

No. 868,430.

PATENTED OCT. 15, 1907.

S. GROSSMAN.
STAIR.

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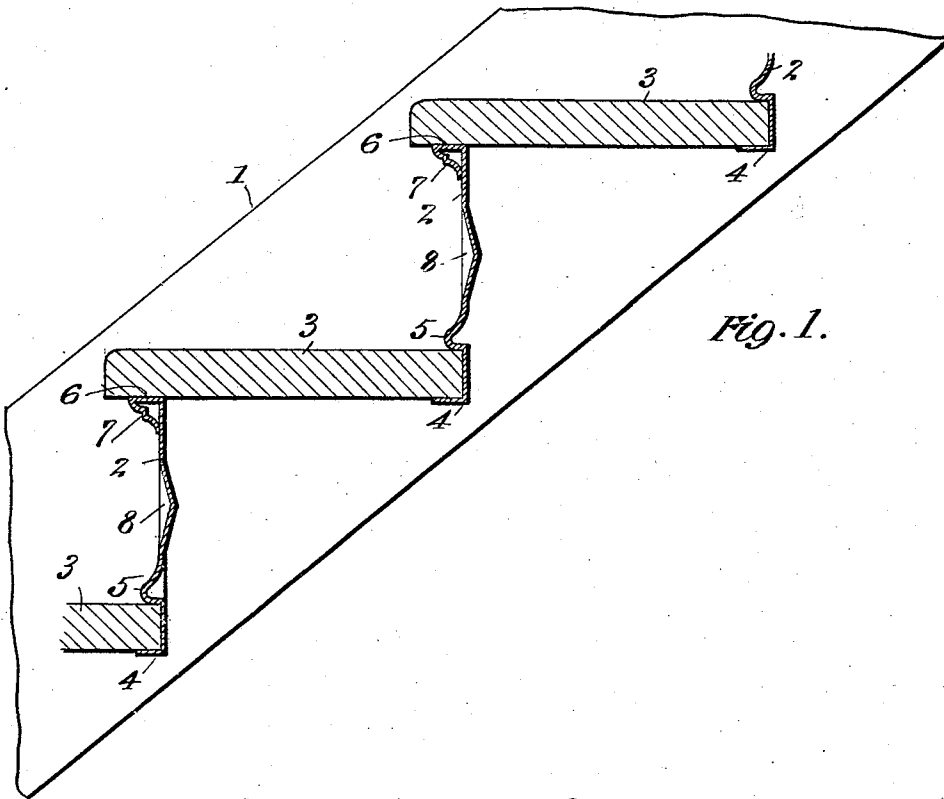
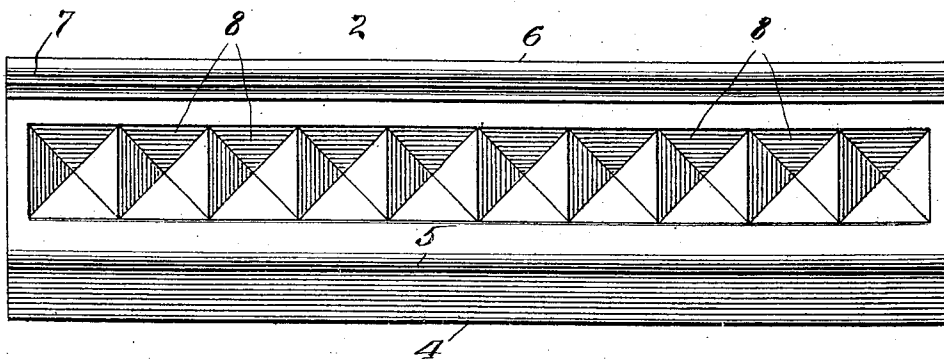


Fig. 1.

Fig. 2.



Witnesses:
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UNITED STATES PATENT OFFICE.

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STAIR.

No. 868,430.

