G. L. WAITT.

CHAPLET.

APPLICATION FILED JUNE 14, 1919.

**1,327,689.**

Patented Jan. 13, 1920.

Fig. 1.

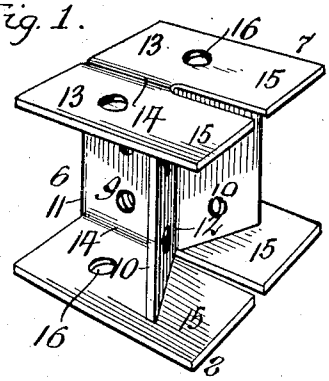



Fig. 2.

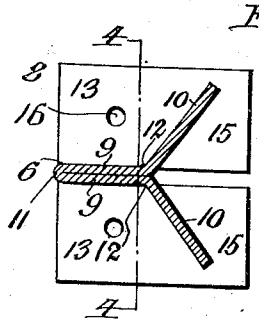



Fig. 3.

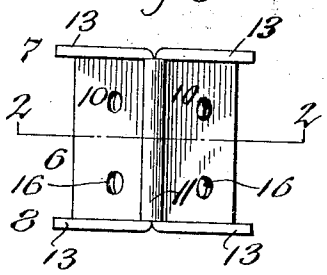



Fig. 4.

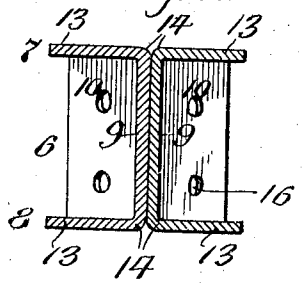
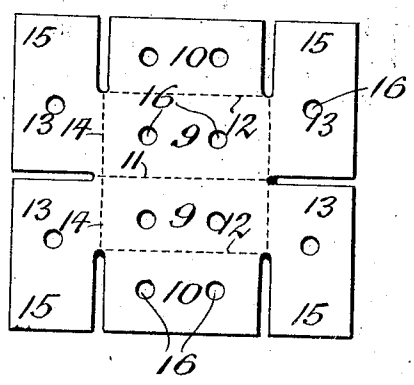



Fig 5.




INVENTOR
George L. Waitt
BY Geyer & Popp
ATTORNEYS.

# UNITED STATES PATENT OFFICE.

GEORGE L. WAITT, OF BUFFALO, NEW YORK.

## CHAPLET.

1,327,689. Specification of Letters Patent. Patented Jan. 13, 1920.

Application filed June 14, 1919. Serial No. 304,350.

*To all whom it may concern:*

Be it known that I, GEORGE L. WAITT, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented new and useful Improvements in Chaplets, of which the following is a specification.

This invention relates to chaplets which are used in foundries for holding parts of a mold in place relatively to each other preparatory to pouring the metal into the cavity of the mold to produce a casting.

The object of this invention is to provide a chaplet of this character which is very strong and durable, and which can be manufactured by the use of a minimum amount of metal for a particular size of chaplet and thus effect a considerable saving in cost. A further object of this invention is to provide a chaplet of maximum strength and still use comparatively thin metal which is low in cost and which will be readily fused by the metal forming the casting and thus become thoroughly incorporated in the latter.

In the accompanying drawings:

Figure 1 is a perspective view of a chaplet constructed in accordance with my invention. Fig. 2 is a horizontal section taken on line 2—2, Fig. 3. Fig. 3 is a rear elevation of the chaplet. Fig. 4 is a vertical section taken on line 4—4, Fig. 2. Fig. 5 is a plan view of the blank from which the chaplet is constructed.

Similar characters of reference indicate corresponding parts throughout the several views.

In its general organization this chaplet comprises a strut or post 6 and two heads 7, 8, arranged at the opposite ends of said strut.

This strut in the upright position of the chaplet comprises two vertical plies of sheet metal each of which consists of a rear section 9 and a front section 10 which are arranged at an angle relatively to each other. The rear sections of the two plies of the strut are arranged parallel and close to each other and the outer vertical edges of the same are connected, as shown at 11, and the front sections of these piles diverge from the inner vertical edges of the rear sections, the junction of the front and rear sections being shown at 12 in Figs. 1, 2 and 5. Each of the heads of the chaplet consists of two horizontal sheet metal plates which are arranged flush with each other and side by side. The rear part 13 of each plate of each head has its inner transverse edge connected with one of the horizontal edges of one of the rear sections of one of the plies of the strut, as shown at 14 in Fig. 4, and the front part 15 of each head plate is disconnected from the companion head plate and bears against the horizontal edge of the adjacent front section of that ply of the strut which is arranged on the same side of the center of the chaplet.

By this means a strut is produced which forms a triple angle in cross section and supports the heads at opposite ends thereof on a corresponding number of points. The heads are therefore sustained throughout practically their entire area and a strong and durable chaplet is produced which will sustain a maximum load and can be manufactured with less metal for a given size than those heretofore known. If desired the different members of the chaplet may be provided with openings 16 to permit the metal of the casting to flow through the same and knit the chaplet into the metal of the casting.

This chaplet is preferably constructed integrally from a single sheet of metal the blank of which is shown in Fig. 5 and from which it is apparent that practically no waste is produced in the manufacture of the same, but instead utilizing nearly all the metal in the chaplet. By reason of the fact that the strut forms a triple angle in the manner shown, the heads are supported over practically their entire area, so that the metal in the chaplet is used to its fullest extent, thereby permitting of making the chaplet of thinner sheet metal and reducing the cost of the same accordingly, and also improving its union by fusion with the molten metal which is poured into the mold to produce the casting.

The strut or stem of the chaplet forms practically three arms or branches which radiate or diverge from the center of the chaplet and thus distribute the bearing for the load which rests on the heads equally to practically the outer edges of the latter, thereby producing a well balanced chaplet.

I claim as my invention:

1. A chaplet, comprising a strut and heads arranged at opposite ends of said strut, said strut consisting of two plies which engage each other and are connected with each other

at one pair of corresponding longitudinal edges while the opposite longitudinal edges thereof are disconnected, and each of said heads consisting of two plates arranged flush and connected at their opposing inner edges with one pair of transverse edges of said strut plies.

2. A chaplet comprising an upright strut and horizontal heads at the upper and lower ends of said strut, said strut consisting of two plies each of which has a front section and a rear section arranged at an angle relatively to each other, the rear sections of both plies being arranged parallel and close to each other and connected with each other at their outer vertical edges, and said inner sections diverging from the inner vertical edges of said rear sections, and each of said heads consisting of two plates arranged flush and each having one part connected at its inner transverse edge with one of the transverse edges of one of said rear post sections while another part of this plate has its inner transverse edge disconnected from the post and extends across one of the horizontal edges of one of the front sections of the strut.

3. A chaplet comprising an upright strut and horizontal heads at the upper and lower ends of said strut, said strut consisting of two plies each of which has a front section and a rear section arranged at an angle relatively to each other, the rear sections of both plies being arranged parallel and close to each other and connected with each other at their outer vertical edges, and said inner sections diverging from the inner vertical edges of said rear sections, and each of said heads consisting of two plates arranged flush and each having one part connected at its inner transverse edge with one of the transverse edges of one of said rear post sections while another part of this plate has its inner transverse edge disconnected from the post and extends across one of the horizontal edges of one of the front sections of the strut, said strut and head being constructed integrally from a single piece of metal of uniform thickness.

4. A chaplet having two heads and a strut connected at opposite ends with said head and constructed to form three angles in cross section.

GEORGE L. WAITT.