June 22, 1937. C. C. TOMKINSON 2,084,417

WEDGE FOR CONCRETE FORM TIES

Filed Aug. 10, 1935

Fig. 1.

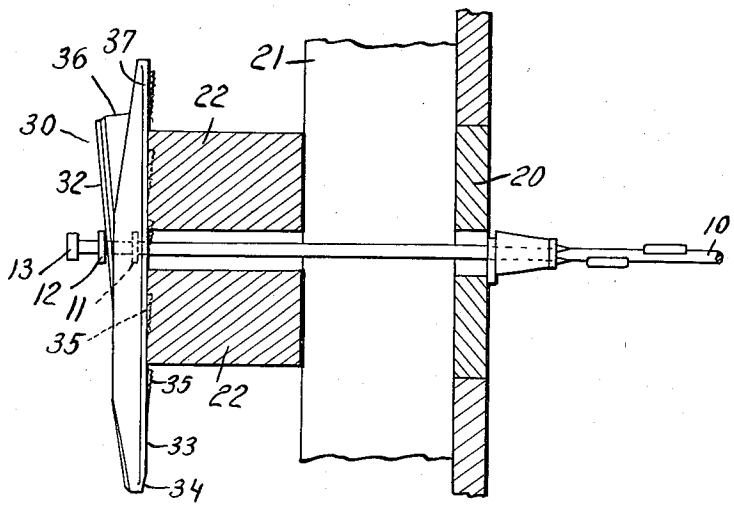


Fig. 2.

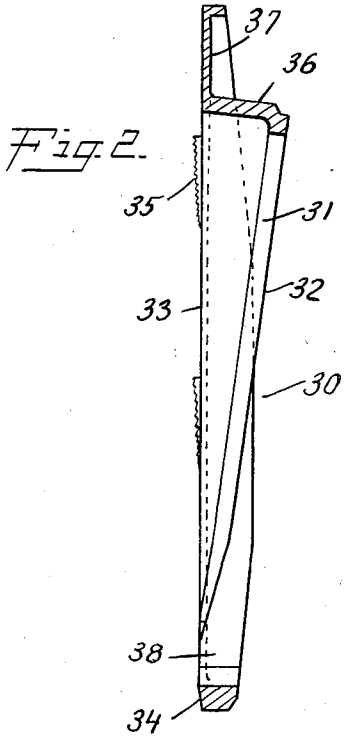
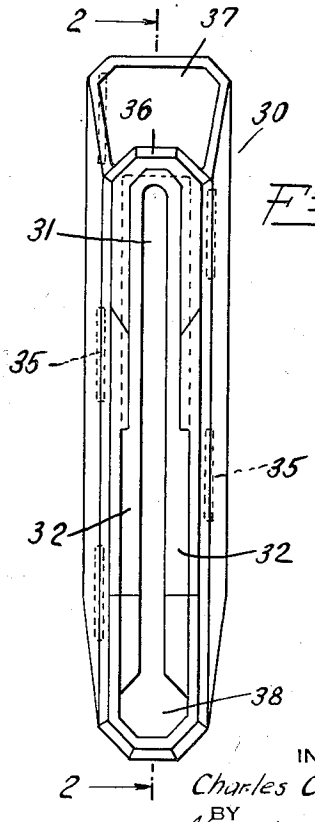


Fig. 3.



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WEDGE FOR CONCRETE FORM TIES

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7 Claims. (Cl. 25—131)

This invention relates to improvements in wedges for concrete form ties.

Its object is to provide a simple and inexpensive wedge for engaging the ends of form ties which can be quickly and easily applied to the forms and which will not become readily displaced.

Some have thought it necessary to make wedges of this type with a heavy portion below the tie rod for the purpose of keeping the wedge from rotating after it has been driven in place. According to my invention this unnecessary weight is dispensed with and the rear surface of the wedge is constructed with ridges which become embedded in the wales and driven in place and effectively prevent displacement of the wedges.

