

Dec. 31, 1963

G. R. DOOLITTLE

3,116,079

SCAFFOLDING CLAMP

Filed March 30, 1959

FIGURE 1

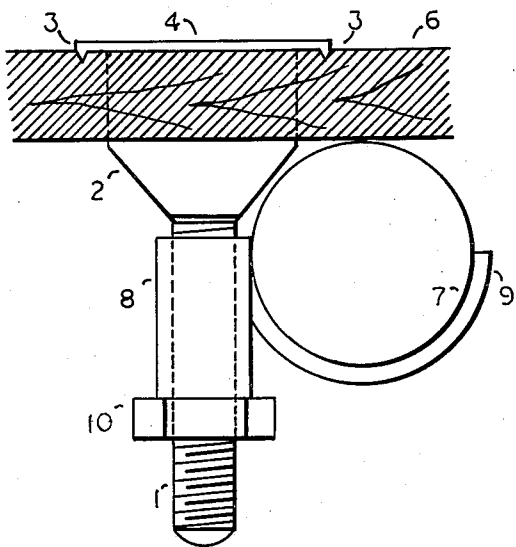


FIGURE 2

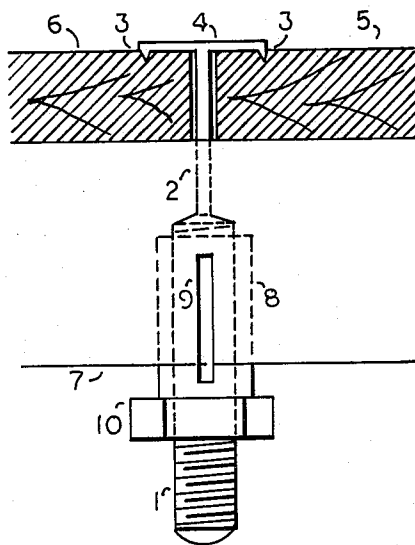


FIGURE 3

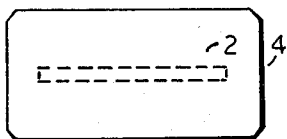


FIGURE 4

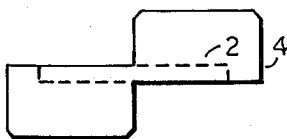
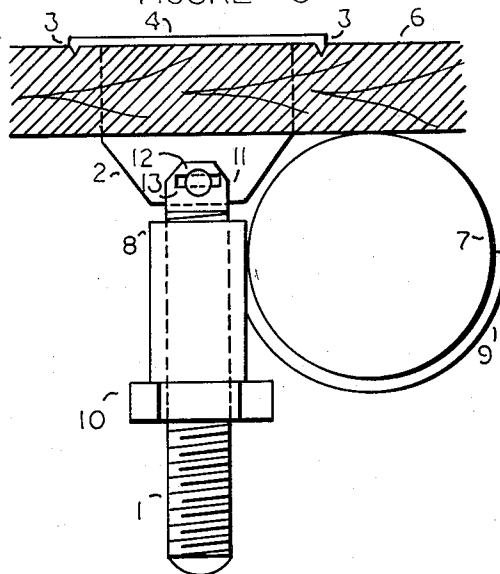


FIGURE 5



INVENTOR.
GERALD R. DOOLITTLE

BY *Gerald R. Doolittle*
ATTORNEY

1

3,116,079

SCAFFOLDING CLAMP

Gerald R. Doolittle, 3523 Prairie, La Marque, Tex.
Filed Mar. 30, 1959, Ser. No. 802,811
3 Claims. (Cl. 287-20)

This invention relates to scaffoldings and, more particularly, to clamps particularly adapted for the installation of safe and secure scaffolding.

Over the years various types of scaffoldings have been utilized for above the ground construction or maintenance of buildings and other structures. Of recent years, scaffoldings consisting of wooden planks placed across tubular or pipe frameworks have become increasingly popular. Due to the temporary nature of such scaffoldings it is not economically feasible to permanently attach the wooden planks to the frame support. Most frequently the planks are merely laid loosely across the support. This has proven to be a serious safety hazard. Movement of the workers on the scaffold causes the planks to shift and serious injuring falls have resulted.

There have been many attempts to correct this situation. None has been completely successful. Wooden strips have been nailed across the ends of the planks. This has not prevented angular movement of the planking. Various clamps have been tried but in every case, the clamp protruded too high above the planking creating a tripping hazard.

It is an object of this invention to provide an improved clamp to be used in stabilizing the planking in scaffolds. Other objects will become apparent from the description of the invention.

