G. R. STRAN.

FASTENING MEANS FOR MOLDS.

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1,380,434.

Patented June 7, 1921.

Fig. 1

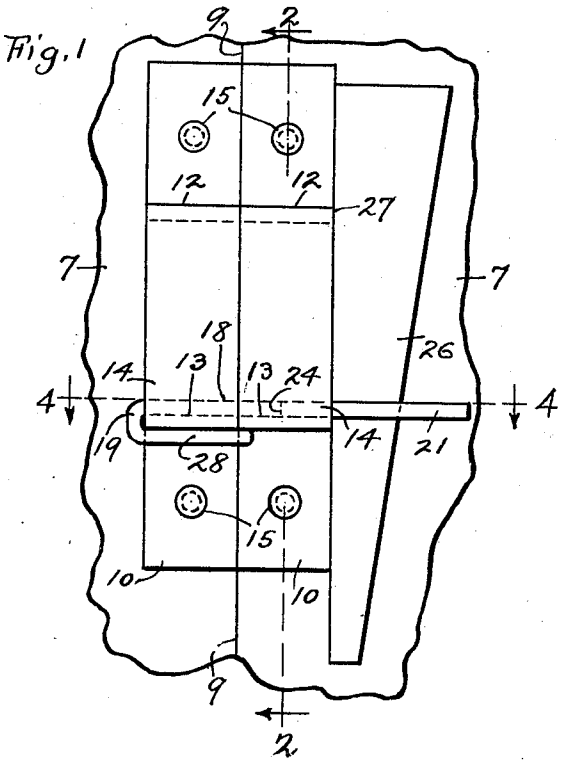


Fig. 2

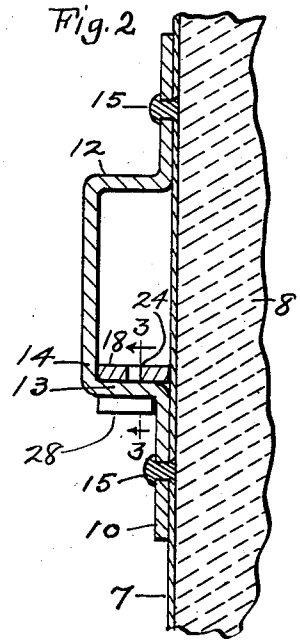


Fig. 3

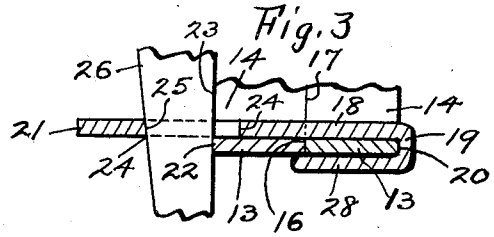
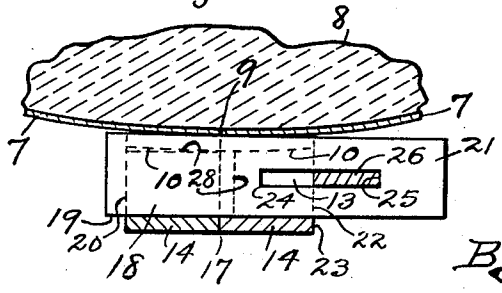


Fig. 4



Inventor.

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By

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UNITED STATES PATENT OFFICE.

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FASTENING MEANS FOR MOLDS.

1,380,434. Specification of Letters Patent. Patented June 7, 1921.

Application filed January 23, 1920. Serial No. 353,427.

To all whom it may concern:

Be it known that I, GEORGE R. STRAN, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented new and useful Fastening Means for Molds, of which the following is a specification.

This invention relates to improvements in fastening means for molds, and pertains more especially to means for use not only in forming a tight joint between adjacent edges of two alined adjoining portions of a sheet-metal mold-forming casing for a concrete column but for maintaining said casing-portions in alinement at said edges.

One object of this invention is to produce exceedingly simple, adequately rigid and highly efficient fastening means of the character indicated.

Another object is to facilitate the assemblage of the component members of my improved fastening means and to render said means reliable and not liable to get out of order.

With these objects in view, and to attain any other object hereinafter appearing, this invention consists in certain features of construction, and combinations and relative arrangements of parts, hereinafter described in this specification, pointed out in the claims, and illustrated in the accompanying drawings.

In said drawings, Figure 1 is an outer side view of my improved fastening means shown applied to adjoining portions of a mold for a concrete column. Fig. 2 is a vertical section taken along the line 2—2, Fig. 1, looking in the direction indicated by the arrows, and in Fig. 2 is shown a portion of a concrete column. Fig. 3 is a vertical section taken along the line 3—3, Fig. 2, looking outwardly. Fig. 4 is a horizontal section taken along the line 4—4, Fig. 1. looking downwardly.

