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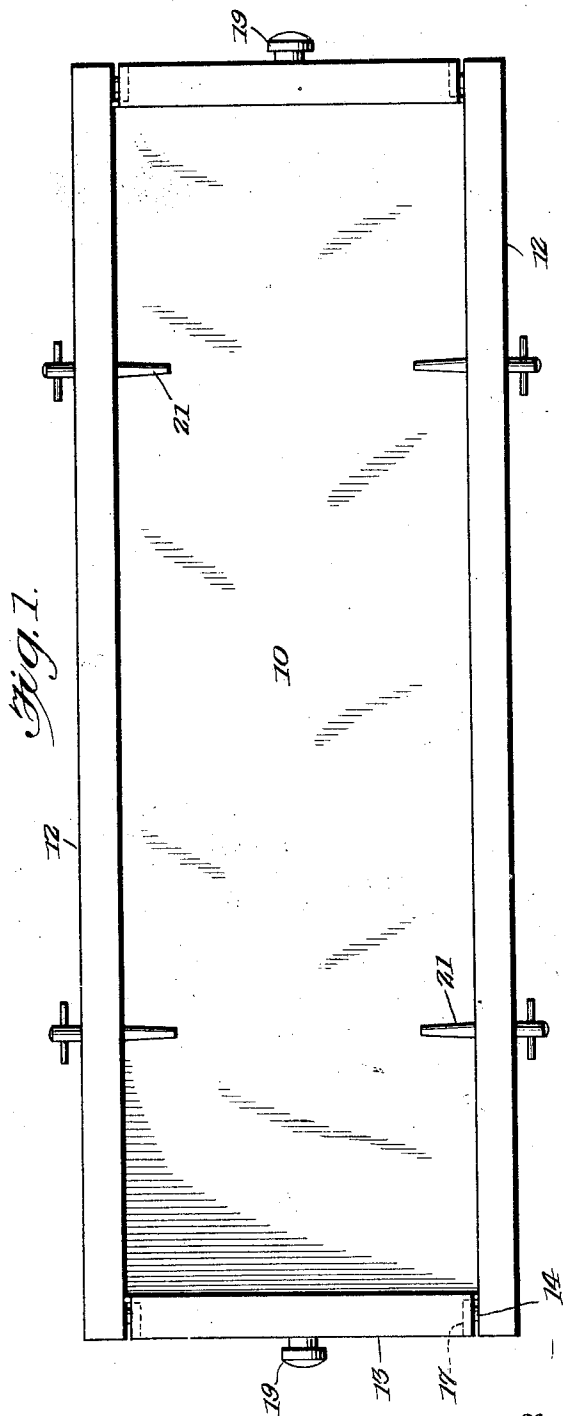
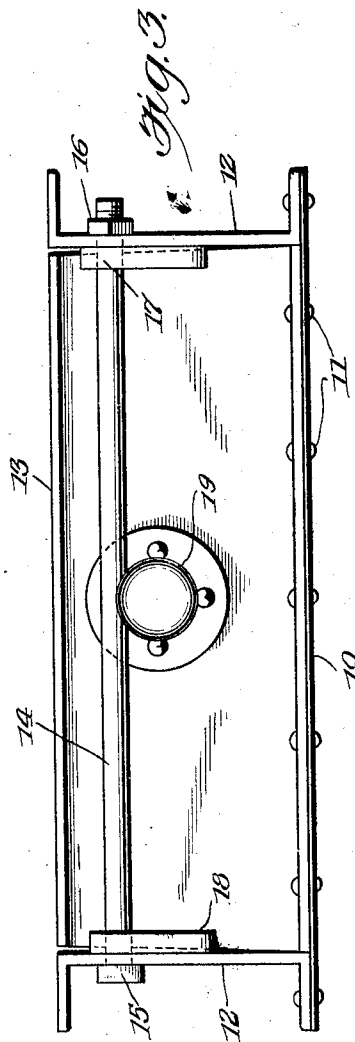
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MOLD FOR FORMING CONCRETE SLABS

