

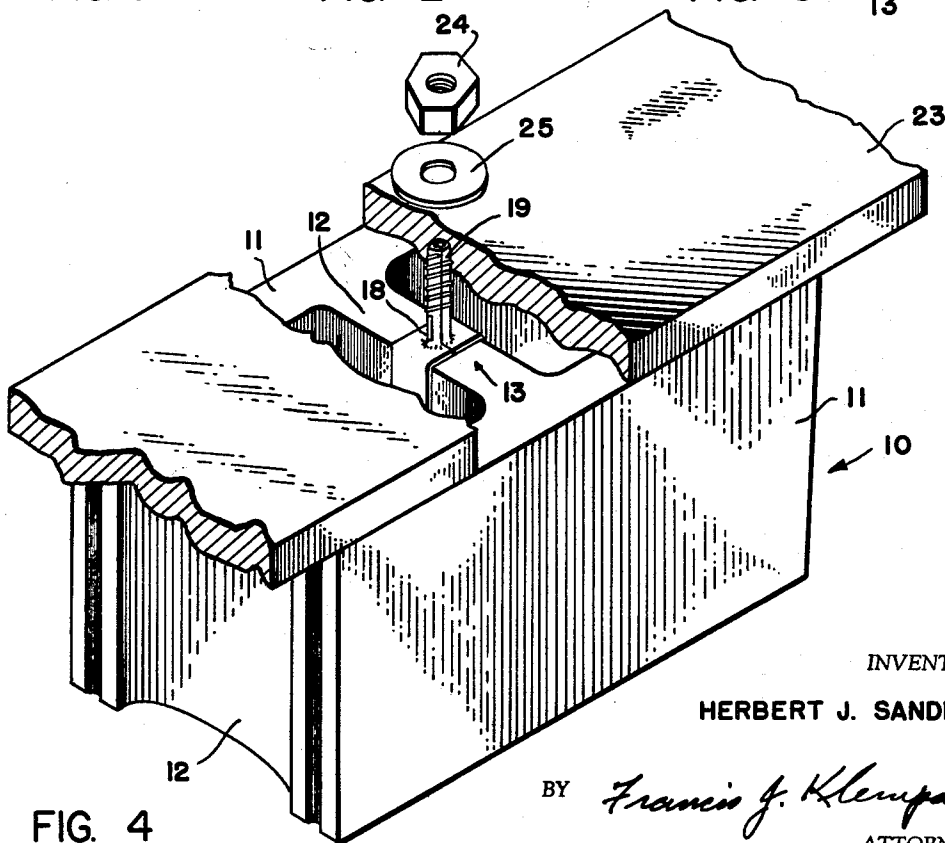
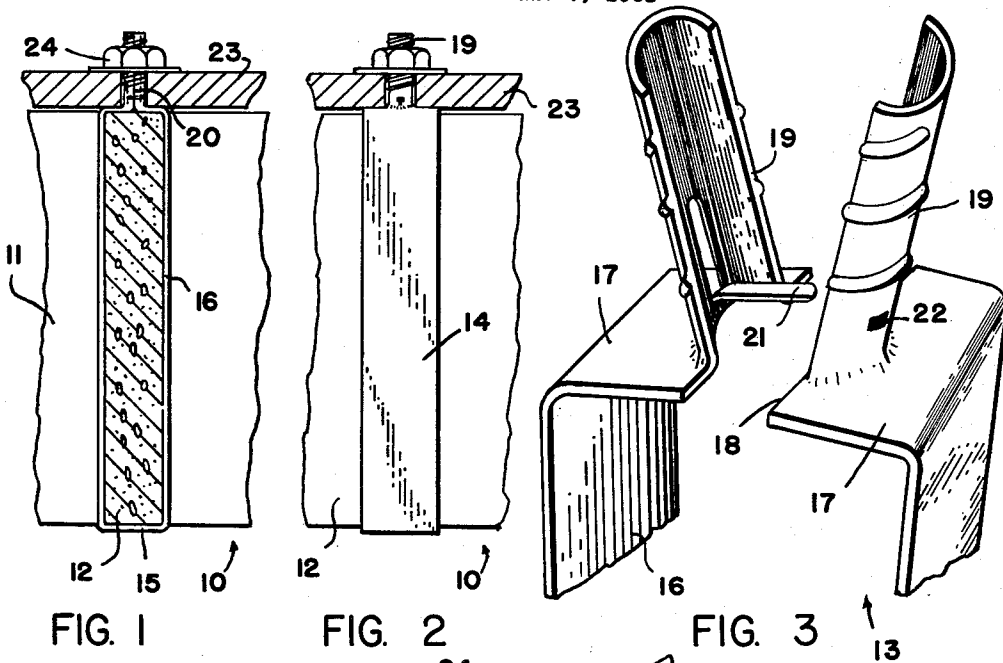
March 9, 1965

