No. 889,115. PATENTED MAY 26, 1908.

O. FRESE & H. RAUCH.

CHAPLET FOR CORES.

APPLICATION FILED JULY 7, 1906.

Fig. 2

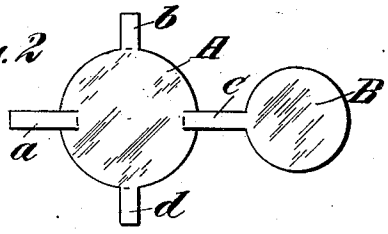


Fig. 1

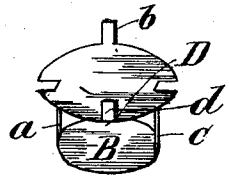


Fig. 4

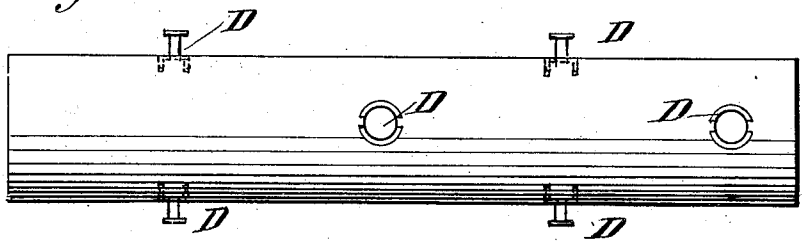


Fig. 5

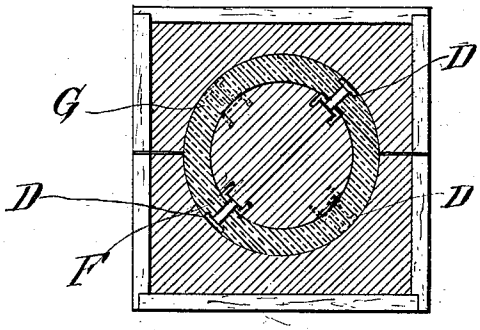
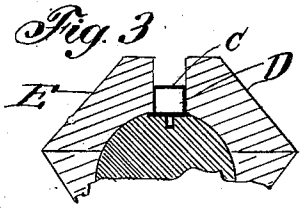


Fig. 3



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CHAPLET FOR CORES.

No. 889,115. Specification of Letters Patent. Patented May 26, 1908.

Application filed July 7, 1906. Serial No. 325,150.

To all whom it may concern:

Be it known that we, OTTO FRESE and HARRY RAUCH, citizens of the United States, and residents of Cincinnati, in the county of Hamilton and State of Ohio, have invented a certain new and useful Improvement in Chaplets for Cores, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, which form part of our specification.

Our invention relates to chaplets to be used in supporting the core within the mold, and its object is to produce a chaplet of simple and cheap construction, which in use will be so attached to the core as to prevent its flowing away with the molten metal when the casting is made.

It is readily and cheaply made, is stamped from a single piece of thin metal, such as tin, and easily and quickly formed into its final shape.

In the drawings:—Figure 1 is a perspective view of our improved chaplet, on an exaggerated scale; Fig. 2 is a plan view on the same scale of the form in which the metal is stamped in order to make our improved chaplet; Fig. 3 is a cross-section through the core-box in which a core is made, showing the manner in which our improved chaplets are used; Fig. 4 is a side elevation of a core showing our chaplet as it appears after the core is formed; and Fig. 5 is a cross-section through a mold after the metal has been poured therein, illustrating the manner in which our improved chaplet supports the core.

The chaplet is intended to be used at any point throughout the periphery of the core, as desired by the pattern maker, as is the case with all chaplets. It is stamped from a flat sheet of metal in the shape as indicated in Fig. 2, and in this flat shape comprises two disks A and B, and the extensions of the disk A,—viz. *a*, *b*, *c*, and *d*. The extension *c* connects the disks A and B, and the disk A is cut through in the direction of the parallel edges of the portions *a* and *c* for a short distance within its circumference.

To form the chaplet, the extensions *b* and *d* are bent upwardly at right angles to the face of the disk A, and the extensions *a* and *c* are bent downwardly at right angles to the face of the disk A, and the disk B then bent at right angles to the extension *c* so as to bring its face against the end of the extension *a*. As thus manipulated, the finished chaplet as illustrated in perspective in Fig. 1, is produced.

In use the chaplet, which as a whole is indicated by the letter D, is inserted in sockets *e* formed in the core-box E for the core F, said openings being placed at various points throughout the length and circumference of the core, so as to properly support the same when it is placed within the mold. The lower disk B of the chaplet D is made slightly smaller than the upper disk A, so that the upper disk will cover the socket *e* in the mold, into which the chaplet extends, and thereby prevent sand from dropping into said socket. The extensions *b*, *d*, project into the portion of the mold to be occupied by the core, and when the core is finally formed, hold the chaplet in position in the core. The core is formed in the usual manner, and when finished, the chaplets appear as in Fig. 4.

The extensions *a*, *c*, are made of a length equal to the thickness of the metal of the casting desired. After the core is properly baked and is ready for use, it is placed within the mold, as indicated at Fig. 5, the chaplets supporting it in proper relation to the mold G. The metal is then poured in the usual manner, and the chaplets being fastened to the core as described, are prevented from flowing away by reason of the flow of the molten metal, and are incorporated in the casting.

Having thus described our invention, what we desire to claim as new, and secure by Letters Patent, is:—

1. A chaplet for cores comprising two disks separated by a distance equal to the thickness of the metal to be cast, the one of smaller diameter than the other and the larger disk having prongs adapted to be embedded in the core.

2. A chaplet for cores comprising a supporting base and a core-engaging-disk, the latter extending beyond the limits of the former and being separated therefrom by a thickness equal to the thickness of the intended casting, said core-engaging-disk being provided with projections adapted to be embedded in the core.

3. A blank for a chaplet stamped from a single piece of metal, said blank comprising

two disks, one larger than the other, and extensions of the larger disk, one set of extensions being adapted to be turned up to form prongs to be embedded in the core, and the other set of extensions being adapted to be bent in the opposite direction, said latter extensions being of a length equal to the thickness of the metal to be cast, and the two disks being connected by one of said latter extensions, substantially as described.

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