

No. 702,620.

Patented June 17, 1902.

W. A. BOLE.

CHAPLET FOR SUPPORTING CORES IN MOLDS.

(Application filed Oct. 10, 1900.)

(No Model.)

Fig. 1.

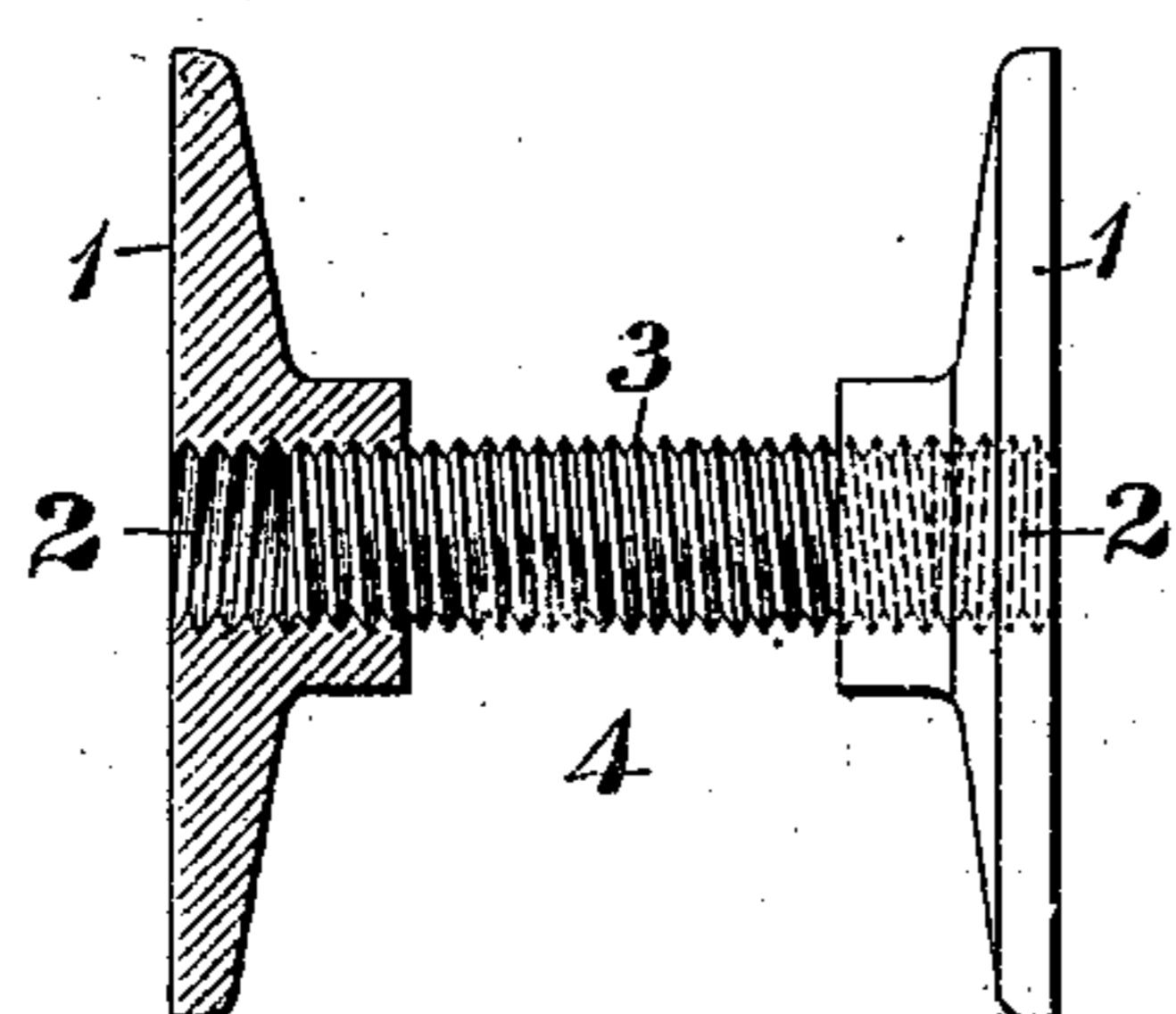


Fig. 2.

