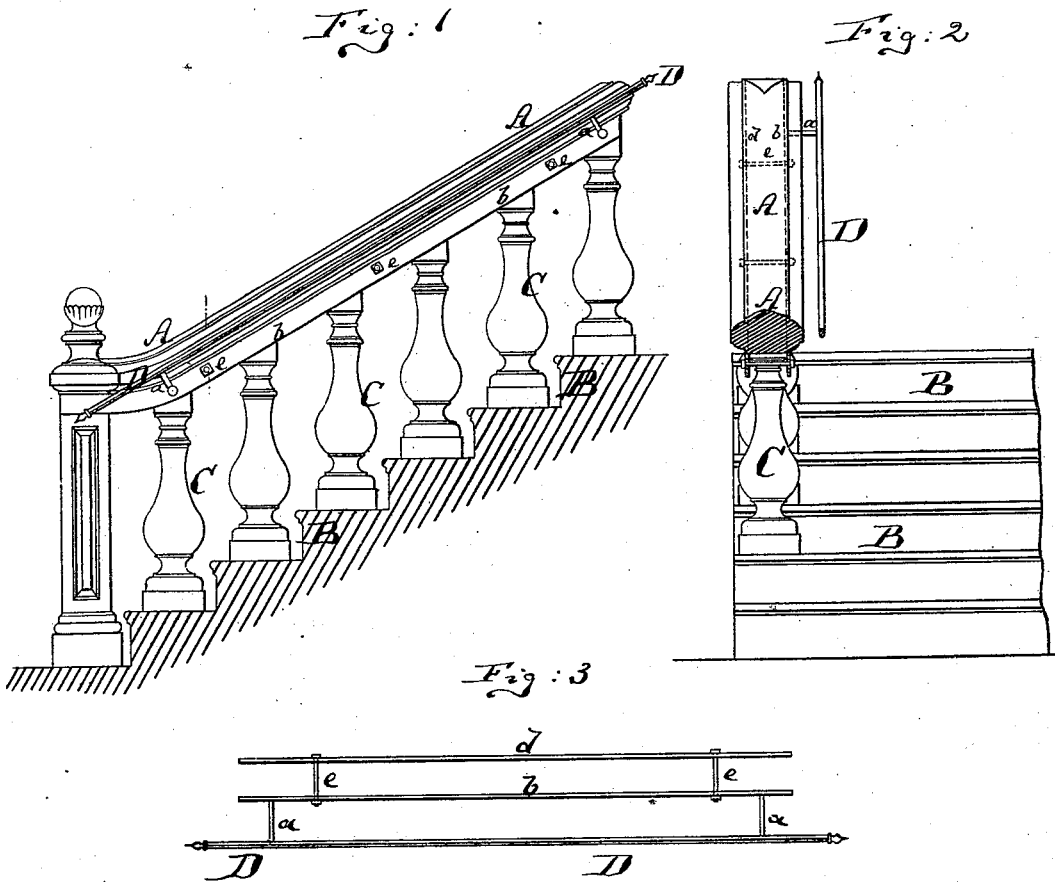


R. Lo FORTE.
Winter-Rail for High-Stoops.

No. 159,830

Patented Feb. 16, 1875.



Witnesses:

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UNITED STATES PATENT OFFICE.

REMIGIO LO FORTE, OF NEW YORK, N. Y.

IMPROVEMENT IN WINTER-RAILS FOR HIGH STOOPS.

Specification forming part of Letters Patent No. 159,830, dated February 16, 1875; application filed December 11, 1874.

To all whom it may concern:

Be it known that I, REMIGIO LO FORTE, of the city, county, and State of New York, have invented a new and Improved Winter-Rail for High Stoops, of which the following is a specification:

The object of this invention is to provide high stoops of houses which have broad stone rails at the sides with supplemental rails, that may be of practical use in winter, and to aged and infirm persons at other seasons.

The invention is applicable, chiefly, to buildings in our northern cities, where the steps are frequently covered with snow and ice, and where, consequently, the ascent and descent is often coupled with considerable danger. The broad stone rails which are usually applied to such high stoops have no practical effect, as they are too large to allow the hand to grasp them, and people frequently fall and injure themselves on slippery steps for the reason that their hands cannot find anything to hold themselves to.

My improved supplemental rail is a tube or rod, sufficiently small in diameter to be readily grasped by the hand, and is clasped or otherwise secured to the main stone rail, so as to project inwardly from the same, and to run about parallel therewith; and is, furthermore, made removable, so that it can be put away in summer, except when it is to be used throughout the year by infirm persons.

Figure 1 in the accompanying drawing is a longitudinal vertical section of a high stoop, showing my supplemental rail and the broad stone rail in side view. Fig. 2 is a front elevation of such stoop, showing the rails in cross-section. Fig. 3 is a top view of my improved rail, showing its connection with a clamp, whereby it is fastened to the main stone rail.

Similar letters of reference indicate corresponding parts in all the figures.

The letter A in the drawing represents the main stone rail, or customary broad rail, of a high stoop, B, C C are the balusters, whereby such rail is supported.

The railing, instead of being of stone, is often of wood or metal, and supported in other suitable manner; its arrangement and construction forming no part of my invention, as my invention tends to improve the broad rails which I find already in existence.

D is my improved supplemental rail. The same is made about as long as the main rail A, and preferably bent into the same shape lengthwise as such main rail. It is made of tubular metal, or of wood or other material, of such diameter as to be readily grasped by the hand, and is attached, by means of projecting arms *a a*, to the main rail.

One mode of attachment is clearly illustrated in Figs. 2 and 3, the same consisting of two parallel rods, *b d*. The arms *a* of the rail D connect rigidly with the rod *b*, such rod being placed against the inner face of the lower part of the rail A, or against the baluster tops C, while the rod *d* is placed against the outside of said rail A, or baluster tops, and the two rods *b d* are then drawn together and firmly clamped to the rail A or balusters C by means of bolts *e e*, which are clearly shown in Figs. 1 and 3.

In this way the rail D is attached to the main rail in such a way as to be properly held in place, and so, also, as to be conveniently removable by loosening the nuts on the bolts *e*.

I do not, however, wish to confine myself to the particular mode shown of attaching the rail D to the main rail A, as other means may be employed. Thus, instead of using the rods *b d*, each of the arms *a* may be made to embrace or clasp one of the baluster-heads, and in this way to hold the supplemental rail in position.

It will be readily understood that high stoops provided with my improved winter-rail will afford protection against slipping, even if the steps should be covered with ice and snow, and that, therefore, my invention is eminently useful in tending to save life and limb. Another advantage of my invention

is, that the main rail A and the balusters C need not be perforated or cut to receive the winter-rail D, and that the winter-rail may be removed in summer without leaving holes or other injurious marks on the main rail or balusters.

I claim as my invention—

An improved winter-rail for high stoops,

provided with projecting arms *a a* and rods *b d*, for convenient application to and removal from the broad main rail A of a high stoop, substantially as specified.

R. LO FORTE.

Witnesses:

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