Feb. 18, 1958 H. E. SCHADE 2,823,440

CHANNEL SLAB CONCRETE MOLD

Filed Feb. 23, 1954 2 Sheets-Sheet 1

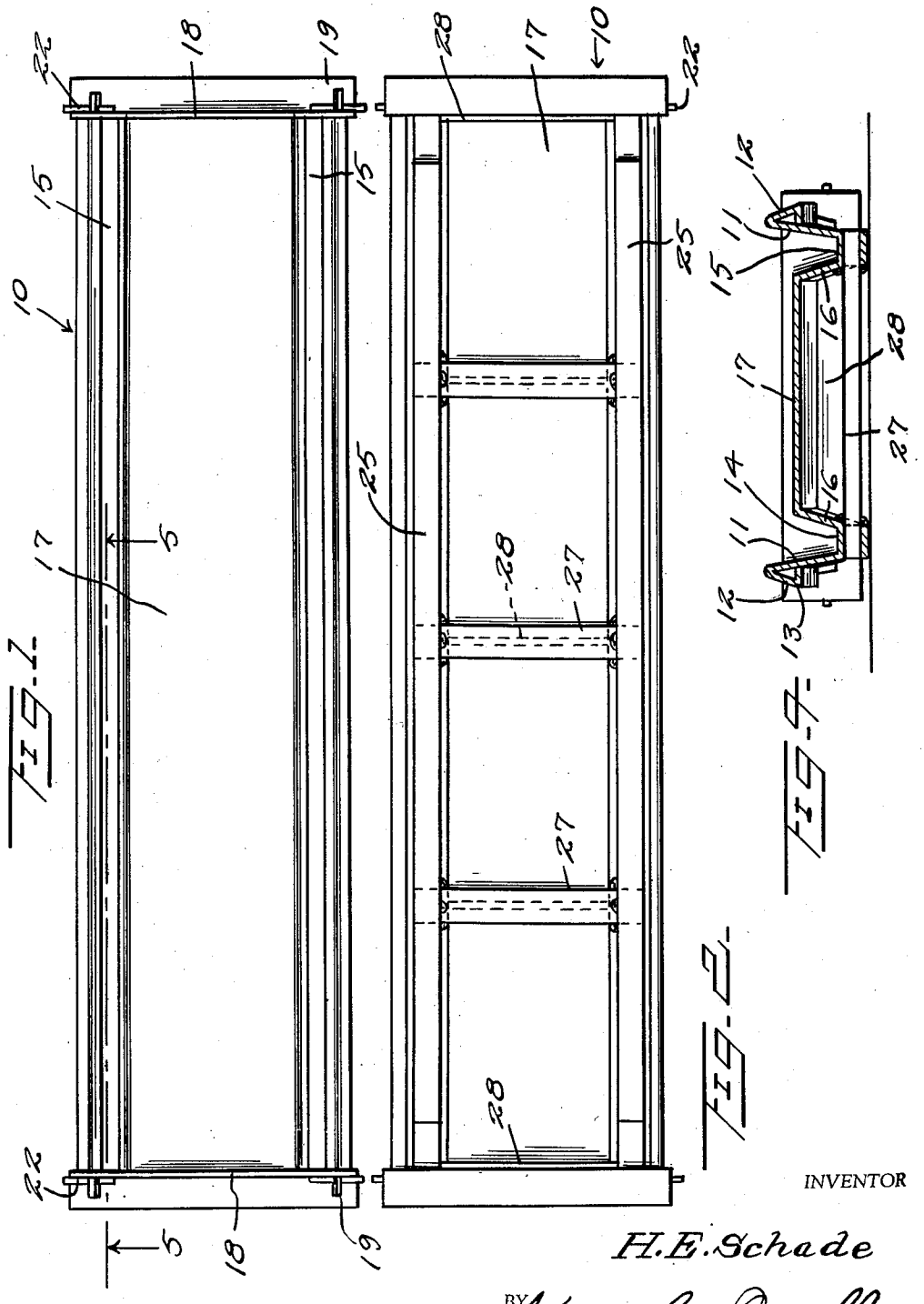


FIG. 1.

FIG. 4.

FIG. 2.

