Nov. 29, 1949 A. M. WOODS 2,489,604

DEVICE FOR FORMING CONCRETE STEPS

Filed Oct. 4, 1946

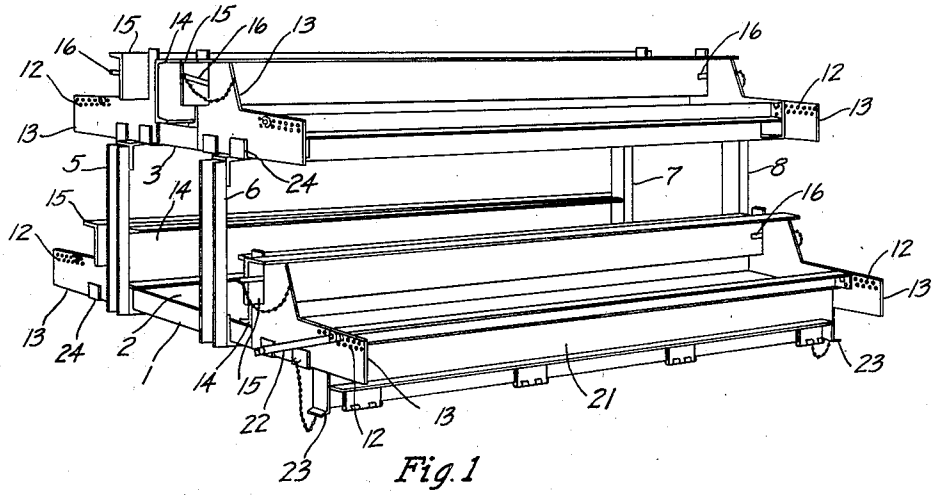


Fig. 1

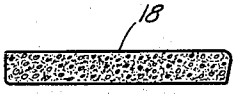


Fig. 3

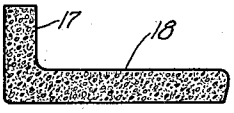


Fig. 4

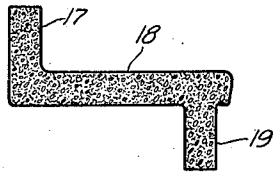


Fig. 5

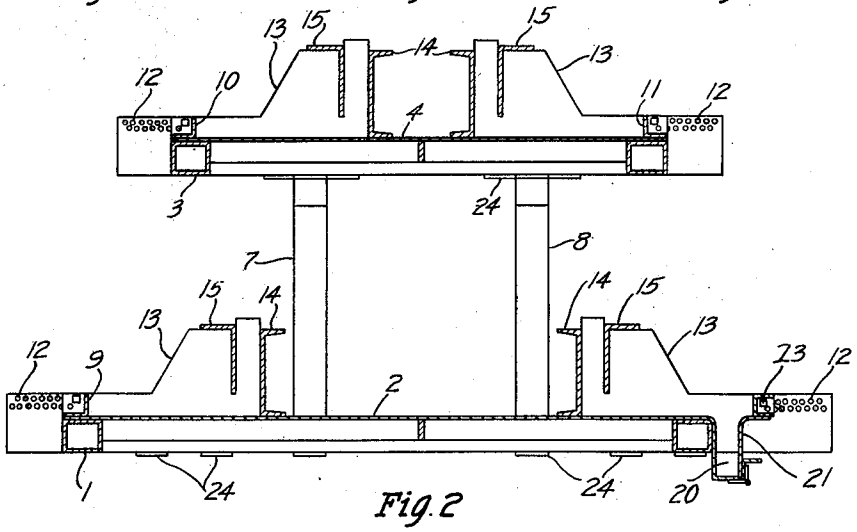


Fig. 2

INVENTOR.
Andrew M. Woods
BY
Samuel A. Davis

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DEVICE FOR FORMING CONCRETE STEPS

Andrew M. Woods, Lansing, Mich.

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1 Claim. (Cl. 25—118)

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This invention relates to concrete step construction and is particularly concerned with a metal structure for accomplishing the same, and is most particularly concerned with the product so obtained.

An object of this invention is the provision of a metal structure whereby concrete steps may be produced. A further object of this invention is the provision of a metal structure by the use of which concrete steps of any width, or height may be constructed. It is still a further object of this invention to provide a metal structure whereby concrete steps may be constructed economically and at a relatively low labor cost.

I have now discovered and invented a metal structure which will be hereinafter described and am able to accomplish the objects set forth, as well as other objects which will present themselves upon disclosure of my invention.

Referring to the drawings:

Fig. 1 is a perspective view of the metal form, or structure.

Fig. 2 is a vertical end section taken along any line of Fig. 1.

Fig. 3 is a section of the tread.

Fig. 4 is a section of the tread and riser.

Fig. 5 is a section of the tread, riser, and support.

Referring to Figs. 1 and 2, the lower frame 1 is welded to the base 2. The upper base 4 is welded to the upper frame 3. The said frame 3 and base 4 are supported by uprights 5, 6, 7, and 8. The bases 2 and 4, have angle irons 9, 10, and 11 welded thereto. The said angle irons have holes therein to serve in adjusting the end pieces 13 by means of the plurality of holes 12. Channel irons 14 are welded to the end pieces 13, forming a slidable unit which controls the width of the steps. An angle iron 15 is wedged into a slot provided in the end piece 13 by means of a wedge pin 16. The said angle iron 15 provides means for controlling the thickness of the riser 17. Fig. 5 shows the first or bottom step to which a support 19 is cast. The casting of the said support 19 is accomplished by providing a gate 21 to the well 20, which gate may be dropped down when the bolt in the rod 22 is removed. The said bottom step, after casting and setting, may then be readily removed. A slidable end gate 23 is provided to prevent the concrete from running out at the end of well 20. The angle pieces 24 are welded to the upper and lower frames, and act as guides for the slidable portion of the form. The step is formed by pouring the concrete to the proper thickness and further trowelling the

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said concrete to form a smooth top surface. The angle iron 15 is removable.

I want particularly to point out that the well 20 shown in Fig. 2 can be used for the production of supports of narrower width, when it is so desired. To produce a support of a narrower width an oblong wooden block of the proper size is placed into the bottom of the said well. I also want particularly to point out that the well may be entirely closed by placing therein a wooden block having substantially the same dimensions as the said well, and thus allowing the formation of a step having a riser but no support, similar to that shown in Fig. 4.

The height of the riser on the step of my invention may be made narrower merely by adding concrete to the desired height. The width of the tread may be varied by adjusting the forms by means of a bolt to the angle irons provided for that purpose.

I claim:

A metal structure for the production of concrete steps comprising a lower frame, a base, a pair of slidable lower forms, the said lower forms having means for adjusting the width thereof, one of the said lower forms having extending downwardly therefrom a well for casting a support onto the said concrete step, said well having a hinged gate, a plurality of uprights substantially fastened at their base to the lower frame, and a pair of slidable upper forms substantially fastened to a frame supported by the said upright, the said upper forms having means for adjusting the width thereof.

ANDREW M. WOODS.

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