

No. 697,434.

Patented Apr. 15, 1902.

H. W. BEARDSLEY.
STEP STRUCTURE.

(Application filed July 31, 1901.)

(No Model.)

FIG. 1.

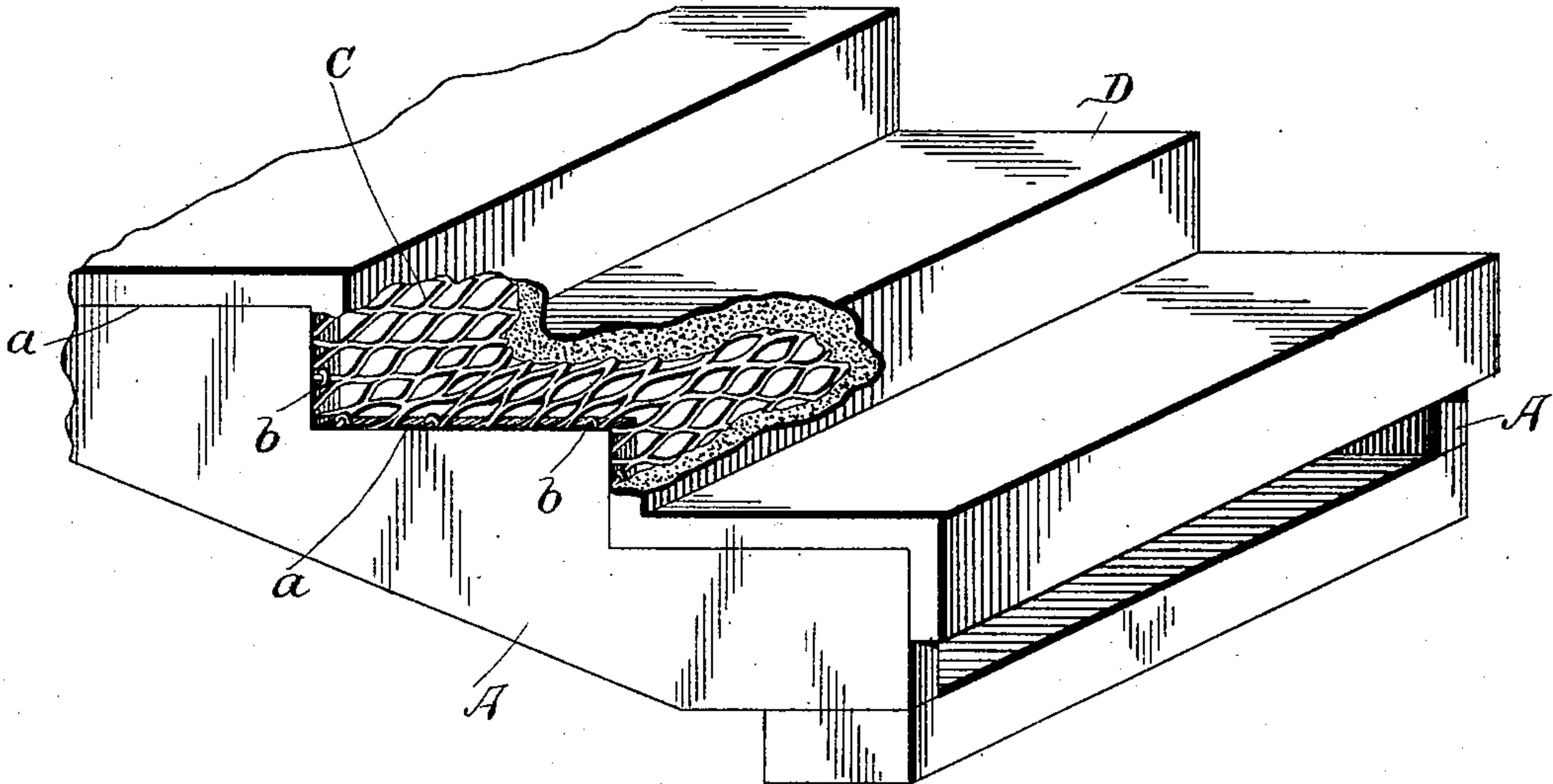
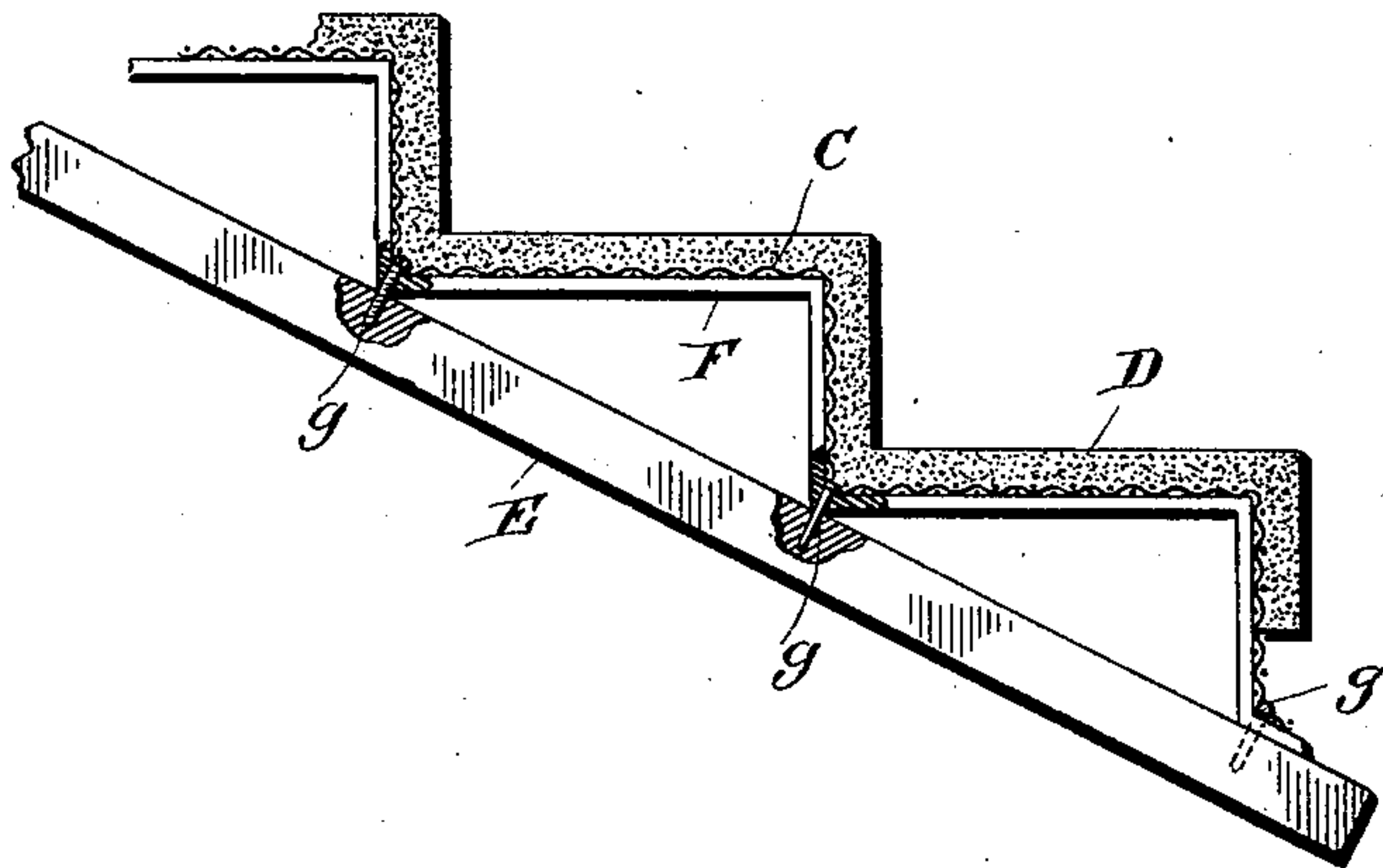


