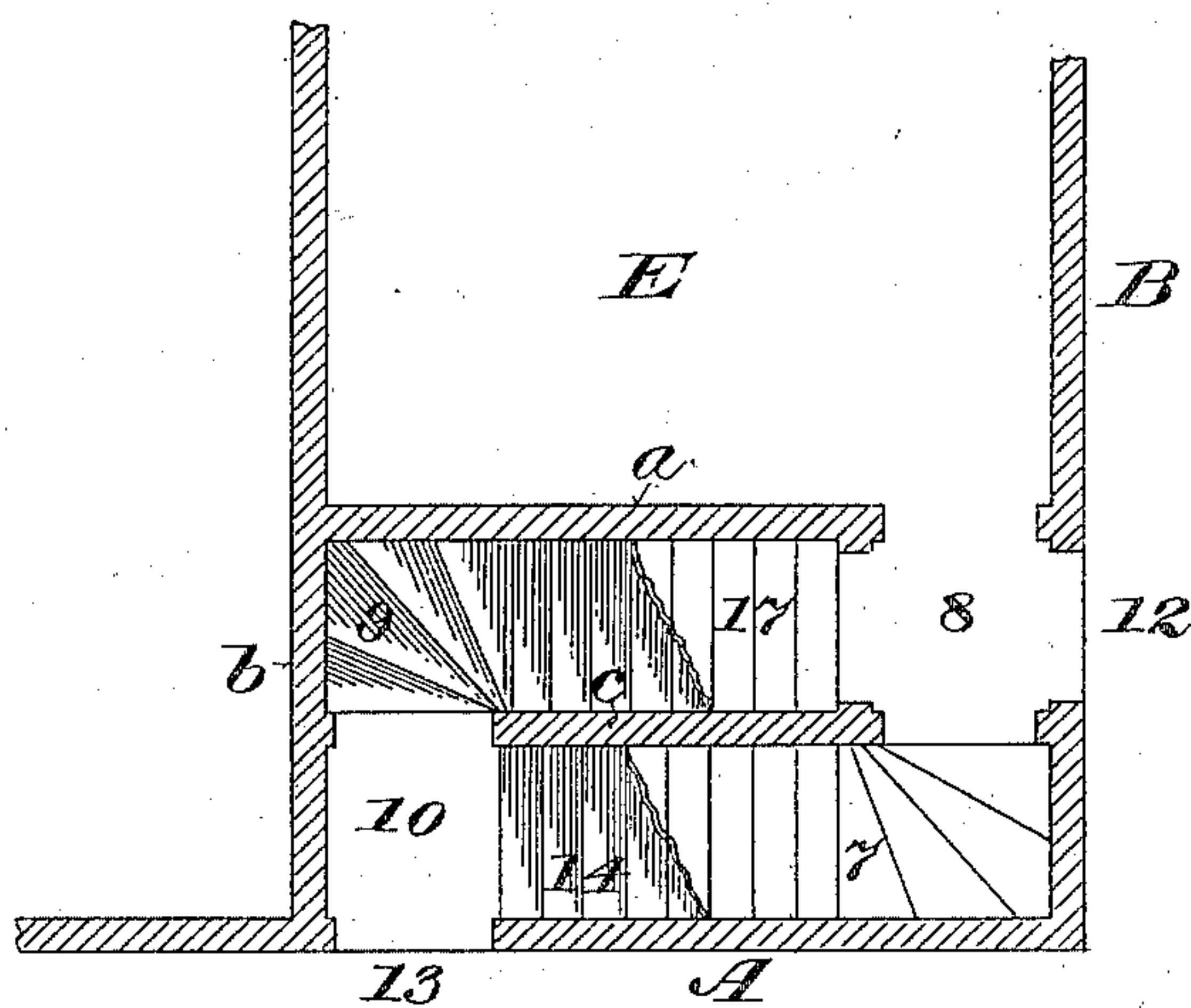
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NO MODEL.

3 SHEETS—SHEET 3.

Fig. 7.



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UNITED STATES PATENT OFFICE.

OTTO C. UEHLING, OF MILWAUKEE, WISCONSIN.

STAIRWAY.

SPECIFICATION forming part of Letters Patent No. 725,179, dated April 14, 1903.

Application filed September 13, 1897. Serial No. 651,433. (No model.)

To all whom it may concern:

Be it known that I, OTTO C. UEHLING, of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain
5 new and useful Improvements in Stairways; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it pertains to make and use
10 the same, reference being had to the accompanying drawings, and to the characters of reference marked thereon, which form a part of this specification.

