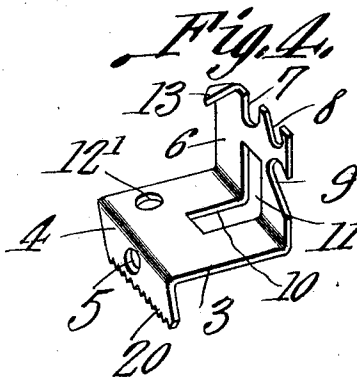
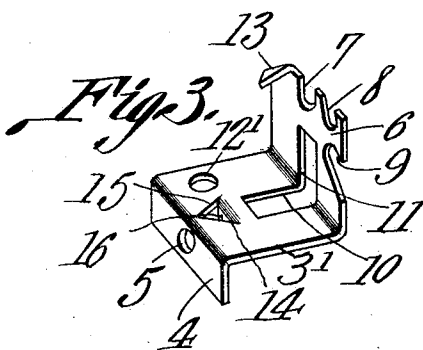
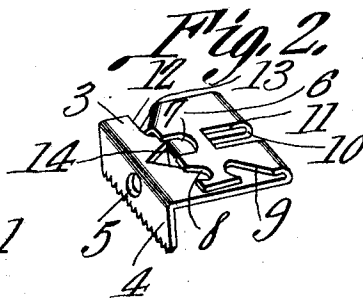
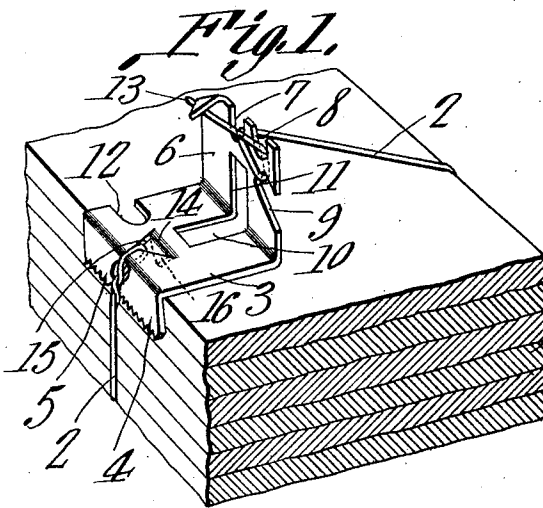


G. W. FURTH.
BUCKLE.

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1,047,036.

Patented Dec. 10, 1912.



Witnesses

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UNITED STATES PATENT OFFICE.

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BUCKLE.

1,047,036.

Specification of Letters Patent.

Patented Dec. 10, 1912.

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To all whom it may concern:

Be it known that I, GEORGE W. FURTH, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented a new and useful Buckle, of which the following is a specification.

This invention relates to baling tie buckles such as are intended particularly for securing the ends of tie wires on bundles of lumber, lath, shingles and similar articles, although the buckle of the present invention can be used in other connections and for other purposes if desired.

Baling tie buckles have been constructed heretofore in the manner shown for example in United States Patents No. 786,147, dated March 28, 1905, and 825,465, dated November 6, 1906, both granted on applications of E. L. Pence. In these cases the bale tie buckle consists of a body portion having a flange depending from one end thereof and a strip projecting in the opposite direction from the other end thereof and having a prong thereon, the bale tie being tied around this strip. This form of buckle however is not as efficient as it should be in tightening the wire and, moreover, the pronged strip does not always possess the requisite strength. Other forms of bale tie buckles have been devised by means of which it was possible to tighten the tie wire, but in such devices the construction has been so modified by the tie receiving means that prongs or other devices for anchoring the tie buckle in position could not be provided, and the buckles were thus liable to slip from off the bales.

The object of the present invention is to provide a form of bale tie buckle in which the tie wire is tightened by the action of the buckle and at the same time the buckle is firmly secured in position upon the bale by means of barbs or other suitable devices, and the construction by which the foregoing objects are attained, preferably includes a body portion or plate having a depending flange at the outer end thereof to fit around the corner of the bale tie, and an upstanding flange at the inner edge thereof, said upstanding flange being provided at one corner with tie wire receiving means, and adjacent the other edge with a barb or tooth adapted to pass down through a cut-away portion in the edge of the body plate and to

enter the bale for the purpose of securing the buckle in position.

Further objects of the invention are generally to improve and simplify the construction of bale tie buckles as well as to increase their strength and durability.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of invention herein disclosed can be made within the scope of the claims without departing from the spirit of the invention.

