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E. H. MOSHER CONCRETE FORM CLAMP Filed Oct. 13, 1923



For Ackeman)

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WITNESS:

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UNITED STATES PATENT OFFICE.

EDGAR H. MOSHER, OF WASHINGTON, DISTRICT OF COLUMBIA.

CONCRETE-FORM CLAMP.

Application filed October 13, 1923. Serial No. 668,441.

To all whom it may concern:

Be it known that I, EDGAR H. MOSHER, a citizen of the United States, residing at

Washington, in the District of Columbia, have invented new and useful Improvements in Concrete-Form Clamps, of which the following is a specification.

This invention relates to improvements in clamps or locks, mainly designed for lock-

- 10 ing together sections of concrete forms, the general object of the invention being to provide a simple and effective device for easily and quickly connecting together the sections, the parts being so formed that they can be 15 used over and over again.
 - Another object of the invention is to provide means whereby the sections are automatically placed in proper alignment by the locking means.
- A further object of the invention is to provide means for locking the corner sec-tions of the form together.

This invention also consists in certain other features of construction and in the

- 25 combination and arrangement of the several parts, to be hereinafter fully described, ilfustrated in the accompanying drawings and specifically pointed out in the appended claims.
- In describing my invention in detail, ref-20 erence will be had to the accompanying drawings wherein like characters denote like or corresponding parts throughout the sev-
- 35 view showing one of my improved devices

Figures 2 and 3 are views showing how the device acts to place the form sections in alignment. 40

Figure 4 is a fragmentary sectional view showing a slightly modified form of device used to connect two corner sections together. Figure 5 is a perspective view of one of

45 the devices shown in Figure 4.

As is well known the forms for building concrete structures are made up of a number of sections, each section consisting of a frame of angle iron and a plate of sheet

- iron and it is the object of my invention to connect these sections together. In Figure 1 portions of the angle iron frames are shown at 1 and the plates at 2. In carrying out my invention 1 form slots 3 in the abutting
- flanges of the frames and provide a plu-55 rality of angle locking members 4 which of my invention will be readily apparent.

are each provided with a portion having a rounded head 5 and a neck 6 which connects the head with the major part of the portion.

In using the locking member its head is 60 passed through the slots in the abutting flanges of the two sections, as shown in Figure 2, and then the members turned, as shown in Figures 1 and 3, so that the edges of the neck 6 will engage the walls of the 65 slot, thus forcing the slots into alignment and consequently moving the sections into alignment. The neck is made of such a width as to snugly fit in the slots so as to bring the parts into alignment, as shown in 70 Figure 3. When in locking position the sec-ond limb of the member will extend in the same direction as the abutting flanges of the frames so that it will be out of the way, as 75 shown in Figure 1.

I cut away the end portion of this second part of each member so as to leave the corner recesses 7, thus providing a space to receive a tool in order to turn the member to unlocking position, if the member should be ⁸⁰ close to the flange of the angle iron frame.

Figure 5 shows a modified form of locking member in which the head part 5' and neck 6' extend from one side instead of the end of the limb, the limbs being cut away, 85 as at 8, for this purpose. The second limb is curved, as at 9, and provided with a slot 10 for receiving a bolt 11 so that a pair of members can be used for fastening together the corner sections of the form, as shown in 90 Figure 4. In this figure two corner sections are shown at A and an angle post B is placed at the ends of these sections.

From the above it will be seen that my locking devices can be easily and quickly 95 placed in position to connect together the sections of the form and the form can be quickly disassembled after the concrete is set and the parts used again.

Instead of using a bolt 11 I may use any 100 other suitable form of member for connecting the two parts together.

Attention is called to the fact that the locking member 4 is of such a size that when it is in locking position no part there- 105 of extends beyond the flanges of the angle irons and thus there are no projections to interfere with workmen in building a structure with my forms.

It is thought from the foregoing descrip- 110 tion that the advantages and novel features

I desire it to be understood that I may make changes in the construction and in the combination and arrangement of the several parts, provided that such changes fall with-5 in the scope of the appended claims.

What I claim is:-

1. A device of the class described comprising a locking member of substantially angle shape, one limb of the member having 10 a head and a neck connecting the head with

the rest of the limb.

2. A device of the class described comprising a locking member of substantially angle shape, one limb of the member having

15 a head and a neck connecting the head with the rest of the limb and the second limb having a slot therein.

3. In a sectional form, the sections having slotted abutting portions, a locking 20 member for engaging the slots and having a head and a neck connecting the head with the member, said head and neck being capable of being passed through the slots and the neck being of slightly less width than 25 the width of the slots so that when the de-

vice is turned after being inserted between the slots to place the neck crosswise of the slots the sections will be aligned by the neck engaging the walls of the slots.

4. In a sectional form, the sections having 30 slotted portions, a pair of members having key-shaped parts for engaging the slots and bent portions at the ends opposite the Tshaped portions, said bent portions having eyes therein and a bolt passing through the 35 eyes for connecting the two members together for locking the corner sections in place.

5. In a sectional form including flanged members having openings therein, a locking 40 member for engaging the openings and having a neck part for engaging the walls of the opening when the device is in locking position to lie in the sections, said member being of smaller width than the flanges so 45 that the outer edges of the flanges will project beyond the same when the member is in locked position.

In testimony whereof I affix my signature. EDGAR H. MOSHER.