

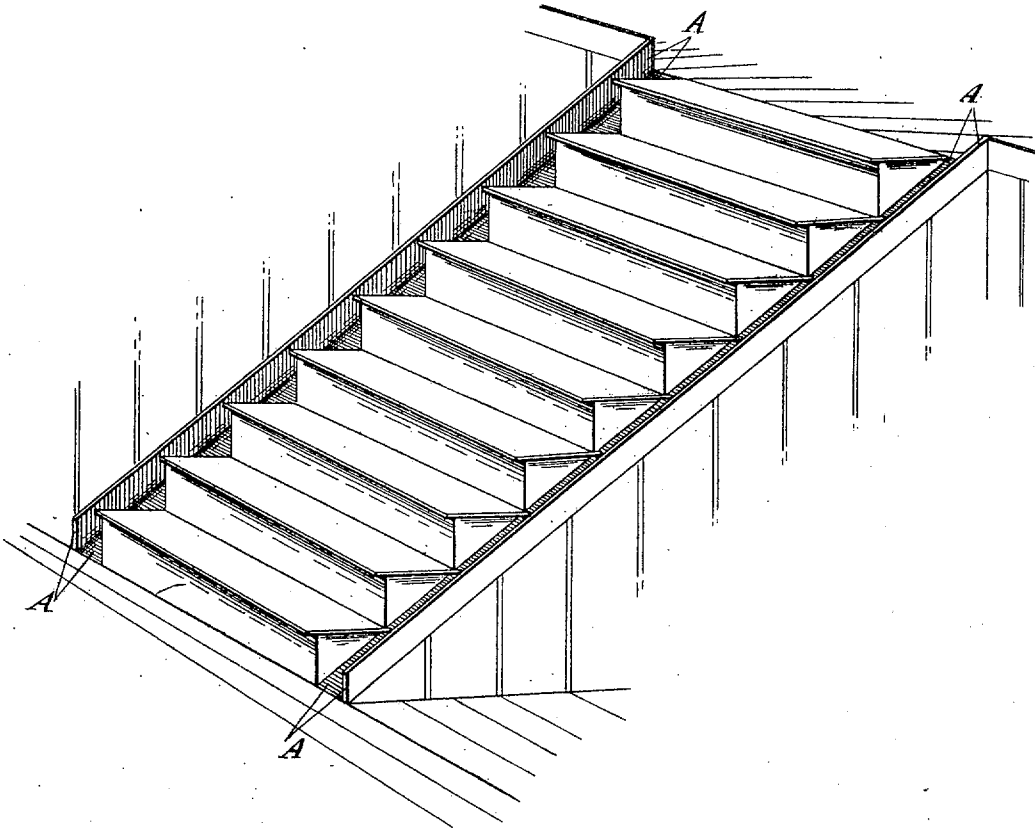
J. C. TOLIVER.

STAIR.

APPLICATION FILED SEPT. 9, 1909.

957,817.

Patented May 10, 1910.



Witnesses:
Fred C. Baldwin
Frank S. Toliver

Inventor:
James C. Toliver

UNITED STATES PATENT OFFICE.

JAMES C. TOLIVER, OF AINSWORTH, NEBRASKA.

STAIR.

957,817.

Specification of Letters Patent,

Patented May 10, 1910.

Application filed September 9, 1909. Serial No. 516,988.

To all whom it may concern:

Be it known that I, JAMES C. TOLIVER, a citizen of the United States, and a resident of Ainsworth, in the county of Brown and State of Nebraska, have invented an Improvement in Stairs, of which the following is a specification.

My invention is an improvement in that class of stairs in which a chute or wheel-way is provided on each side of the steps constituting the stair proper.

My invention consists in the construction and arrangement of the chute on the sides of the stairs proper, whereby dust, dirt, or other material that may fall or accumulate upon the stairs may be swept or pushed directly off the same into the chute.

The details of construction, arrangement, and combination of parts are as hereinafter described, and illustrated in the accompanying drawing which represents in perspective a stairway provided with my improvement.

The stair proper is constructed in the usual way of a series of steps, each formed of a horizontal tread and a vertical riser. On each side of such steps I provide a chute or trough, A, which has the same inclination as the stair. Each chute is constructed of a bottom board, and a side board attached to the outer edge of the latter and spaced from the ends of the steps. In order that dust, dirt, or other material falling upon or accumulating on the steps may be swept or pushed off the ends of the treads, without obstruction, it is necessary that the bottom of the chutes or troughs shall lie behind, or at least not project in front of, the angle formed by the several treads and risers.

With the bottom of the chutes so arranged, the dirt, dust, or other material will pass directly off the ends of the stair treads and is not obstructed at the inner angles of the steps, as in other inventions of this class. Thus, the triangular pieces at the ends of the steps, which form part of the strings or stringers that support the steps, constitute virtually the inner sides of the chutes or troughs. Each chute is made of sufficient width to receive the brush of an ordinary broom when turned edgewise, and thus the dirt or other material swept from the treads of the steps into the chutes without any obstruction at that point, can be easily swept down the chutes by turning the broom edgewise, and, at the bottom of the chutes, the material may be taken up with a dust-pan. By this construction and arrangement of parts, I avoid the difficulty heretofore encountered in removing dust, dirt, or other material at the outer corners of the steps.

What I claim is:

A stair having a chute located on the side parallel thereto and having the same inclination, the chute being formed of an outer or side portion which is spaced from the ends of the steps, and a bottom which is located behind the inner angles of the treads and risers, whereby dust or other material accumulating on the steps may be swept off the ends of the treads into the chute without obstruction, substantially as described.

JAMES C. TOLIVER.

Witnesses:

BUEL S. HARRINGTON,
ARTHUR C. TOLIVER.