H. J. SANDIN

3,172,238

ANCHOR BOLT CLIP FOR MASONRY CONSTRUCTION

Filed Jan. 5, 1961



INVENTOR

HERBERT J. SANDIN

BY

Francis J. Klemm

ATTORNEY

1

3,172,238

ANCHOR BOLT CLIP FOR MASONRY CONSTRUCTION

Herbert J. Sandin, 83 Gertrude Ave., Boardman Township, Mahoning County, Ohio
Filed Jan. 5, 1961, Ser. No. 80,761
1 Claim. (Cl. 50—481)

The present invention relates generally to the building arts and more particularly to improved and highly simplified anchor bolt clips for use on webbed masonry unit construction and the like.

As will be understood by those skilled in the art, it is often necessary to provide a plurality of upstanding anchor bolts in building construction, for example, along the top row of masonry blocks. These anchor bolts provide a convenient means for attaching and anchoring base plates and the like to masonry block construction. In providing these anchor bolts it is usual practice to partially fill the center openings in webbed masonry blocks with paper or other filler and then to pour plaster or mortar, for example, into these openings. The heads of the anchor bolts are embedded in the bonding material and the same is allowed to harden.

While the above procedure for providing anchor bolts is widely employed, it should be apparent that the same is quite time-consuming since the bolts must carefully be placed upright and then allowed to remain untouched until the bonding material hardens. Also, the bolts may be easily dislodged or tilted if the same are accidentally moved before the bonding material has had time to harden. These bolts, if used too soon, may even be pulled loose in which case the job of setting them must be redone. Therefore, in many cases the anchor bolts are not securely mounted with respect to the masonry blocks and further, it is quite difficult to position the anchor bolts within the accuracies required.

It is therefore the primary object of this invention to provide means for mounting anchor bolts for masonry block construction and the like in a highly improved and simplified manner. The present invention discloses an anchor bolt clip which is adapted to be easily secured about the web portion of a concrete or cinder block, for example.

It is another object of this invention to provide clips for rigidly securing anchor bolts to masonry blocks and the like which are adapted to be applied to the same in a minimum of time by even the most unskilled laborer or helper, and before the blocks are positioned and/or laid in a wall.

A further object of this invention is to provide anchor bolt clips for the purposes above described which are characterized by their relatively simple and inexpensive construction.

The above, as well as other objects and advantages will become more fully apparent upon consideration of the following specification and accompanying drawing wherein there are disclosed certain preferred embodiments of the present invention.

In the drawing:

FIGURE 1 is a side view, partially in section, of an anchor bolt clip positioned on a block and constructed in accordance with the teachings of the present invention;

FIGURE 2 is an end view of the clip of FIGURE 1;

FIGURE 3 is a partial isometric view, on an enlarged scale, of the top portion of the clip of the invention; and

FIGURE 4 is an isometric view showing the anchor bolt clip of FIGURE 1 clamped about the web of a masonry block.

Referring now to the drawing, the reference numeral 10 designates a masonry block having a pair of longitudinally

2

extending and laterally spaced side wall portions 11 and a number of transversely extending and longitudinally spaced web portions 12. Masonry blocks are, of course, well known in the art and do not, in and of themselves, form any part of the present invention.

The anchor bolt clip, generally designated by the reference numeral 13 is comprised of a body 14, formed of a relatively strong and resilient single length of material, preferably metal strip, which defines a bottom portion 15, a pair of side portions 16 and a pair of top portions 17. The body 14 has a generally rectangular and vertically elongated shape whereby the same is adapted to be nestingly received in clamping relation about the web portion 12 of a masonry block. It will be noted that the body 14 of the anchor bolt clip is split along a line 18 between the top portions 17.

Integral with each of the top portions 17 adjacent the split line 18 is an upstanding externally threaded member 19, having a generally semi-circular outer periphery. The threaded members 19, when the same are abutted along a line 20 which is coincident with the split line 18, provide a circular threaded rod or shank.