In the accompanying drawings forming part of this specification:—Figure 1 is a perspective view of a bale showing a tie wire and a bale tie buckle constructed in accordance with the present invention. Fig. 2 is a perspective view of the bale tie buckle shown in Fig. 1 after it has been hammered or flattened down, the tie wires being omitted. Fig. 3 is a perspective view showing a slightly modified form of the invention. Fig. 4 is a view similar to Fig. 3 showing another modified form of the invention.

Like reference numerals indicate corresponding parts in the different figures of the drawing.

The reference numeral 1 indicates a bale of shingles or other articles which are to be secured together by means such as the tie wire 2 and the bale tie buckle forming the subject of the present invention.

The bale tie buckle preferably is formed of sheet metal and includes a body portion 3 having a depending wing or flange 4 at the forward edge thereof, said wing 4 being intended to fit around the corner of the bale 1. The wing 4 preferably is formed with a perforation 5 adapted to receive one end of the tie wire. At its inner edge, the body portion 3 is provided with an upstanding wing 6 which extends in a direction opposite to the wing 4. The wing 6 is formed or provided with tie wire receiving means which preferably although not essentially consist of three cut-away portions or slots 7, 8 and 9, the slots 8 and 9 preferably being diagonal as shown. The body portion 3 is formed with a slot 10 which is extended upward within the wing 6 as indicated at

11. When the wing 6 is driven or flattened down on the body portion 3 as shown in Fig. 2 the slots 10 and 11 register with each other to provide a clearance for the tie wire 2 so as to enable the same to lie close against the bale 1.

For the purpose of providing means for anchoring the bale tie buckle securely in position upon the bale 1, the body portion 3 is cut-away adjacent one edge thereof as indicated at 12 and the wing 6 is provided with a prong 13 which is adjacent the edge thereof opposite the tie wire securing means. The prong 13, preferably, although not essentially, is produced by bending the corner of the wing 6 as shown. When the wing 6 is driven down into the position shown in Fig. 2, the prong 13 extends through the cut-away portion 12 and enters the bale so as to anchor the buckle securely in position.

If it be desired to provide additional means for anchoring the buckle in position upon the tie, the body portion 3 may be out-punched as indicated at 14 so as to provide a triangular cut away portion 15 and a downwardly extending integral prong 16 which is adapted to bite into the bales. The cut-away portion 15 preferably is utilized in conjunction with the cut-away portion 5 of the wing 4 as means for securing one end of the tie wire in position upon the buckle. In other words, the tie wire is passed through the triangular cut-away portion 15 as well as through the opening 5 and suitably twisted therein as shown clearly in Fig. 1 of the drawing. The prong 14 of course aids the prongs 13 in holding the buckle securely in position upon the bale. It is to be understood that both the prongs 13 and 14 can be used at the same time as shown in Figs. 1 and 2, or either one of said prongs may be used and the other prong may be omitted.

The modified construction illustrated in Fig. 3 is exactly the same as that shown in Figs. 1 and 2 except that the cut-away portion 12' adjacent the edge of the body portion 3' is circular in shape and does not extend entirely outward through the edge of the blank as shown in Fig. 1.

The modified construction illustrated in Fig. 4 is the same as that shown in Fig. 3 except that the second prong 16 is omitted

and the lower edge of the wing 4 is serrated or toothed as indicated at 20. In addition to being serrated, the wing 4 is bent in at a sufficient angle beneath the body portion 3 to bite into the material of the bale when the tie wire is tightened. The serrations or teeth 20 thus serve to prevent any slipping of the buckle after it has been secured in position.

It is to be noted that the wing 6 is of substantially the same width as the body portion 3 of the buckle and thus possesses approximately the same strength as the body portion. It is to be noted also that the prong 13 is provided without materially weakening the strength of the device.

The tie buckle of the present invention therefore provides means for not only tightening the tie wire when the wing 6 is flattened down on the body portion but likewise for taking a firm grip upon the bale so as to prevent the buckle from slipping. So far as I am aware, no previous tie buckle has been provided which secures these advantages.

The bale tie buckle of the present invention is strong, simple, durable and inexpensive in construction as well as thoroughly efficient in use.

What is claimed as new is:

1. A bale tie buckle comprising a body portion having oppositely projecting flanges at the opposite ends thereof, each flange having wire receiving means, one of said flanges being bent at an acute angle with relation to the body portion and having teeth along the edge thereof.

2. A bale tie buckle comprising a body portion having an outpunched prong, a depending flange having an opening therein adjacent to the outpunched portion of said body portion, whereby said perforation and said outpunched portion serve as common wire receiving means, and a second flange connected with said body portion and having wire receiving means.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

GEORGE W. FURTH.

Witnesses:

F. B. OCHSENREITER,
C. E. DOYLE.