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Feb. 18, 1958 H. E. SCHADE 2,823,440

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Filed Feb. 23, 1954 2 Sheets-Sheet 2

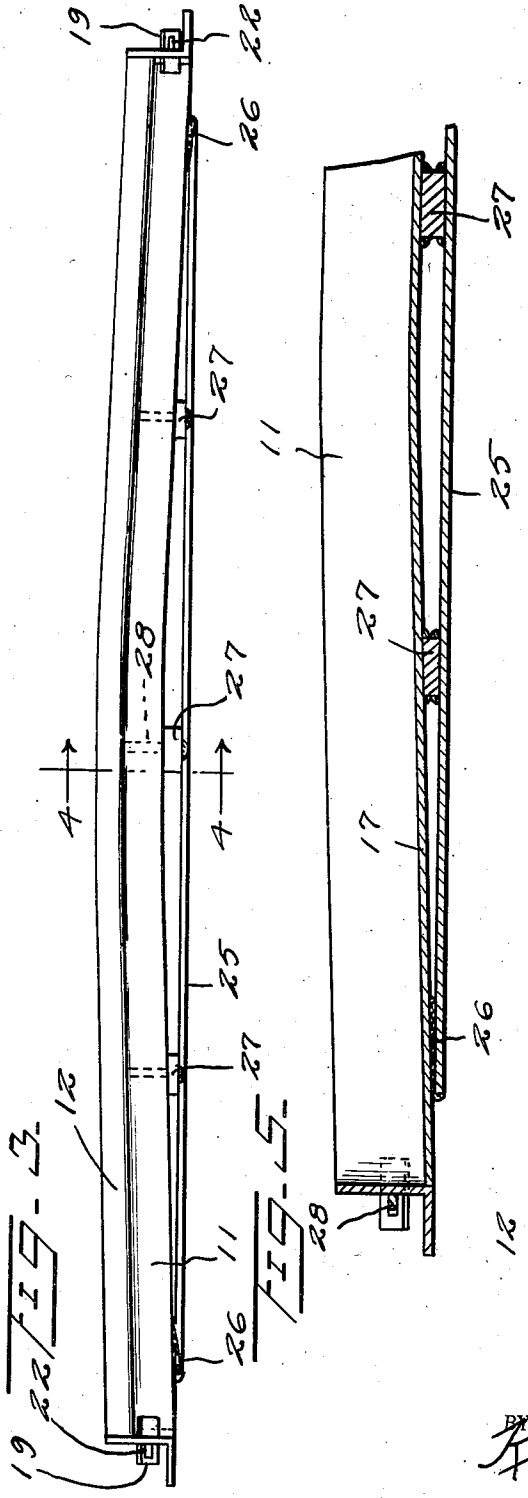


FIG. 3.

FIG. 5.

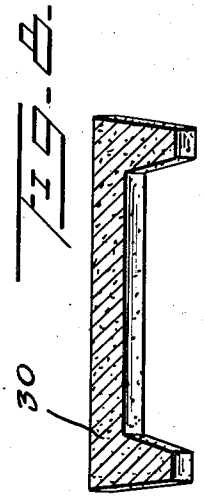


FIG. 6.

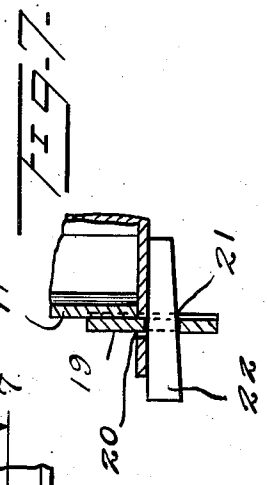


FIG. 7.

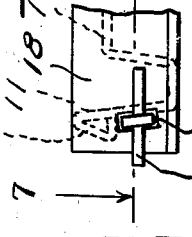


FIG. 4.

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CHANNEL SLAB CONCRETE MOLD

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Application February 23, 1954, Serial No. 411,721

2 Claims. (Cl. 25—121)

This invention relates to a channel slab concrete mold, and has as its primary object the provision of a mold which will form a slab in which the customary sagging effect after the slab is positioned is eliminated.

An important object of the invention is the provision of a mold of this character by means for imparting a slight bow to the slab during the molding thereof so that after curing any slab will result in a perfectly flat smooth slab.

A further object of the invention is the provision of a mold which is of extra light weight, that it will be easily handled by the laborer without use of cranes or other lifting devices.

Still other objects reside in the combination of elements, the arrangement of parts, and features of construction, all as will be more fully pointed out hereinafter, and shown in the accompanying drawings wherein there is disclosed a preferred embodiment of this inventive concept.

