No. 670,765. Patented Mar. 26, 1901.

F. G. CALDWELL.

CLAMP FOR BUNDLING CORRUGATED METAL SHEETS OR PLATES.

(Application filed Feb. 9, 1900. Renewed Feb. 11, 1901.)

(No Model.)

Fig. 1.

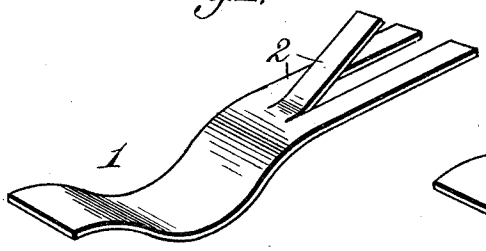


Fig. 2.

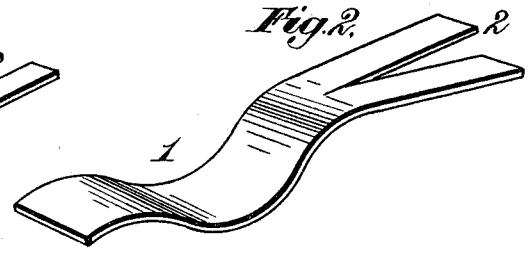


Fig. 3.

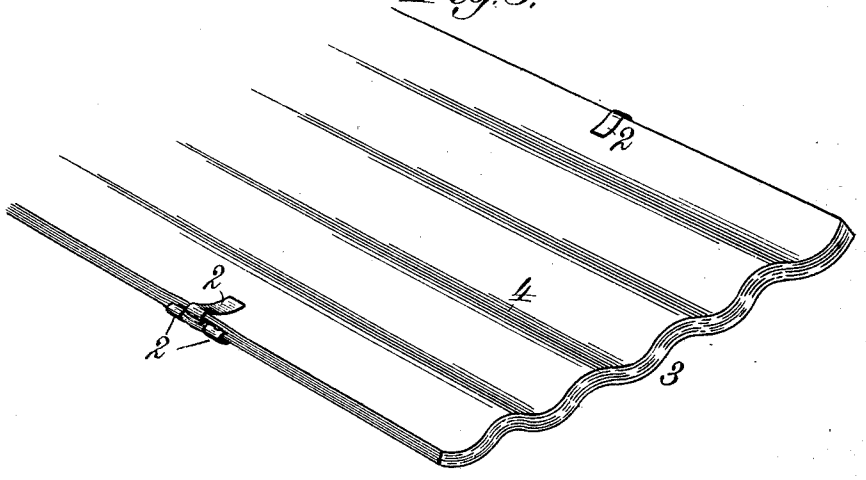
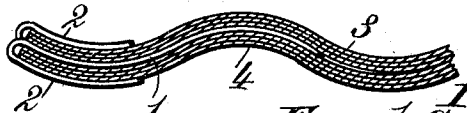


Fig. 4.



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UNITED STATES PATENT OFFICE.

FRANK G. CALDWELL, OF WHEELING, WEST VIRGINIA.

CLAMP FOR BUNDLING CORRUGATED METAL SHEETS OR PLATES.

SPECIFICATION forming part of Letters Patent No. 670,765, dated March 26, 1901.

Application filed February 9, 1900. Renewed February 11, 1901. Serial No. 46,878. (No model.)

To all whom it may concern:

Be it known that I, FRANK G. CALDWELL, a citizen of the United States, residing at Wheeling, in the county of Ohio and State of West Virginia, have invented new and useful Improvements in Clamps for Bundling Corrugated Metal Sheets or Plates, of which the following is a specification.

The object of my invention is to provide a simple, inexpensive, thoroughly effective, and easily-applied clamp for bundling corrugated metal sheets or plates to facilitate the handling and transportation of such plates or metal sheets.

My invention consists in a clamping device preferably having one end portion transversely corrugated to correspond with the corrugations on the metal sheets or plates that are to be bundled or made into a package, the said corrugated end portion of the clamp being adapted to fit between a number of corrugated metal sheets or plates at about the center of the bundle and the outer end of said clamp being longitudinally slitted to provide a plurality of tongues that are to be bent over in opposite directions to clasp firmly against the outer sides of the bundle of corrugated metal sheets or plates on its opposite sides, as hereinafter set forth.

In the annexed drawings, illustrating the invention, Figure 1 is a perspective of one form of my clamp for bundling corrugated metal sheets or plates. Fig. 2 is a perspective showing a modified form of said clamp having only two tongues. Fig. 3 is a view of a bundle or package of corrugated metal sheets or plates with the clamps thereon to secure the metal sheets or plates together. Fig. 4 is a sectional view of the same, illustrating the application of the clamps.

The clamp is composed of an oblong metal strip having one end preferably provided with transverse corrugations 1 and the other end longitudinally slitted to form a plurality of tongues 2, that are adapted to be bent over in opposite directions. The transverse corrugations 1 may occupy about one-half the length of the metal clamp and should be formed to correspond with the corrugations in the metal plates or sheets that are to be bundled together. The tongued end of the clamp may comprise any suitable number of tongues, some of which are to be bent over in one direction and the others in an opposite direction when the clamp is applied to its intended use. In Fig. 1 I have shown the clamp as provided with three tongues, and in Fig. 2 is shown a clamp having two tongues; but I would have it understood that I do not wish to confine myself to any particular number of tongues, as two or more may be used, as preferred.

In applying this clamp to its intended use the transversely-corrugated end portion of said clamp is inserted at any convenient point in the edge portion of the bundle or package of corrugated metal plates or sheets 3, that are superposed one on another. When the clamp is properly inserted into the bundle or package of corrugated metal plates or sheets, the corrugations 1 of said clamp will fit between and correspond with the corrugations 4 of said metal sheets or plates, and the tongues 2 of the clamp will project beyond the edge of the bundle or package. One or more of said tongues will then be bent over the edge of the bundle in one direction and pressed down against the outer side of said bundle or package, and the other tongue or tongues will be bent over in an opposite direction and firmly pressed down against the opposite side of said bundle or package. By reason of the corrugations 1 of the clamp being engaged with the corrugations 4 of the metal sheets or plates it will be impossible for the clamp to be withdrawn after the tongues 2 have been bent over against the opposite sides of the bundle, and these tongues when so bent over in opposite directions and pressed firmly against the corrugated metal sheets or plates will hold said plates or sheets together and prevent one of them slipping on another, thus firmly securing together all the corrugated metal sheets or plates in the bundle or package.

The manner of applying the clamp as above described is clearly shown in Figs. 3 and 4 and will be readily understood.

The construction of clamp shown in Fig. 2 is essentially the same as that illustrated in Fig. 1, but is more inexpensive by reason of dispensing with the central tongue and also by admitting of the use of any kind of scrap material to make the same.

In both forms of clamp illustrated the feature of providing one end of the clamp with transverse corrugations and placing the same between the corrugated metal sheets or plates makes it impossible to withdraw the clamp after the projecting points or tongues 2 have been turned over the edge of the package or bundle in opposite directions upon the metal sheets or plates, as above described.

The described clamp for bundling corrugated metal sheets or plates is very inexpensive and can be quickly and easily applied to its intended use.

What I claim as my invention is—

A clamp for bundling corrugated metal sheets or plates, said clamp consisting of a metal strip having one end portion transversely corrugated to engage between superposed corrugated metal sheets or plates and provided at its other end with a plurality of tongues or projections adapted to be bent over the edge of the bundle or package in opposite directions, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

FRANK G. CALDWELL.

Witnesses:

THOS. H. FARIS,

WILSON I. KELLY.