The novel scaffolding clamp of this invention is best understood from the drawings wherein:

FIGURE 1 represents the front view of a clamp embraced by this invention;

FIGURE 2 represents the side view of the clamp shown in FIGURE 1;

FIGURE 3 represents the top view of top plate 4 of FIGURE 1;

FIGURE 4 represents the top view of a modification of top plate 4 of FIGURE 1;

FIGURE 5 represents the front view of a preferred modification of the clamp of FIGURE 1.

Referring to the drawings, the clamp of this invention comprises a body having a threaded member 1 attached to and extending from the base 2 of a T-shaped metal plate assembly having a top 4. The base and top parts of the T-shaped metal plate assembly are such that when said assembly is positioned with the base of the T between adjoining scaffolding boards 5 and 6, positioned on scaffolding frame 7, the base of the T extends beyond the bottom of the scaffolding boards and the top of the T rests flat on a portion of the top surfaces of both of the adjoining scaffolding boards. Slideable member 8 is provided with hook extension 9. As the slideable member is moved toward the T-shaped metal plate assembly, the hook extension engages the scaffolding frame. Nut 10 is provided to move the slideable member toward the T-shaped metal plate assembly and hold it in fixed relation thereto.

The T-shaped metal plate assembly can be fabricated from two metal plates welded together as shown in FIGURE 1 or it can be fabricated from a single metal plate (FIGURE 4) by cutting a metal plate part way down the center and then sharply bending the two sections thus formed 90° in opposite directions. In either case, in order for the T-shaped metal plate assembly to more rigidly secure the scaffolding planks, the corners of the top of the T-assembly are preferably bent down forming

2

points 3 which are embedded into the wood planking as the clamp is tightened into position.

The T-shaped metal plate assembly can be attached either rigidly or pivotally to the threaded member, the latter being preferred and shown in FIGURE 5. In this case the T assembly is fitted into slot 11 and held in place with pin 12 and keys 13. Having the T assembly pivotally attached to the threaded member permits adaptation of the clamp to irregularities existing in the scaffolding planks.

The novel scaffolding clamp of this invention is very simple to use. The clamp is merely positioned between adjoining scaffolding planks and the nut tightened securely clamping the scaffolding planks to the scaffolding frame. The advantages to be gained through the use of this clamp are obvious. The clamp is simple and inexpensive to fabricate. The clamps can be placed anywhere on the scaffolding frame—their use and placing not being dictated by the construction of the frame. The T assembly can be made of thin metal stock eliminating gaps between adjoining scaffolding planks thereby avoiding injuries resulting from tools and materials falling through scaffold planking. Similarly, the thin metal stock from which the top of the T assembly can be made prevents the clamp itself from being a tripping hazard. No special tools are required to install the clamp and it has been found that scaffolding planks can be secured by hand-tightening of the clamp.

What is claimed is:

1. A scaffolding clamp comprising, in combination, a body having a threaded member attached to and extending downwardly from the base of a T-shaped metal plate assembly, the base and top parts of said assembly being such that when said assembly is positioned with the base of the T between adjoining scaffolding boards positioned on a rigid scaffolding frame support, the base of the T extends beyond the bottom of the scaffolding boards and the top of the T rests flat on a portion of the top surfaces of both of the adjoining scaffolding boards, a member slidably positioned on said threaded member and having rigidly attached thereto a hook extension which, as the slideable member is moved toward the bottom surface of the scaffolding boards, engages the scaffolding frame, a nut on said threaded member for moving said slideable member on said threaded member toward the T-shaped metal plate assembly.

2. A scaffolding clamp as described in claim 1, wherein said T-shaped metal plate assembly is rigidly attached to said threaded member.

3. A scaffolding clamp as described in claim 1, wherein said T-shaped metal plate assembly is pivotally attached to said threaded member.

References Cited in the file of this patent

UNITED STATES PATENTS

569,755	Grist	Oct. 20, 1896
726,636	Carll	Apr. 28, 1903
940,609	Newberry	Nov. 16, 1909
947,811	Glidden	Feb. 1, 1910
1,026,845	Bishop	May 21, 1912
1,396,279	Paine et al.	Nov. 8, 1921
1,445,410	Palmer-Jones	June 7, 1927
2,008,229	Sharpe	July 16, 1935
2,080,916	Hayden	May 18, 1937
2,332,752	Ratcliff	Oct. 26, 1943
2,578,239	Gosswiller	Dec. 11, 1951

FOREIGN PATENTS

264,224	Switzerland	Jan. 3, 1950
309,649	Switzerland	Nov. 16, 1955
1,129,339	France	Sept. 3, 1956