FIG. 2.



WITNESSES

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STEP STRUCTURE.

SPECIFICATION forming part of Letters Patent No. 697,434, dated April 15, 1902.

Application filed July 31, 1901. Serial No. 70,375. (No model.)

To all whom it may concern:

Be it known that I, HENRY W. BEARDSLEY, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Step Structures; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My present invention relates to improvements in steps; and it has for its object the production of a cement step structure capable of being rapidly built without the exercise of special skill and which possesses great strength and rigidity and durability.

The nature of the invention will be readily comprehended, reference being had to the following detailed description and to the accompanying drawings, in which—

Figure 1 is a perspective view, partly broken away, of a step structure embodying my invention. Fig. 2 is a longitudinal sectional view of a modification.

Referring first to Fig. 1, A A denote wooden strings having stepped upper edges *a*, to which is secured by means of nails, staples, or screws *b b* a step-base C, which may be what is known as "expanded metal" or wire-netting or their equivalent. D designates the treads, which are formed from cement or the like applied in a plastic condition and which are anchored to the base by being forced through and beyond the openings in said base. The base, which may be continuous or in sections, extends transversely from string to string and

may be supported intermediately by another string or strings.

In Fig. 2 is shown a construction employing inclined wooden or other sleepers E, which support strings F, formed by bent band-iron or the like, the metallic strings being fastened to the sleepers by suitable securing devices, such as the nails, staples, screws, or bolts *g g*. The metallic strings support the step-base C, the latter being secured, preferably, by the devices *g*, and said base serves as the anchoring-support for the cement treads D, as in the construction illustrated in Fig. 1.

The upper surface of the cement tread portion may have any desired design or configuration, as the material of which it is composed is applied in a plastic state. When set, the structure possesses lightness coupled with great strength and rigidity and durability. The steps may, as above stated, be rapidly constructed without the exercise of special skill.

I claim as my invention—

1. A step structure comprised of strings having stepped upper edges, a perforate tread and riser body secured to the stepped edge of the strings, and cement treads and risers supported by and anchored to the said body.

2. A step structure comprised of sleepers, metallic stepped strings secured to the sleepers, a perforate tread and riser body secured to the strings, and cement treads and risers supported by and anchored to the said body.

In testimony whereof I affix my signature in presence of two witnesses.

HENRY W. BEARDSLEY.

Witnesses:

WILLIAM MAFFITT,
HARRY SCULLINS.