The main objects of my invention are to provide the several tenements of a flat or tenement building with separate and distinct stairways and to economize space in the construction and arrangement of the stairways. Buildings of this class as heretofore constructed
20 are generally provided in front with ordinary separate stairways for the independent use of the several tenants of the building and in the rear with a single common stairway for the use of all the tenants. Separate and distinct runs or flights for the different flats or
25 tenements have not been generally provided in the rear of such buildings on account of the considerable space which they require.

It is the purpose of my improvements to so
30 combine, construct, and arrange separate and distinct runs or flights of stairs that each of the several tenements will have means of communication between different floors independent of the other tenements of the building without taking up the room or space
35 which would be required for separate and distinct stairways as usually built.

The invention consists of certain novel features in the construction and arrangement of
40 the component runs or flights of stairs in a combination-stairway, as hereinafter particularly described, and pointed out in the claims.

In the accompanying drawings, like characters designate the same parts in the several
45 figures.

Figure 1 is a sectional view of a stairway constructed in accordance with my invention, the outer wall of that portion of the building in which the stairway is located being removed in
50 a plane indicated by the line 1 1, Figs. 3 to 6, inclusive. Fig. 2 is a sectional view of the stairway in a plane at right angles to that of Fig.

1 and indicated by the line 2 2, Figs. 3 to 6, inclusive. Fig. 3 is a horizontal section of the stairway and adjoining parts of the building on the line 3 3, Figs. 1 and 2, and a plan
55 view of a portion of the basement. Fig. 4 is a similar section on the line 4 4, Figs. 1 and 2, and a plan view of the first floor. Fig. 5 is a similar section on the line 5 5 and a plan
60 view of a portion of the second floor. Fig. 6 is a similar section on the line 6 6 and a plan view of a portion of the upper floor or attic, and Fig. 7 is a section and plan view corresponding with Fig. 4 and showing a slight
65 modification in the arrangement and construction of the outside entrance and the basement run or flight of the first-story tenement.

For the purpose of illustration I have shown my improved stairway as constructed and
70 arranged for the rear of a building containing two separate flats or tenements, the stairs of the second-story tenement being, for the sake of greater clearness, shaded to distinguish them from the stairs of the first-story
75 tenement.

Referring to the drawings, A designates the rear and B one of the side walls of a building inclosing the stairway on one side and
80 one end, and *a* and *b* are partitions extending from basement to attic, completing the inclosure of the stairway on the other side and end. The several runs or flights of which the stairway is composed are arranged
85 on opposite sides of and separated by a partition *c*, extending midway between and parallel with the outer wall A and partition *a* of the building from basement to roof or attic ceiling. This partition *c* is constructed without reentrant angle and is usually and preferably
90 straight, although it may be curved where the stairway is located next to a curved wall. By the term "straight" as employed in the claims to define such partition I mean
95 to include a partition which is without reentrant angle, but may be curved, as above stated, as well as absolutely straight.

Referring to Figs. 3 and 4 in connection with Figs. 1 and 2, 7 is a run or flight of stairs leading on one side of the partition *c*
100 from the basement D to a landing 8 in communication with a room or apartment E of the first-story tenement, and 9 is a run or flight of stairs leading on the opposite side of

the partition *c* from the basement *F* of the second-story tenement to a platform or landing 10 at or near the level of the first floor. A platform or landing 11 may be provided in the run or flight 7 for the outside entrance 12 of the first-story tenement, as shown in Fig. 4, or the entrance of this tenement may be placed in the wall *B* and carried up to the level of the first floor, as shown in Fig. 7. The outside entrance 13 of the second-story tenement opens upon the platform or landing 10, which may be located, as shown in Figs. 1 and 2, at the level of the first floor. The platform or landing 10 constitutes the entry of the second-story tenement. The platforms or landings 8 and 11, connected by a short run of stairs or by the upper part of the flight 7, constitute the entry of the first-story tenement when its outside entrance 12 is arranged as shown in Fig. 4, and the platform or landing 8 alone constitutes the entry of the first-story tenement when its outside entrance is arranged as shown in Fig. 7. From the platform or entry 10 a run or flight of stairs 14 leads on the outer side of partition *c* over the run 7 to a landing 15 on the second floor in communication with a room *G* of the second-story tenement, and from the landing 15 a run or flight 16 leads on the opposite side of the partition *c* to the upper floor or attic *H* of the second-story tenement. From the landing 8 of the first-story tenement a double run or flight 17 leads up on one side of the partition *c*, over the run 9, through an opening 18 in said partition, and thence along the opposite side thereof, over the run 14 to the third floor or a landing 19 in communication with the attic *I* of the first-story tenement. This double run 17 may be continuous or broken by a landing 20 at the opening 18 in partition *c* on or near the level of the second floor, as shown in Figs. 1 and 5.

