T. H. WELLS.

ADJUSTABLE CHAPLET.

APPLICATION FILED APR. 6, 1910.

974,218. Patented Nov. 1, 1910.

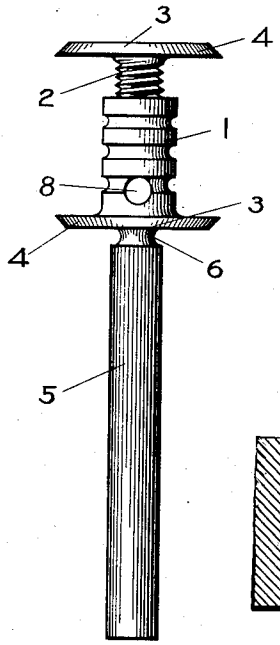

FIG. 1.

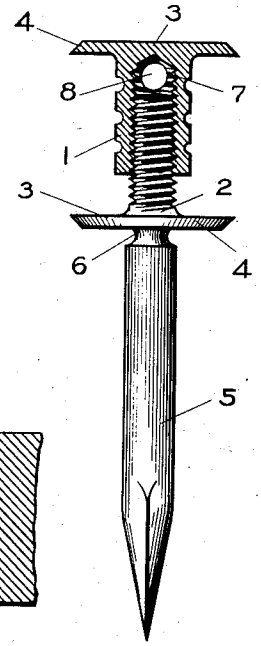

FIG. 2.

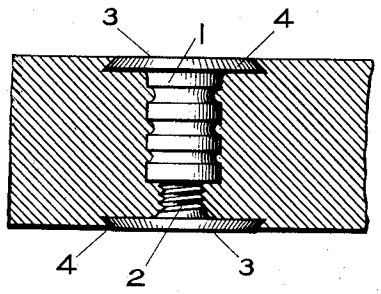

FIG. 3.

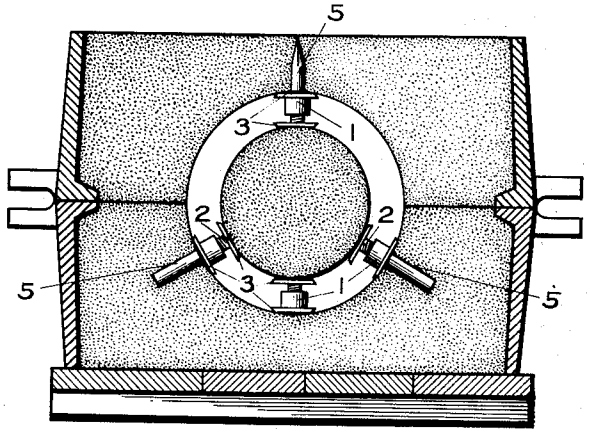

FIG. 4.

WITNESSES

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ADJUSTABLE CHAPLET.

974,218. Specification of Letters Patent. Patented Nov. 1, 1910.

Application filed April 6, 1910. Serial No. 553,895.

To all whom it may concern:

Be it known that I, THOMAS HARRY WELLS, of the city of Toronto, in the county of York and Province of Ontario, Canada, have invented certain new and useful Improvements in Adjustable Chaplets; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form part of this specification.

The present invention relates to improvements in an adjustable chaplet for foundry purposes, which in its application can be carried out in several ways in order to overcome the difficulties that are encountered in the use of previous devices of this class, and particularly to the means employed to insure the core-supporting device becoming an inseparable part of the casting.

In the present invention the number of chaplets necessary in a series of any given range, is reduced by providing a maximum of adjustability with a minimum number of separable parts, which is a desideratum; and the objects of my improvement are, to eliminate the possibility of extending within the range of adjustment beyond the limit of safety of the screw-threaded engagement; to afford facilities for supporting the chaplet in any desired position and secure the same to prevent displacement; and, to provide an efficient yet inexpensive chaplet which will present an unbroken surface in, and become an integral part of the finished casting.