In the drawings:

Figure 1 is a top plan view of a mold constructed in accordance with the instant invention.

Figure 2 is a bottom plan view thereof.

Figure 3 is a side elevational view of the mold.

Figure 4 is an enlarged sectional view taken substantially along the line 4—4 of Figure 3, as viewed in the direction indicated by the arrows.

Figure 5 is an enlarged sectional view taken substantially along the line 5—5 of Figure 1, as viewed in the direction indicated by the arrows.

Figure 6 is a fragmentary end view of a constructional detail.

Figure 7 is a sectional view taken substantially along the line 7—7 of Figure 6, as viewed in the direction indicated by the arrows.

Figure 8 is a perspective end view of the finished slab.

Similar reference characters refer to similar parts throughout the several views of the drawing.

As conducive to a clearer understanding of this invention, it may here be pointed out that in casting concrete slabs of any substantial length, even after they have been thoroughly cured and set in place, there is a tendency of the slab to sag or bow slightly from its own inherent weight, thus resulting in an irregular and unsightly surface when the slabs are used for roofs, floors, or the like.

One important object of this invention is, therefore, to obviate this difficulty by initially casting the slab in upwardly bowed form so that if such sagging occurs the slab will be substantially flat. This is accomplished by means of a mold constructed in accordance with the instant invention.

The mold of the instant invention, generally indicated at **10**, comprises outer side walls **11**, formed with depending flanges **12**, and inwardly reverted ends **13** on said flanges, the walls **11** extending downwardly to the bottoms **14** of channels **15**, from which upwardly extending inclined walls **16** extend to the bottom wall **17** of the mold.

End walls **18** are provided and are secured to the side walls by means of lugs **19** secured to the ends of walls **11** which extend through apertures **20** at the ends of the end wall, and which are themselves apertured as at **21** to receive locking keys **22**.

Underlying each of troughs **15** is a strip-like truss member **25** extending the full length of each trough and securely welded thereto at each end, as indicated at **26**. Transversely extending spacers **27** extend beneath the troughs and above the trusses and these are graduated in thickness, as best shown in Figures 3 and 5, to provide a central bowing in an upward direction of the bottom of each trough.

Transversely extending webs **28** are secured to each of members **27** and extend upwardly to support the bottom **17** of the mold proper. By virtue of this arrangement it will be seen that when a slab is poured into the mold it is initially imparted a slight upward bow, and when the mold is removed a slightly arched slab results.

The ends **18** of the mold may be removed by the removal of locking keys **22** and the finished slabs thus readily removed therefrom.

After the slabs, indicated at **30**, see Figure 8, have dried they are placed on edge in stacked relation for curing and after a suitable period of time are ready for use. When the slabs are positioned in the building structure they are initially laid with the bowed side up and any subsequent sagging thus will result in a perfectly flat slab.

The degree of sagging in a construction of this sort is slight and in consequence the amount of bow or arch imparted in each slab is correspondingly slight, and in the drawing is exaggerated for purely illustrative purposes.

From the foregoing it will now be seen that there is herein provided an improved mold or concrete slab of the channel type which imparts the bow to the slab during molding and thus eliminates the effect of any substantial sagging of the slab, which mold is very light and may be constructed of very light sheet metal, or the like, to facilitate handling, which accomplishes all of the objects of this invention, and others, including many advantages of great practical utility and commercial importance.

As many embodiments may be made of this inventive concept, and as many modifications may be made in the embodiment hereinbefore shown and described, it is to be understood that all matter herein is to be interpreted merely as illustrative and not in a limiting sense.

What is claimed is:

1. A mold for casting substantially elongated preformed convex-upwardly bowed concrete slabs of uniform cross-section said mold including a convex-upwardly bowed gradually curved bottom wall, a pair of side wall members secured to the opposite side edges of said mold and extending upwardly therefrom, said side wall members each having a convex-upwardly bowed upper edge extending parallel to the upper side of said bottom wall, a pair of end walls, means detachably securing said end walls to the opposite ends of said side wall members, a pair of elongated flat straight rigid truss bars underlying said mold in spaced parallel relation and having their opposite end portions welded to the underside of said bottom wall, and a plurality of spacer members welded between the medial portions of said truss bars and said bottom wall.

2. A device as claimed in claim 1 wherein said bottom wall is provided with a pair of depending trough members disposed on opposite sides thereof with the lower edges of said trough members arranged in spaced parallel relation to said bottom wall.

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