Under some conditions it may be desirable to shorten up the stairway, and when this is done runs or flights of the required length can be obtained by making the partition *c* thicker and extending the stairs around the ends of said partition. The partition *c* in this case might be made hollow and the space within it might be utilized for dumb-waiters, clothes-chutes, &c. The construction, however, in which the partition *c* is made of the ordinary thickness and straight is most economical of space and is preferably employed.

It is obvious that the location of the landings or platforms and the arrangement of the openings or doors into the several parts of the stairways may be variously changed and modified to suit different buildings and conditions. In buildings with flat roofs which are utilized for hanging clothes or other purposes the upper runs of the stairway may lead to the roofs. Under certain conditions but one side or end of the stairway may be next to an outer wall of the building, and the stairway of the first-story tenement need not

necessarily have an outside entrance; but an outside entrance on or near the first or ground floor to the stairway of the second or an upper-story tenement is indispensable. The flight or run of stairs 16 may in certain cases be omitted from the combination-stairway and conveniently located elsewhere.

I am aware that a combination-stairway in which the runs or flights are arranged on the outer sides of and within the angle of an angular or L-shaped partition has been patented; but such an arrangement does not utilize space or room to the best advantage and is not adapted to conditions under which my construction may be employed with convenience and economy.

I claim—

1. A stairway for a tenement-building comprising separate entries on the same side or adjacent sides of the building, a partition between and parallel with the sides of the stairway, a flight leading up on one side of said partition from one entry to the second floor, a flight leading down on the opposite side of said partition from the same entry to the basement, a flight leading from the other entry down to the basement under the said flight which leads from the first to the second floor, a double flight leading up from the last-mentioned entry on one side of said partition past the second floor, and thence in a reverse direction on the opposite side of said partition, and a flight leading up from the second floor, over the lower part of the double flight, the entry of the first-story tenement forming a direct passage from the top of its basement-flight past the bottom of the double flight to the first-floor entrance, substantially as and for the purposes set forth.

2. A stairway for a tenement-building comprising separate entries on the same side or adjacent sides of the building, a straight partition between and parallel with the sides of the stairway, a flight leading on one side of said partition from one entry to the second floor, another flight leading on the opposite side of said partition from the same entry to the basement, a flight leading from the other entry to the basement under the flight which leads from the first to the second floor, and a double flight leading on one side of said partition past the second floor and thence up in a reverse direction on the opposite side of said partition from the last-mentioned entry which forms a straight passage to the first floor past the top of the basement-flight and the bottom of the double flight which lead therefrom, substantially as described.

3. A stairway for a tenement-building comprising separate entries on the same side or adjacent sides of the building, a straight partition between and parallel with the sides of the stairway, a flight leading on one side of said partition from one entry to the second floor, another flight leading on the opposite side of said partition from the same entry to the basement, a flight leading from the other

entry to the basement under the flight which leads from the first to the second floor, a double flight leading on one side of said partition, past the second floor and thence up in a reverse direction on the opposite side of said partition from the last-mentioned entry, which forms a straight passage to the first floor past the top of the basement-flight and the bottom of the double flight which lead therefrom, and a flight leading up from the second floor over the lower part of the double flight, substantially as described.

4. In a stairway for a tenement-building comprising first and second story tenements and separate outside entrances for said tenements on the same side or adjacent sides of the building, a straight partition between and parallel with the sides of the stairway, a flight leading on one side of said partition from a landing at the entrance of the second-story tenement to the second floor, another flight leading on the opposite side of said partition from the same landing to the basement, a short

flight leading from a landing at the entrance of the first-story tenement below the level of the first floor to a landing at or near the level of the first floor, a flight leading from the lower-entrance landing to the basement, and a double flight leading up first on one side and then in the reverse direction on the other side of said partition past the second floor from the landing which is connected with the entrance-landing of the first-story tenement and forms with it and the connecting short flight a straight passage from the entrance direct to the first floor by the top of the basement-flight and the bottom of the double flight which lead from said passage, substantially as described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

OTTO C. UEHLING.

Witnesses:

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M. L. EMERY.