The device illustrated in the accompanying drawings is in accordance with my invention, in which:—

Figure 1 is a side elevation of a chaplet conforming to the herein described invention. Fig. 2 is a view in side elevation with a portion in vertical section of a modification. Fig. 3 is a sectional view of a portion of a casting showing integral therewith a chaplet, and setting forth, in side elevation, a further modification of the chaplets shown in Figs. 1 and 2; and, Fig. 4 is a sectional view of a mold or flask showing the application of the several modifications of this invention as applied to separate and support cores.

Similar figures of reference refer to like parts throughout the several views.

In its several forms or modifications it will be seen that, there are in all but two separable parts comprising the chaplet, each adapted for screw-threaded engagement, and without exterior openings to mar the surface of the casting of which it becomes a part in the act of supporting cores.

The variability of the length of the chaplet, within the range of adjustment, is provided by a single screw-threaded engagement, comprising an internally screw-threaded sleeve or socket 1, an externally screw-threaded stud 2, and each provided with a laterally extending flange integral with one end thereof and adapted to form heads 3. These heads are preferably circular in shape, the outer faces of which provide unbroken plane surfaces, so that their use will not be the cause of objectionable recesses or pockets in the surface of the finished casting. The periphery of the heads 3 is provided with a beveled face 4, as shown. The inclination of the beveled face is sufficient to insure the heads of the chaplet becoming pocketed in and for all ordinary purposes an inseparable part of the casting.

On referring to Figs. 1 and 2 it will be seen that, the arrangement of the screw-threaded members is reversed, with respect to the elongated stems 5. In the instance of Fig. 1, the sleeve 1 is formed of one piece with the head and stem, while in that or Fig. 2, the stud 2 is formed of one piece with the head and stem. This arrangement is at present immaterial, but may be of some consideration in the manufacturing of large quantities.

The stems 5, of which two forms are shown, are adapted to support the chaplet in any desired position by being forced or otherwise inserted below the face of the mold. To facilitate the cutting-off of the stems during the dressing of the casting after being removed from the mold, and to minimize the possibility of injury to the heads of the chaplets, there is a neck 6 of reduced diameter adjacent to the outer surface of the head of the chaplet, as shown.

On referring to Fig. 3 it will be seen that, in this instance, the elongated stem 5 is dispensed with and the chaplet adapted to rest in the mold in the usual way, as shown in Fig. 4.

Should it be found desirable to eliminate the inclosed space 7, brought about by the adjustment of the screw-threaded members 1 and 2, there are openings 8 communicating with the screw-threaded interior of the sleeve

1, so that the metal when poured has ingress to the interior space.

Having described my invention, what I claim as new and desire to secure by Letters-Patent, is:—

1. In adjustable chaplets, the members adapted for screw-threaded engagement provided with heads of relatively large area and having a receding margin whereby the metal of the casting is permitted to converge over the perimeter of the head and envelop the periphery of the inclined face, for the purpose hereinbefore set forth.

2. In adjustable chaplets, the members adapted for screw-threaded engagement provided with laterally extending flanges to form heads of relatively large area, and a supporting stem integral with one of said members and so formed as to be readily severed from the head of the chaplet after the casting is made.

3. In adjustable chaplets, the members adapted for screw-threaded engagement provided with laterally extending flanges to form heads of relatively large area, a receding margin whereby the metal of the casting is permitted to converge over the perimeter and envelop the periphery of the inclined face of said heads, and a supporting stem having a neck portion of reduced diameter adjacent to the outer surface of said head.

4. An adjustable chaplet comprising two separable parts adapted for screw-threaded engagement, a sleeve and stud each having a laterally extending flange of relatively large area to form heads having an uninterrupted plane outer-surface, and one or more transverse openings communicating with the screw-threaded interior of said sleeve.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

THOMAS HARRY WELLS.

Witnesses:

PERCY WATT,

H. DIXON.