Filed Nov. 10, 1927

2 Sheets-Sheet 1



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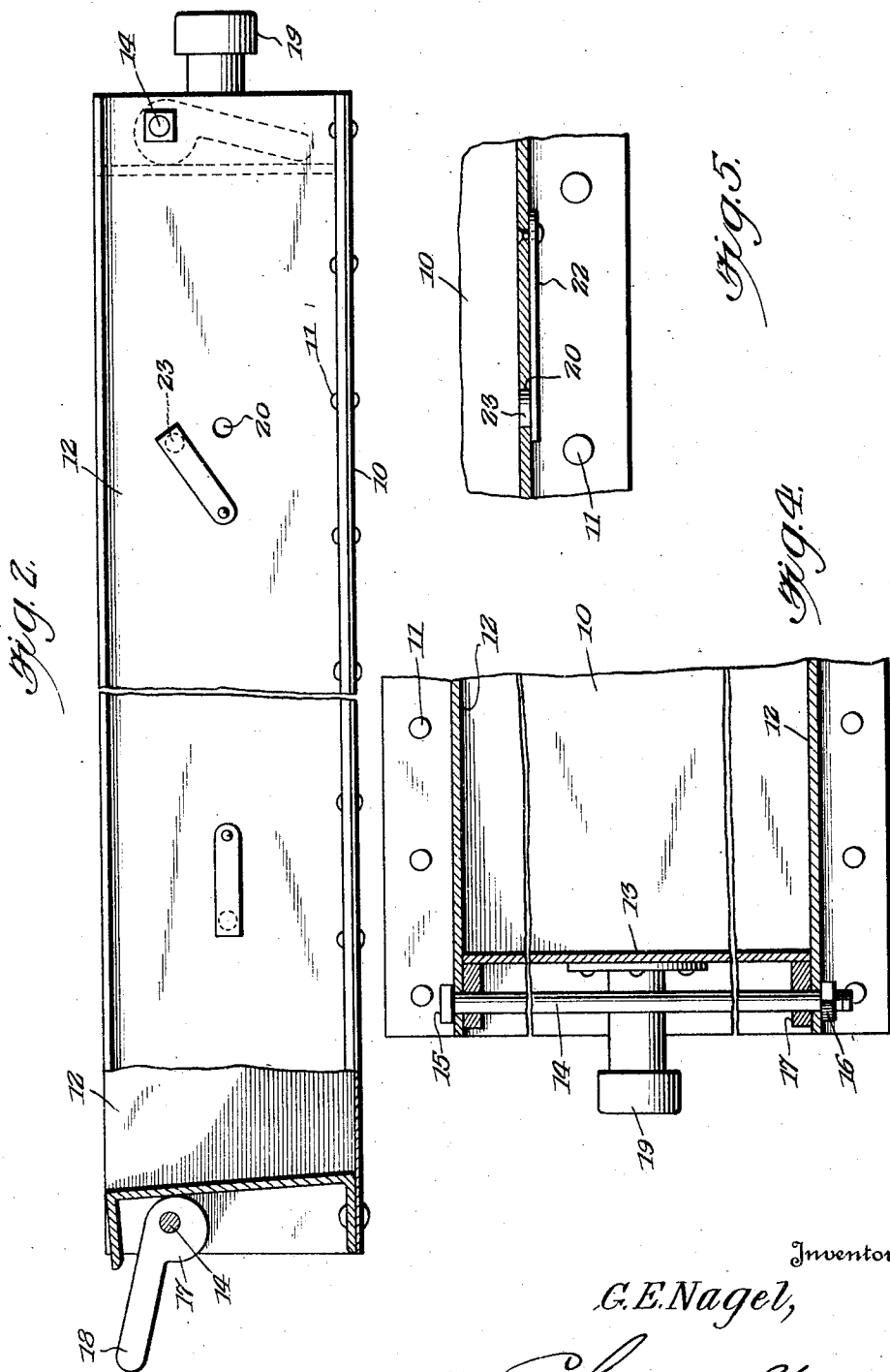
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MOLD FOR FORMING CONCRETE SLABS

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2 Sheets-Sheet 2



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UNITED STATES PATENT OFFICE.

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MOLD FOR FORMING CONCRETE SLABS.

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This invention relates to molds particularly adapted for the formation of concrete slabs.

The primary object of the invention is the provision of a mold from which the slabs may be quickly and easily discharged after the concrete has properly set.

It is rather advantageous that the wear sustaining surface of the finished slab be a little larger than the base portion of the slab and as the wear sustaining surface is formed by the bottom of the mold, the present invention contemplates a mold having a flexible bottom and sides whose upper portions may be contracted prior to the concrete mix being placed therein, so that, after the mix has set, said sides may be released, permitting them to flex outwardly, whereupon the finished slab may be easily and quickly removed.

The mold shown in the present instance is especially designed for the production of slabs used between the rails at railroad grade crossings and as it is desirable to provide means for anchoring the slabs between said rails, the mold is provided with means for facilitating the formation of depressions or sockets in the finished slab for co-operation with suitable anchoring means.

With these and other objects in view, the invention consists in certain novel details of construction and combinations and arrangements of parts all as will be hereinafter more fully described and the novel features thereof particularly pointed out in the appended claims.

