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BEARING PILE SPLICE CLAMP

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FIG. 1.

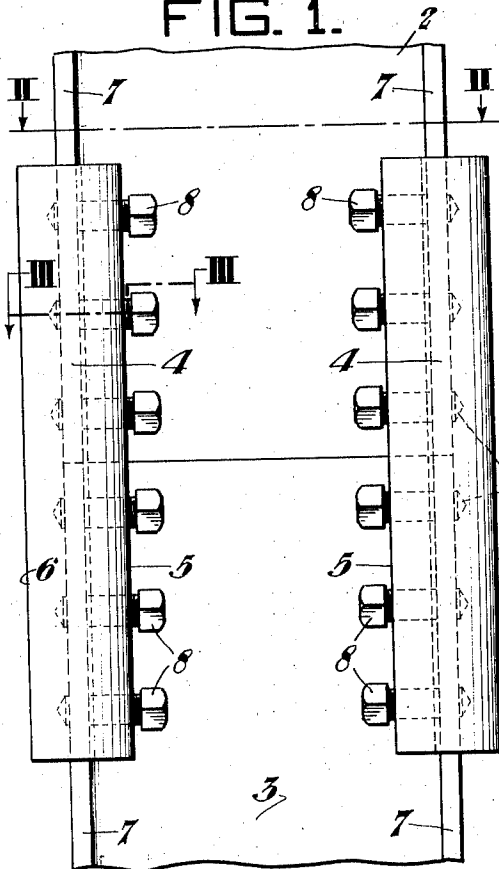


FIG. 2.

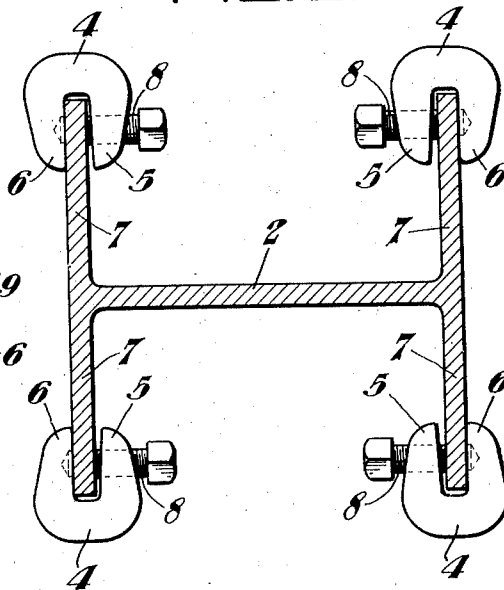
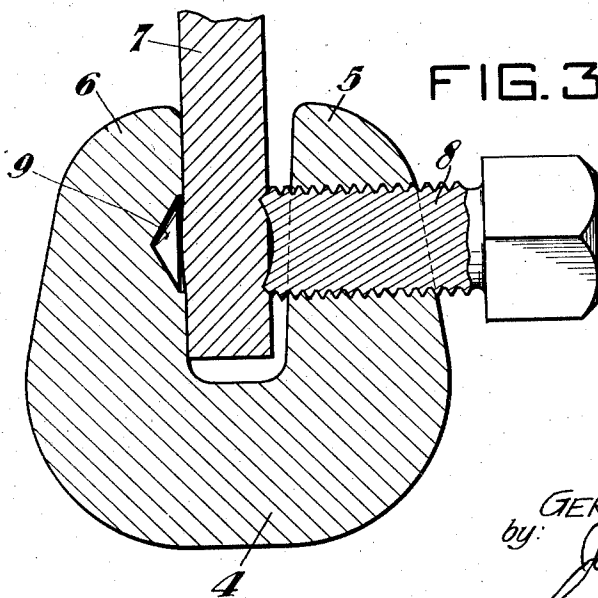


FIG. 3.



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BEARING PILE SPLICE CLAMP

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2 Claims. (Cl. 61—53)

The present invention relates to bearing pile splice clamps.

An object of the present invention relates to rigidly securing the ends of adjoining piling sections together with a minimum of delay and interruption to the work.

A further object is to provide a clamp which can be quickly applied to the piling sections during the driving operation in order to rigidly connect one piling section to another.

