No. 851,932. PATENTED APR. 30, 1907.

S. GROSSMAN.

METALLIC STAIR.

APPLICATION FILED MAR. 11, 1907.

Fig. 1.

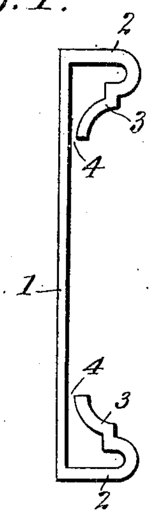


Fig. 2.

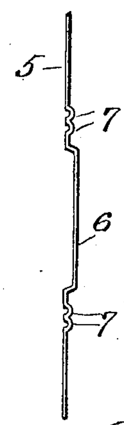
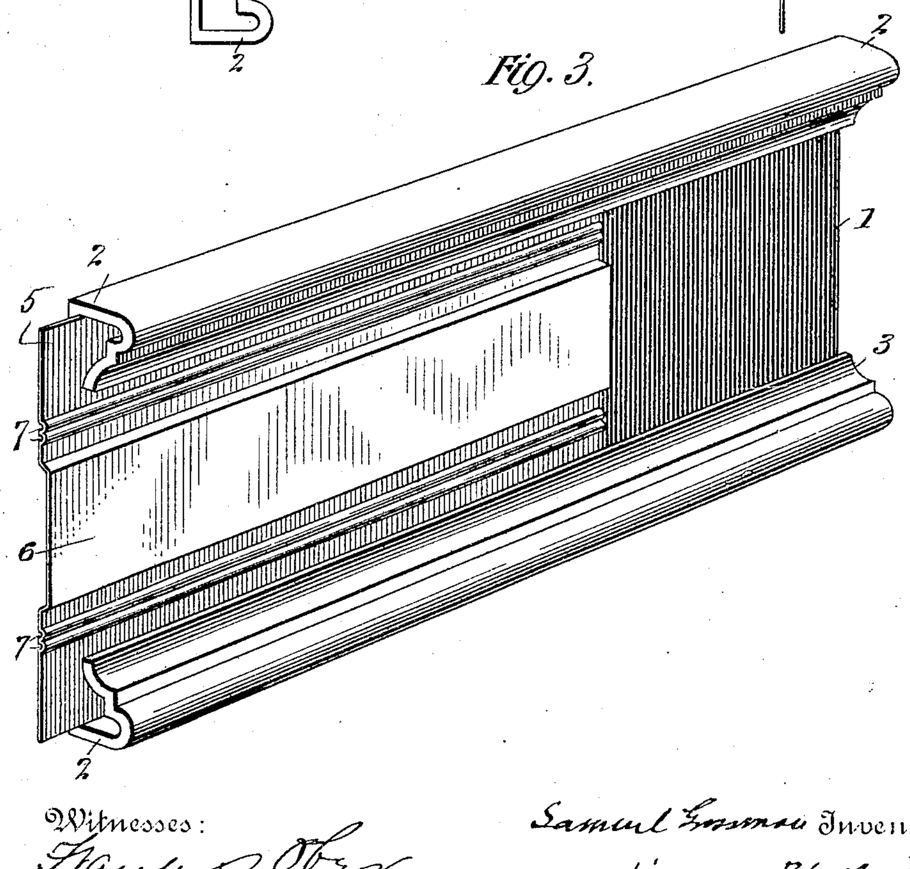


Fig. 3.



Witnesses:

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UNITED STATES PATENT OFFICE.

SAMUEL GROSSMAN, OF NEW YORK, N. Y.

METALLIC STAIR.

No. 851,932. Specification of Letters Patent. Patented April 30, 1907.

Application filed March 11, 1907. Serial No. 361,660.

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 Metallic 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 sheet metal structures and is particularly well adapted for sheet metal stringers used in metallic stairs.

The principal objects of the invention are to provide a sheet metal stringer or the like which is not only made of great strength and of comparatively light weight, but is at the same time very ornamental, the manner of ornamenting the structure being such as to admit of a wide range in that respect.

Briefly stated, the invention consists in the stringer or the like main part being itself made of a substantial thickness of sheet metal which is rolled or formed into the desired shape and constitutes the principal part, while the ornamental part is an adjunct for the purpose of ornamentation, though when it is made of sheet metal itself it, of course, adds a certain degree of strength to the composite structure.

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

Figure 1 is an end view of the main part of the stringer or like member, without the ornamental part inserted therein. Fig. 2 is an end view of the ornamental part or plate, shown as detached. Fig. 3 is a perspective view of the composite structure, showing the two parts illustrated in Figs. 1 and 2, respectively, as being put together, the ornamental plate or part being slid into the other.

Referring to the drawings, in which like numbers of reference designate like parts throughout, 1 is a sheet metal stringer or like part which is formed of a suitable thickness of sheet metal and has the longitudinal edges thereof bent over upon the same side of the stringer so as to form a hollow strengthening rib, one part 2 of which extends outwardly at right angles to the body of the stringer, while the in-turned portion 3 thereof projects inwardly and is corrugated for the purpose of strengthening it and at the same time forming an ornamental bead. The ends of the in-turned edges are slightly spaced at 4 from the body of the stringer, the space being about the thickness of the plate or sheet of ornamental material 5 which is to be inserted therein. The ornamental member or plate 5 is made of suitable metal or any other desired material and is of lighter weight than the main structure, as it is more particularly designed to ornament the composite structure. In the present construction this plate is shown as having a central panel 6 extending the length thereof with raised corrugations or beads 7 at each side of the panel so as to give the part a rich ornamental appearance. The edges of the plate 5 are preferably left plain and smooth for the purpose of being slid under the in-turned parts 3 of the main member 1 and after the plate 5 has been ornamented as desired and completely finished, it is then slid endwise beneath the in-turned parts 3 so as to completely fill the space between the edges of the main part 1.

From the foregoing description it will be seen that this composite structure admits of a wide range of ornamentation being given the same. The main part 1 of the structure may be formed of sheet steel or any suitably strong material which is rolled into the desired shape and substantially as herein shown while the ornamental plate 5 may be mad eof ordinary brass or copper or any suitable well-known material and may be stamped with any suitable designs thereon or may have open work cut in the same for the purpose of ornamenting the completed structure. The ornamental sheet 5 need not, of course, be of metal, but in cases where it is made of metal a corresponding degree of strength is added to the structure.

This invention is not confined to stair structures but it is applicable to other constructions in sheet metal in which light weight with a certain amount of strength is required, as well as ornamentation.

Of course, the size and shape of the parts herein described may be varied as desired, in carrying out the invention as herein set forth.

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

1. A metallic structure comprising the combination of a sheet metal stringer or like piece having the longitudinal edges thereof bent over upon the same side thereof, and an ornamental plate or sheet of material insert-

ed beneath and between said overturned edges.

2. A metallic structure comprising the combination of a sheet metal stringer or like piece having the longitudinal edges thereof bent over upon the same side thereof and constituting a strengthening rib and such bent over parts being suitably ornamented, and an ornamental plate or sheet of material inserted beneath and between said overturned edges.

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

SAMUEL GROSSMAN.

Witnesses:
SAMUEL KAHAN,
BERNARD S. DEUTSCH.