Near the basal portion of the shank in one of the members 19, is centered a tab which is pushed inwardly to form a tongue 21. In the other member 19 of the shank is centrally located an aperture 22 so located as to be in line with tongue 21 to permit entry of tongue 21, upon abutment of members 19.

The length of material forming the anchor bolt clip is relatively resilient and the arrangement is such that the side portions 16 can be pulled away from each other to an extent whereby the anchor bolt clip can be inserted about the web portion of a masonry block through the opening defined by the parted split lines 18 and 20.

As the threaded semi-circular members 19 are brought into engagement with each other the tongue 21 is inserted through the aperture 22 and the portion of the tongue 21 which extends beyond the outer periphery of the member 19 is bent over. Thus the threaded members 19 are locked, forming a threaded shank and the anchor bolt clip is also held firmly about the web of the masonry block.

The clips described above are conveniently manufactured from discreet lengths of metal strip which by suitable dies are bent, formed and pierced into the articles shown. Thus, all the parts of each unit (with the exception of the washer 25 and nut 24) and which comprise the bottom strut 15, the side walls 16, the top walls 17, the bolt halves 19, and the tab 21 are integrally attached to each other. Even the threads on the bolt halves 19 are integrally formed by a coining operation in the die.

After the block has been properly laid a base plate 23 or other suitable structural member may be received over the threaded end of anchor bolt 19 and is held in clamped relation with respect thereto by a locking nut 24. The locking nut 24 further aids the tongue 21 since it not only holds on plate 23, but insures a tight clamped relation between the members 19 which form the anchor bolt. If desired, a washer 25 shown in the drawing may be used. While in normal practice the top surface of the web 12 of the masonry block 10 lies in the same plane as the top surfaces of the side walls 11, I prefer in the manufacture of the blocks that at least the center portion of the top surface of the web 12 be depressed slightly to accommodate the thickness of the top portions 17 of the anchor bolt clip 13 so that the bottom surface of the plate or other object being secured will be drawn down tight onto the general top surfaces of the block. Of course, the same result may be achieved by the mason by simply cutting away a portion of the upper end of the web 12. In both cases it is preferable that a clip of slightly less depth to be used so that the bottom of the clip will be drawn up tight to the bottom of the web.

3

The anchor bolt clip above described may be attached to the web portion of a masonry block in a highly improved manner and in a minimum of time by even the most unskilled laborer. The clips may be applied to the blocks before the latter are positioned and/or laid in the wall.

It should now be apparent that I have accomplished the objects initially set forth. While there are disclosed certain preferred embodiments of this invention, it should be understood that many changes may be made therein without departing from the true scope and intent of the invention. Accordingly, reference should be had to the following appended claim in determining the scope of the invention.

What I claim is:

An anchor bolt assembly for securing a plate and the like onto the top surface of a concrete block wall and adapted to be secured to a transverse web of a conventional concrete block comprising

(a) a unitary length of resilient metal strip formed to provide a bottom portion to overlie the bottom surface of said web and spaced parallel side portions to overlie the side surfaces of said web,

(b) the upper reaches of said strip length being bent first inwardly toward each other to provide corners for engaging about the upper edges of said web and thence upwardly to provide adjacent bolt-forming half-sections,

(c) said half-sections being formed into semi-cylindrical shape and having screw-threads coined on their

4

outer convex surfaces to form a bolt when the half-sections are brought into contact with each other, (d) a bendable tab integral with and extending outwardly from one of said half-sections below the coined screw-threads thereon, and an aperture in the other of said half-sections below the coined screw-threads thereon to receive said tab whereby the half-sections may be interlocked with each other, and (e) the general arrangement being such that said assembly may be slid vertically over said web from below and locked in place thereon by said tab prior to the laying in said wall of the block containing said web.

References Cited by the Examiner

UNITED STATES PATENTS

829,234	8/06	Seipp	50—481
1,147,065	7/15	Zieg	85—1
1,821,015	9/31	Hull	50—140
2,289,516	7/42	McCullough et al.	85—1
2,324,892	7/43	Warren	46—21
2,618,960	11/52	Orzel	50—128
2,670,986	3/54	Presnell	46—21 X
2,829,514	4/58	MacLean	50—190
2,903,879	9/59	Williams	50—190

HENRY C. SUTHERLAND, *Primary Examiner.*

WILLIAM I. MUSHAKE, JACOB L. NACKENOFF,
Examiners.