

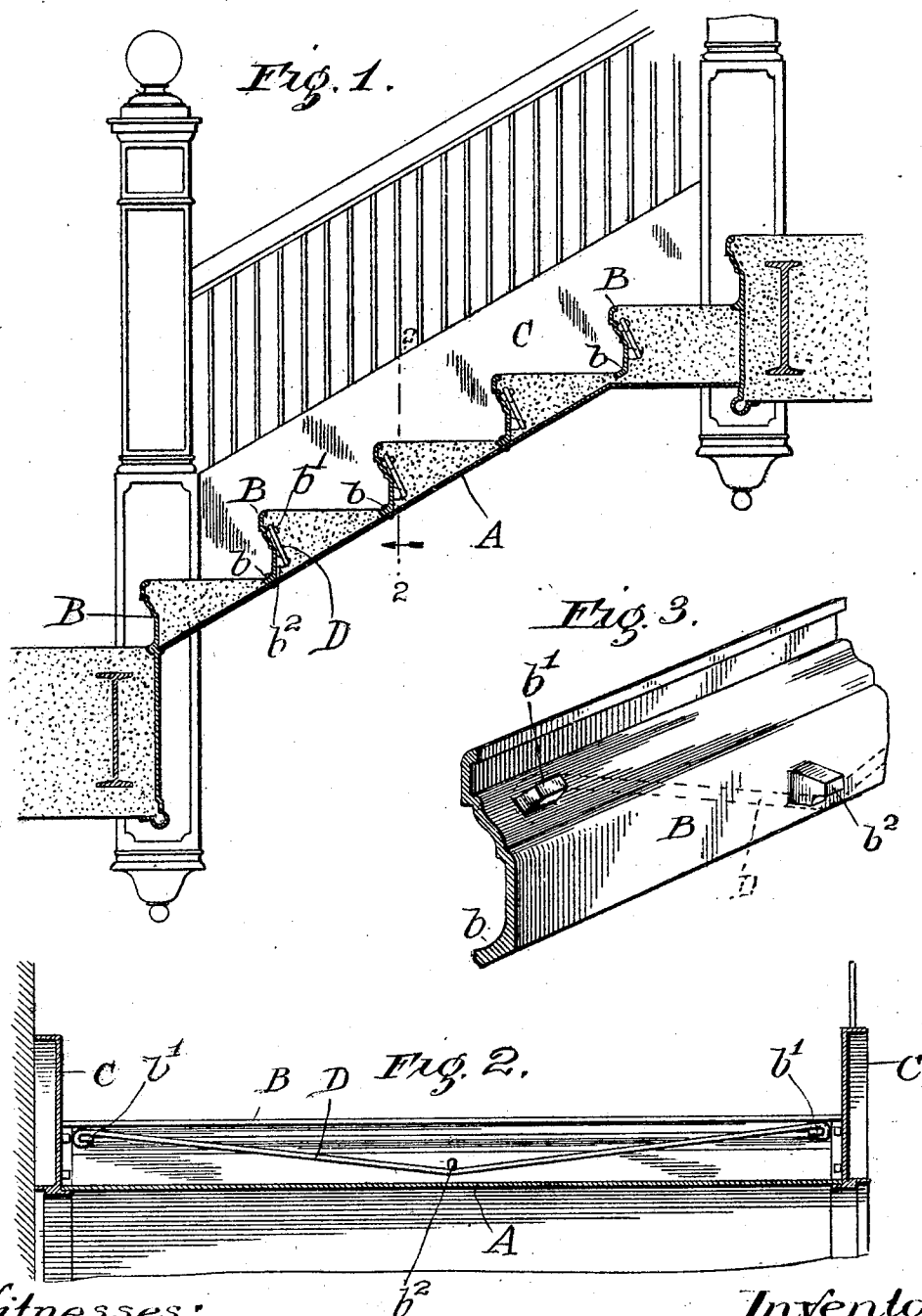
No. 794,908.