Referring to the drawing,

Fig. 1 is a sectional elevation of a part of a concrete form with a tie rod thereon such as that shown in an application filed by Daniel C. Hungerford on the 24th day of July 1935, Serial No. 32,864, together with one of my improved wedges shown in elevation;

Fig. 2 is a sectional side elevation of a wedge which is made according to and embodies my invention, the section in this figure being taken on the line 2—2 of Fig. 3; and

Fig. 3 is a front elevation of the wedge shown in the preceding figures.

10 designates a tie rod, near both ends of which are spaced heads, such as those shown at 11, 12 and 13. 20 designates mold boards which are to be held in spaced relation from similar boards, not shown, by the tie rod 10. 21 is a vertical stud outside of the form boards and 22 are wales outside of the studs. The wedge 30 is provided with a longitudinal slot 31 through which the tie rod passes. The sides of this slot form inclined surfaces 32 which engage one of the heads near the end of the tie rod. 33 is a base of the wedge which is substantially flat to engage the outer surfaces of the wales except at its lower end 34 where it is beveled to facilitate its insertion between the wales and one of the heads of the tie rods. Projecting rearwardly from the base 33 are spaced and staggered longitudinal ridges 35. These are preferably tapered toward the bottom of the wedge with their outer edge serrated.

The upper end of the parts 32 which form the inclined surfaces is carried back, as at 36, to form an anvil head by means of which the wedge may be driven in place. Above this anvil head the wedge is extended, as at 37, to form a heel which makes it possible for the wedge to be driven down to the full length of the slot 31 and still engage the upper wale 22.

When the parts are assembled as shown in Fig. 1, the inclined surfaces 32 of the wedge engage one or another of the tie rod heads 11, 12 or 13, depending upon the thicknesses of the lumber used in the form. The heads pass through an opening 38 at the lower end of the wedge, but ride up on the inclined surfaces 32 which engage them. This draws the parts of the mold together and keeps them from separating. When the wedge is thus driven into place the ridges 35 cut themselves into the wales and prevent accidental displacement of the wedge, as for example, when struck by the foot of a workman walking on the wales 22.

It will be understood that the invention is capable of modification and that changes in the construction and in the arrangement of the various cooperating parts may be made without departing from the spirit or scope of the invention, as expressed in the following claims.

What I claim is:

1. A tapered wedge for concrete form tie rods having a flat base and constructed with a longitudinal slot, and a plurality of longitudinally spaced ridges parallel with the slot projecting rearwardly from the base.

2. A tapered wedge for concrete form tie rods having a flat base and constructed with a longitudinal slot, and a plurality of longitudinally spaced ridges parallel with the slot projecting rearwardly from the base and tapered in a direction opposite to the taper of the wedge.

3. A tapered wedge for concrete form tie rods having a flat base and constructed with a longitudinal slot, and a plurality of longitudinally spaced ridges, having serrated edges, parallel with the slot projecting rearwardly from the base and tapered in a direction opposite to the taper of the wedge.

4. A tapered wedge for concrete form tie rods having a flat base and constructed with a longitudinal slot, and a plurality of rows of longitudinally spaced ridges parallel with the slot projecting rearwardly from the base in staggered relation and tapered in a direction opposite to the taper of the wedge.

5. A tapered wedge for concrete form tie rods having a flat base and constructed with a longitudinal slot, and a relatively narrow ridge parallel with the slot projecting rearwardly from the flat base.

6. A tapered wedge for concrete form tie rods having a flat base and constructed with a longitudinal slot, and a ridge parallel with the slot projecting rearwardly from the base and tapered in a direction opposite to the taper of the wedge.

7. A tapered wedge for concrete form tie rods having a flat base and constructed with a longitudinal slot, and a ridge having a serrated edge parallel with the slot projecting rearwardly from the base and tapered in a direction opposite to the taper of the wedge.

CHARLES C. TOMKINSON.