GAUGE FOR CONCRETE STAIR CONSTRUCTION

3 Claims, 6 Drawing Figs.

ABSTRACT: A gauge for concrete stair construction comprising a stringer extending in a direction corresponding to the rise and run of the completed stair, a plurality of flat gauge brackets secured to the stringer, each bracket having an edge extending in a direction, generally vertical, and bearing against the riser form, the bracket having spacer structure secured to the rear edge of the bracket and contacting the underside of the stringer and the upper edge of the riser form to hold same in place. The flat gauge brackets may be rocked in a vertical plane, so that the riser form may be given a desired amount of kick back.
GAUGE FOR CONCRETE STAIR CONSTRUCTION

It is a principle object of the invention to provide an improved gauge for laying out and constructing concrete stairs, which gauge can be readily adjusted in the field by the carpenter or formsetter.

The drawings:

FIG. 1 is an elevational view showing the gauge according to the present invention in position for the construction of a concrete stair;

FIG. 2 is a detailed isometric view thereof;

FIG. 3 is an elevational view of a flat gauge bracket employed with the gauge seen in FIG. 1;

FIG. 4 is an end view thereof;

FIG. 5 is an isometric view thereof; and

FIG. 6 is a view similar to FIG. 1 showing the gauge adjusted for kickback of the stair tread.

The improved gauge according to the present invention is referred to by the reference numeral 10 and is employed in the construction of a concrete stair CS. The gauge includes a stringer 11 extending in a direction corresponding to the rise and run of the stair CS.

Stringer 11 has a plurality of gauge members 12 spaced at equal distances throughout the length thereof for locating the front of the risers R and the tread surfaces T of the finished stair CS.

Each of the gauge members 12 consists of a flat plate 13 generally in the form of a trapezoid as shown and provided with a plurality of holes H therein adapted to receive nailing devices, not shown, for securing said gauge member 12 in adjustable positions to the stringer 11.

A flange 14 extends laterally from plate 13 and is adapted to bear against a riser from RF which locates the front face of riser R. Flange 14 may also be provided with holes H for nailing devices, not shown, to secure riser from RF to flange 14.

Structure is provided for locating the gauge member 12 with respect to stringer 11 and consists of a pair of dowels 16 and 17, welded or otherwise secured to the back face of flange 14. Dowel 16 contacts the underside of stringer 11, while dowel 17 bears against the upper edge of riser form RF to hold same against the buoyant forces of the wet concrete during pouring of the stair CS.

As seen in FIG. 1 the gauge members 12 are located against plumblines PL marked on the stringer 11. In the event the stair is constructed with kickback as seen in FIG. 6 kickback lines KBL are located on the stringer 11 and the plate 13 rotated around dowel 16 to give the proper position to the gauge member 12 for such kickback.

1 claim:

1. In an improved gauge for concrete stair construction comprised of a series of risers and treads;

a. a stringer spaced from said risers and treads and extending in a direction corresponding to the rise and run of the completed stair;

b. a plurality of gauge members spaced throughout the length of said stringer for locating the top of the treads of the finished stair and the front of the risers thereof;

c. each of said gauge members including a riser member disposed against the adjacent riser of said concrete stair;

d. each of said gauge members being adjustable in position on said stringer and being adapted to cooperate with said riser member for constructing said stair, and including

1. a flat member adjustedly secured to said stringer along a side thereof,

2. a flange extending laterally from said flat member and in engagement with said riser member along the face thereof to hold the same in position,

3. a first member extending laterally of said flat member and secured to said flange and bearing against the underside of said stringer,

4. a second member extending laterally of said flat member and secured to said flange in generally parallel relation to said first member for exerting a downward force against said riser member.

2. A gauge according to claim 1 wherein each of said gauge members is in the form essentially of a flat plate having a plurality of holes therein adapted to receive nailing devices for securing said gauge member in adjustable positions to said stringer.

3. A gauge according to claim 1 wherein said flat member has a plurality of holes therein adapted to receive nailing devices for securing said flat member in adjustable positions to said stringer with said first member bearing against the underside of said stringer.

4. 

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