Referring to said drawings, 7 indicates two longitudinally adjoining longitudinal portions of a substantially vertical mold-forming sheet-metal casing for a concrete column, and 8 indicates a fragmentary portion of said column. The casing-portions 7 are arranged edge to edge and alined as at 9, (see Fig. 4) at their meeting longitudinal edges. Two rigid metal brackets 10 are arranged externally of said casing and adjacent the joint formed between said casing-portions 7. One of said brackets is supported from one of said casing-portions, and the other of said brackets is supported from the other of said casing-portions. Each bracket has a laterally and outwardly offset-portion 12 between its upper and lower end portions and has said offset portion contoured as required to form a substantially horizontal seat-member 13 and an upright abutment-member 14 extending substantially vertically upwardly from said seat-member and spaced from and facing the casing-portion supporting said bracket. The end portions of each bracket are shown riveted, as at 15, to the casing-portion supporting the bracket, so that the bracket is secured to said casing-portion below the seat-member 13 and above the abutment-member 14 of the bracket. The seat-members 13 of the brackets are substantially flush at the top thereof and meet, as at 16, (see Fig. 3) at their adjacent or inner side edges. The abutment-members 14 of the brackets are substantially flush at their inner sides and meet, as at 17, (see Fig. 4) at their adjacent edges.

A clamping bar 18 lies on and extends across the seat-members 13 of the brackets and at its outer side edge extends across the inner sides of the abutment-members 14 of the brackets and is interposed widthwise between the abutment-member 14 of each bracket and the casing-portions 7. Said bar 18 has a clamping jaw 19 overlapping (see Fig. 3) the outer side edge 20 of the seat-member of one of the brackets and also has a portion 21 (see also Fig. 4) projecting beyond the outer side edges 22 and 23 of the seat-member and abutment-member respectively of the other of said brackets. Said bar has a slot 24 which extends longitudinally of the projecting portion 21 of the bar and over the adjacent seat-member 13 and therefore inwardly beyond said projecting portion,—that is inwardly from the outer side edge of said seat-member,—and has an outer end wall 25. A downwardly tapering wedge 26 extends through the slot 24 and is interposed widthwise between said wall 25 and the last-mentioned edge and has its upper portion abutting, as at 27, Fig. 1, against the bracket comprising said seat-member at the top of the offset portion 12 of the bracket. Obviously upon driving the wedge tightly into place between the outer end wall 25 of the slot 24 and the adjacent bracket the seat-members 13 and also the abutment-members 14 of the brackets are

clamped together at their adjacent edges, by and between said wedge and the jaw 19, and the relative arrangement of the parts is such that when the brackets are clamped together a tight joint between the adjoining casing-portions 7 has been formed and maintenance of the alinement of said casing-portions is insured. The jaw 19 has an arm 28 overlapping the under or outer sides of the seat-members 13 so as not only to prevent upward displacement of said bar upon the assemblage of the component parts of my improved fastening means, but to insure maintenance of the alinement horizontally of said seat-members.

What I claim is—

1. The combination, with two adjoining portions of a mold-forming casing, said casing-portions being arranged edge to edge and alined at their meeting edges, and two brackets rigid with the different aforesaid casing-portions respectively and arranged externally of the casing and adjacent the joint formed between said casing-portions, each bracket having a laterally and outwardly offset portion which is contoured as required to form an abutment-member spaced from and facing the casing-portion supporting the bracket, of a bar which is interposed widthwise between the abutment-member of each bracket and said casing-portions and extends across the inner side of said abutment-member and has a jaw overlapping an outer edge of one bracket and also has a portion projecting beyond an outer edge of the other bracket, said bar having a slot which extends longitudinally of and inwardly from said projecting portion and has an outer end wall, and a wedge engaging said slot and interposed widthwise between said wall and the adjacent bracket, the aforesaid jaw having an arm overlapping the outer sides of the offset portions of the brackets.

2. The combination, with two longitudinally adjoining longitudinal portions of a substantially vertical mold-forming casing, said casing-portions being alined at their meeting longitudinal edges, and two brackets arranged externally of the casing and adjacent the joint formed between said casing-portions, each bracket having a laterally and outwardly offset portion comprising a seat-member at the lower end of said portion and an abutment-member which faces toward and is spaced from the casing, and the brackets being in contact with each other, of a bar which is interposed widthwise between the abutment-member of each bracket and the casing-portion supporting the bracket and has a jaw at the outer side edge of the seat-member of one bracket and a portion projecting beyond the outer side edge of the seat-member of the other bracket, said bar having a slot which extends longitudinally of and inwardly from said projecting portion and has an outer end wall, and a wedge engaging said slot and interposed widthwise between said wall and the offset portion of the adjacent bracket, the aforesaid jaw having an arm overlapping the under sides of the seat-members of the brackets, and each bracket being secured above and below its offset portion to the casing-portion supporting the bracket.

In testimony whereof, I sign the foregoing specification, in the presence of two witnesses.

GEORGE R. STRAN.

Witnesses:

BASIL F. JOHNSON,

H. F. ZIPKIN.