Other objects and advantages will become apparent as the description proceeds and reference is made to the accompanying drawing, in which:

Figure 1 is a detailed elevation, showing the clamp applied to adjoining piling sections;

Figure 2 is a section on line II—II of Figure 1; and

Figure 3 is an enlarged detailed section on line III—III of Figure 1.

In the drawing, the numerals 2 and 3 represent piling sections of any conventional design, the illustration being shown as of H or I-shaped cross-section. After the piling section 3 has been driven into the ground until its upper portion approaches the ground line and it becomes necessary to position and align another piling section thereon, such can be done with a minimum of delay and interruption to the work.

For effecting the rigid connection of the two piling sections, the clamping device of the present invention is applied to the upper portion of the piling section 3. This clamping device consists of a member having a C-shaped cross-section and comprises a main body portion 4 and flanges 5 and 6 extending from the main body in the same direction and spaced from each other to provide a channelway or groove of a width sufficient to accommodate the flanges 7 of the H or I-beam piling sections.

The flange 5 of the clamp is tapped to provide a plurality of vertically aligned openings through which screws 8 are adapted to pass. The opposite flange 6, of the clamp, is provided with shallow depressions 9 in alignment with the vertically spaced apertures formed in the flange 5.

When it becomes necessary to add a piling section, the clamp is secured to the flanges of the structural member 3, after which the set screws 8 are tightened up so that they bear against the flanges 7 of the structural member, and, upon additional tightening upon said set screws 8, they bite into one surface of said flanges 7 and, as a result, the flanges 7 are forced slightly into the shallow depressions 9 opposite the point of engagement of the screw with said flanges 7, as

clearly shown in the enlarged detailed sectional view of Figure 3, so that the grip of the clamp upon the structural member is secure. The upper piling section 2 is then positioned so that the flanges 7 enter the grooves or channelways formed by the two flanges 5 and 6 of said clamp and said piling section 2 is gradually lowered into position to insure a firm seating upon the abutting end of the piling section 3 after which, the set screws 8 are tightened so that they bite into and firmly grip the flanges of the upper piling section 2, thereby rigidly securing the piling sections together so that the driving operation can be continued.

By providing a clamp in accordance with the present invention, all previous preparation to the ends of the piling sections 2 and 3 is eliminated. It is not necessary to initially provide drill holes in the piling sections or experience the usual delays caused in securing the clamps to the piling sections by the usual method of welding. The clamp of the present invention provides a continuous pressure due to the spring-like action so that the set screws remain in tight engagement with the flanges of the structural members 2 and 3, and do not become loosened under the action of the pile hammer during the driving operation.

While I have shown and described a specific embodiment of the invention, it will be understood that I do not wish to be limited exactly thereto, since various modifications may be made without departing from the scope of the invention, as defined in the following claims.

I claim:

1. In a bearing pile construction including two or more H or I-shaped beam members, splice clamps positioned on the ends of the adjoining beam members for securing said beam members in alignment so that driving of the bearing pile can proceed with a minimum of delay, said clamps each comprising a main body portion having spaced flanges extending in the same direction to provide a channelway or groove of a width sufficient to accommodate the flanges of said H or I-shaped beam members, one of said flanges provided with vertically aligned spaced apertures, depressions formed on the other flange in alignment with said spaced apertures and a threaded bolt extending through said apertures and contacting the flanges of said beam members so that tightening up of the threaded bolt will force the metal of the flanges of said beam members slightly into said depressions whereby the grip of the splice clamp and the threaded bolts on the piling sections being joined is made secure.

2. In a bearing pile construction including two or more H or I-shaped beam members, splice clamps positioned on the ends of the adjoining beam members for securing said beam members in alignment so that a driving of the bearing pile can proceed with a minimum of delay said clamps each comprising a main body portion having spaced flanges extending in the same direction to provide a channelway or groove of a width sufficient to accommodate the flanges of said H

or I-shaped beam members, one of said flanges provided with vertically aligned spaced apertures and a threaded bolt extending through said apertures and contacting the flanges of said beam members so that tightening up of the threaded bolt will force the end of said bolt into the metal of the flanges of said beam members, whereby the grip of the splice clamp and the threaded bolts on the piling sections being joined is made secure.

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