PATENTED JULY 18, 1905.

F. A. WINSLOW.

STAIRWAY.

APPLICATION FILED AUG. 20, 1904.



Witnesses:  
H. M. Cornwall  
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# UNITED STATES PATENT OFFICE.

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## STAIRWAY.

SPECIFICATION forming part of Letters Patent No. 794,908, dated July 18, 1905.

Application filed August 20, 1904. Serial No. 221,580.

*To all whom it may concern:*

Be it known that I, FRANCIS A. WINSLOW, a citizen of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Stairways, of which the following is a specification.

My invention relates to certain new and useful improvements in stairways; and its object is to produce a device of this class which shall have certain advantages which will appear more fully and at large in the course of this specification.

To this end my invention consists in certain novel features, which are shown in the accompanying drawings as embodied in my preferred form of construction.

In the aforesaid drawings, Figure 1 is a longitudinal section through my improved stairway. Fig. 2 is a transverse section in the line 2 2 of Fig. 1 looking in the direction of the arrow, and Fig. 3 is a perspective view of the rear face of one of the risers.

Referring to the drawings, A is the soffit of my improved stairway, the same being formed of a plate of metal having a flat lower surface which affords a good basis for such ornamentation as is common in high-grade interior ironwork. To this soffit are secured a plurality of risers B, each of the risers having at its lower end a downwardly-projecting flange b, which is riveted or otherwise secured to the soffit A. The soffit is secured at its edges to side beams C, to which the ends of the risers are also secured.

On the rear of each of the risers B are two lugs b' at the upper corners, and a third lug b<sup>2</sup> is provided at the center near the lower edge of the riser. A truss-rod D is hooked at its ends over the lugs b' and at its center engages with the lug b<sup>2</sup>. The truss-rod is in practice shrunk into place on the riser by heating it and placing it in position. When cooled, it will be evident that the center of the riser will be subjected to a strong upward pull, which will tend to stiffen the riser very materially. After the metal-work of the stairway is assembled the space behind each

riser and above the soffit is filled with concrete to form a step of the ordinary form, as illustrated.

My improved method of construction is particularly advantageous in wide stairways. Heretofore it has been necessary to place a strengthening-beam below the central line of a wide stairway to brace the same; but such a structure possesses certain disadvantages which are removed by my improved construction. In many instances the space below a stairway is so small as to make it practically impossible to have a downwardly-projecting beam below the lower line of the risers, and in any case such a beam breaks the flat soffit and interferes with any scheme of ornamentation which might be adopted. With the device herein shown each riser is braced by the truss-rod on its rear face, and no additional central brace is necessary for a stairway of any practicable or desirable width. Thus space is gained below the stairway without any accompanying weakening of the structure, and at the same time a large unbroken surface is provided upon which a consistent ornamental scheme can be worked out.

I realize that considerable variation is possible in the details of this construction without departing from the spirit of the invention, and I therefore do not intend to limit myself to the specific form herein shown and described.

I claim as new and desire to secure by Letters Patent—

1. In a device of the class described, the combination with a soffit and a riser secured thereto, of a truss-rod wholly supported on the rear of the riser, said truss-rod running from the two upper corners of the riser and over a suitable engagement device at the center of the lower edge.

2. In a device of the class described, the combination with a soffit and risers secured thereto, of an integral lug at each upper corner of the risers and at the center of the lower edges thereof, and truss-rods running over said lugs.

3. In a device of the class described, the

combination with a soffit and risers secured thereto, of a lug at each upper corner of the risers and at the center of the lower edges thereof, truss-rods running over said lugs, and a body of concrete filling the space behind each riser and above the soffit.

In witness whereof I have signed the above

application for Letters Patent, at Chicago, in the county of Cook and State of Illinois, this 15th day of August, A. D. 1904.

FRANCIS A. WINSLOW.

Witnesses:

CHARLES S. SAXE,  
W. R. KAVANAUGH.