Specification of Letters Patent.

Patented Oct. 15, 1907.

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To all whom it may concern:

Be it known that I, SAMUEL GROSSMAN, a citizen of the United States, residing in the borough of Manhattan, New York city, county and State of New York, have invented certain new and useful Improvements in Stairs, of which the following is such a full, clear, and exact description as will enable any one skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to improvements in the construction of stairs in which sheet metal is wholly or partly employed, and the principal objects of the invention are to provide neat and well constructed stairs of ample strength and having a comparatively light weight sheet metal riser serving to support and clamp at its lower end the adjacent tread, and furthermore to make the peculiar joint between the lower end of the riser and the tread more secure and proof against the admission of foreign matter and at the same time ornamental.

With these and other objects in view, my invention consists in the various novel and peculiar arrangements and combinations of the several different parts of the structure, all as hereinafter fully described and then pointed out in the claims.

I have illustrated a type of my invention in the accompanying drawings, wherein:—

Figure 1 is a vertical longitudinal section of stairs constructed in accordance with my invention. Fig. 2 is a front view of one of my improved sheet metal risers, shown as detached.

Referring to the drawings, in which like numbers of reference designate like parts throughout, 1 indicates one of the stringers of the stairs and 2 and 3, the risers and treads, respectively, which are secured to or supported upon the stringers in any suitable well-known manner.

The riser 2 is made of comparatively light sheet metal and is formed at its lower end with a forwardly extending flange 4 and also with a forwardly projecting corrugation 5 which extends practically parallel with the flange 4 and between which two parts the rear edge of the solid or block like tread 3 is inserted and in which it is clamped. The flange 4 thus serves to support the rear edge of the tread while the corrugation 5 which bends well forwardly and overlies the upper surface of the tread sufficiently far to exclude foreign matter from working in around the back edge of the tread, at

the same time the corrugation 5 gives a desired strength to the riser as it extends throughout the length thereof. It also adds to the ornamentation of the exterior of the riser. The upper end of each riser is bent over forwardly upon itself to form a supporting part or flange 6 with a backwardly turned or bent part 7 serving as a brace for the part 6 and being corrugated so that the entire bent part forms not only a hollow strengthening rib but an ornamental part as well. The main surface of the riser is formed with a series of indentations or corrugations 8 which are shown in the form of pyramids and extend inwardly, as indicated in the drawings, the apex of each pyramid lying to the back of the tread and leaving the hollow configuration upon the exterior, though this, of course, could be reversed if desired, and these peculiar formations in the body of the material likewise give a strengthening quality to the member. Of course, the indentations or corrugations 8 may be made in any other suitable design and various changes may be made in this respect.

Having thus described my invention what I claim and desire to secure by Letters Patent is:

1. Stairs comprising the combination of suitably supported metal risers each formed at its lower end with a forwardly extending flange and a forwardly projecting corrugation formed in the body of said metal and extending substantially parallel with said flange, and projecting forwardly of the main part of said riser and treads each having its rear edge inserted between the flange and the corrugation of the next riser above same.

2. Stairs comprising the combination of suitably supported metal risers each formed at its lower end with a forwardly extending flange and a forwardly projecting corrugation in the body of said metal and extending substantially parallel with said flange, treads each having its rear edge inserted between the flange and the corrugation of the next riser above same and the upper end of each riser being bent over upon itself to form a strengthening and supporting edge for the treads.

3. Stairs comprising the combination of suitably supported metal risers each formed at its lower end with a forwardly extending flange and a forwardly projecting corrugation in the body of said metal and extending substantially parallel with said flange, treads each having its rear edge inserted between the flange and the corrugation of the next riser above same, and the body of said riser being formed above said corrugation with a series of indentations or corrugations for strengthening the same.

In testimony whereof, I have hereunto set my hand in the presence of the two subscribing witnesses.

SAMUEL GROSSMAN.

Witnesses:

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