M. FÄRCH.

SELF FITTING STAIR RISER.

APPLICATION FILED AUG. 25, 1911.

1,046,165.

Patented Dec. 3, 1912.

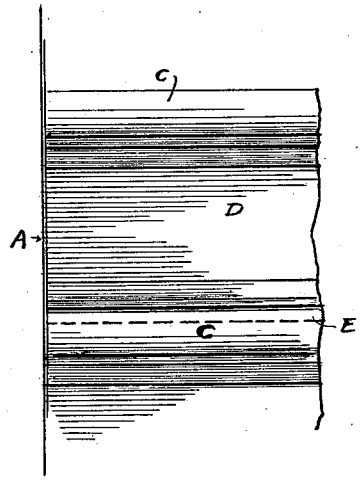


FIG #1

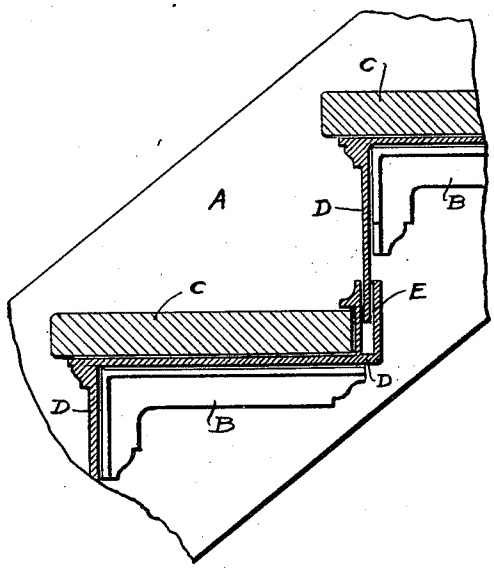


FIG #2

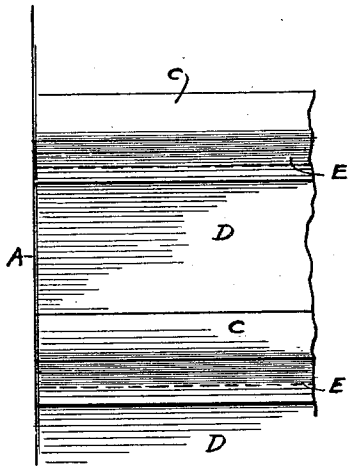


FIG #3

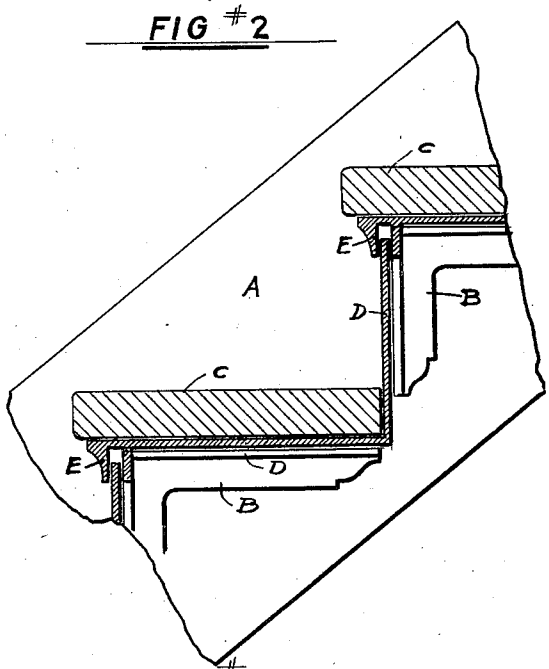


FIG #4

WITNESSES:

G. Leonhard Schmaltz

Lillian E. Lindquist

INVENTOR

Wenceslaus Färch

BY

W. P. Preble Jr.

ATTORNEY

COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

MOGENS FÄRCH, OF NEW YORK, N. Y.

SELF-FITTING STAIR-RISER.

1,046,165. Specification of Letters Patent. Patented Dec. 3, 1912.

Application filed August 25, 1911. Serial No. 645,993.

To all whom it may concern:

Be it known that I, MOGENS FÄRCH, a citizen of Denmark, and a resident of Brooklyn borough, New York city, State of New York, have invented certain new and useful Improvements in Self-Fitting Stair-Risers, of which the following is a specification.

As heretofore constructed, risers for stairs and stair-ways have had to be made of a definite height calculated from the number of steps to occupy a given space. This has involved a great deal of labor in erecting the stair-ways as the successive frames have to be secured together by bolts or otherwise with great accuracy to make the risers correspond with the carriers. Obviously, a riser intended for a 6½ inch rise, would not fit where 7 inches or 6 inches were required. All this labor of erection is saved and there are many other advantages in my improved riser which is so constructed as to slip into the portion of the stair frame which is designed to receive it only to that distance which is permitted by the structure of the carrier. As the riser does not support the weight of the tread, commonly marble or other stone, but the carrier does, it is not necessary for the riser to do more than interlock with the socket, sufficiently to attain the necessary rigidity against forward and back displacement.

The riser, according to my invention, may either be adapted to the lower forward side of the portion of the frame, which receives the stair tread, or to the upper side of the rear edge as desired. Whichever place is selected for the riser, the other place is selected for the socket. Thus it will be seen that the stair frame can be erected by simply setting the successive steps, one upon the other, the riser of one step interlocking with the socket of the next step. No bolts or other fastening will be required the weight of the stair tread being sufficient to force the riser into the socket as far as the carrier permits. It will thus be seen that where, for any reason, the space between successive treads are made to vary the improved riser accommodates itself to that variation automatically, and for this reason, I call the riser a self-fitting riser; meaning thereby, that it readily adapts itself and fits the socket when the socket assumes the position upon the stair tread taking its place upon the carrier.

In the accompanying drawing, I have shown two applications of my invention.

In Figures 1 and 2, the riser descends into the socket of the stair frame below, and in Figs. 3 and 4, the socket of the stair above, upon the upwardly projecting riser. Figs. 1 and 3, are front elevations. Figs. 2 and 4, are vertical sections.

Same letters indicate similar parts in the different drawings.

A, represents the usual stringer to which the usual carriers B, B, are secured in the usual way.

C, C, are the stair treads which may be of any suitable material, but in work of this kind, are generally marble or other stone.

D, D, are riser frames, adapted to slip into each other as shown in Figs. 2 and 4 by having the vertical portion of the riser slip into the socket E, which in one case, is at the top of the tread portion of the riser frame to receive the flange of the riser above and in the other case, projects downwardly from the tread portion to receive the flange of the riser below.

The many uses and advantages of my invention, will be, I think, readily understood by architects, builders, and others without further explanation.

I claim:

A self fitting stair riser which comprises a tread surface portion, a vertical flange projecting from one edge, and a vertical socket projecting from the other edge, in the opposite direction from said vertical flange; said flange and socket adapted to engage freely and adjust themselves in connection with the socket and flange respectively of the adjacent stair risers.

MOGENS FÄRCH.

Witnesses:
G. LEONHARD SCHUEPF,
W. P. PREBLE, Jr.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."