In the drawings,—

Figure 1 is a top plan view of a mold embodying the present invention;

Fig. 2 is a side elevational view of the mold;

Fig. 3 is an end elevational view of a portion of an end of the mold adjacent to the side shown in Fig. 2.

Fig. 4 is a longitudinal sectional view through an end portion of the mold.

Fig. 5 is a detail sectional view through the side wall of the mold shown in Fig. 2.

The present mold comprises a base 10 of suitable resilient material which will permit of being flexed and attached to said base as by rivets 11 are the side walls 12, 13. It will be understood that the face of the slab formed at the bottom of the mold is actually the wear sustaining surface for the finished slab, and in order that the wear sustaining surface may be of a little larger area than the bottom of

the slab the sides 13 of the mold are cut away at the upper portions of their ends so that it may be said said sides are tapered upwardly.

The side walls 12 extend beyond the walls 13 and mounted in the projecting portions thereof is a rod 14 extending full length of the mold. One end of said rod has an enlargement 15 formed thereon and at its opposite end there is a nut 16, whereby by screwing up the nut 16 the two walls 12 are contracted or moved toward one another so as to be brought in contact with the tapered ends of walls 13.

Walls 13 are also adapted to be flexed inwardly and for this purpose there is mounted on rod 14 a cam 17 whose camming surface when the handle portion 18 is raised is adapted to permit walls 12 to flex outwardly. However, by turning handle 18 downwardly as shown in dotted lines in Fig. 3 walls 13 may be flexed inwardly or contracted as in the case of walls 12. With this arrangement the cross section of the finished slab is reduced at its base as compared with the area of the wear sustaining surface, which, as pointed out, is formed at the bottom of the mold. It will be understood that the expanding and contracting means just described are provided at two opposite sides of the mold, and after the slab has been formed such contracting means are released so that all four sides are again free to flex outwardly, after which the mold may be inverted by turning on trunnions 19 to discharge the molded slab.

As before mentioned, the present mold is especially designed for the formation of slabs to be used in forming the road surface at railroad grade crossings. Such slabs should be provided with means for anchoring them, as otherwise they are apt to rise upwardly between the rails to some extent and either cause undue strains to be placed upon their corners or at least have a detrimental effect on otherwise smooth road surface. For this reason the present mold has two of its opposite sides formed with apertures 20 into which pins may be projected when the concrete mix is being deposited in the mold. After the concrete is set and before it is attempted to remove the slab from the mold said pins, one of which is indicated at 21, are withdrawn leaving what might be termed a socket in the finished mold. In the event it is desired to

form the molds without sockets, the flexible plate 22 is pivoted at one end to the side of the mold in proximity to each of openings 20 and at their free ends these plates are provided with projections 23 conforming in configuration to the cross section of apertures 20 so that by turning said plates until the projections 23 come into registry with openings 20 said plates will be forced into the openings by the resiliency of the plates 22. Preferably projections 23 are of the same width as the walls of the mold, so that their inner surfaces will lie flush with the inner surfaces of said walls, thereby producing a substantially smooth surface on the finished slab.

What I claim is:

1. A mold comprising a resilient bottom, side walls rigidly mounted on said bottom, two of said walls being of reduced length at their upper edges whereby, when the bottom of the mold is flexed to position the other two sides against the ends of the sides of reduced length the cross section of the mold will be reduced at its upper portion, and means for forcing said walls against the walls of reduced length.

2. A mold comprising a resilient bottom, side walls rigid with said bottom, two of said walls being of reduced length at their upper edge and two other sides being adapted to be moved against the ends of said first two walls

by flexing said bottom, and means carried by said walls for flexing said bottom.

3. A mold comprising a resilient bottom, side walls rigid with said bottom, two of said walls being of reduced length at their upper edge and two other sides being adapted to be moved against the ends of said first two walls by flexing said bottom, rods connecting two of said walls and means on said rods for forcing the upper edges of all of the walls inwardly with respect to said bottom.

4. A mold comprising a resilient bottom, side walls rigid with said bottom, two of said walls being of reduced length at their upper edge and two other sides being adapted to be moved against the ends of said first two walls by flexing said bottom, rods mounted on two of said walls, means on said rods for contracting the upper edges of said walls, and cam members on said rods adapted to force the upper edges of the other two walls inwardly.

5. A mold for railroad crossing slabs comprising a bottom and side walls, one of said side walls having an aperture therein, a plate pivoted on said wall, and a projection on said plate having a cross section conforming to the configuration of said aperture, said projection being adapted to be positioned in said aperture.

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