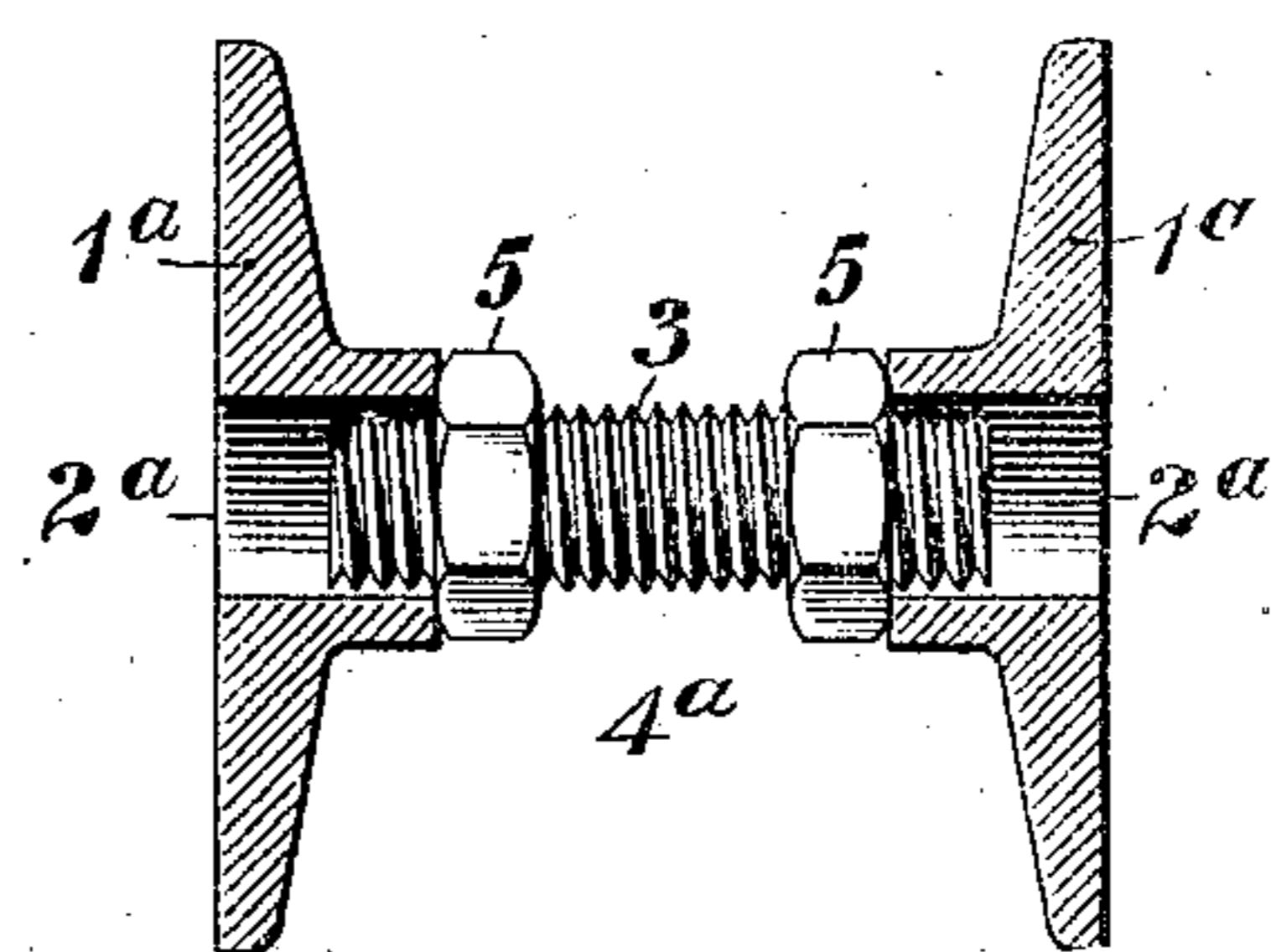
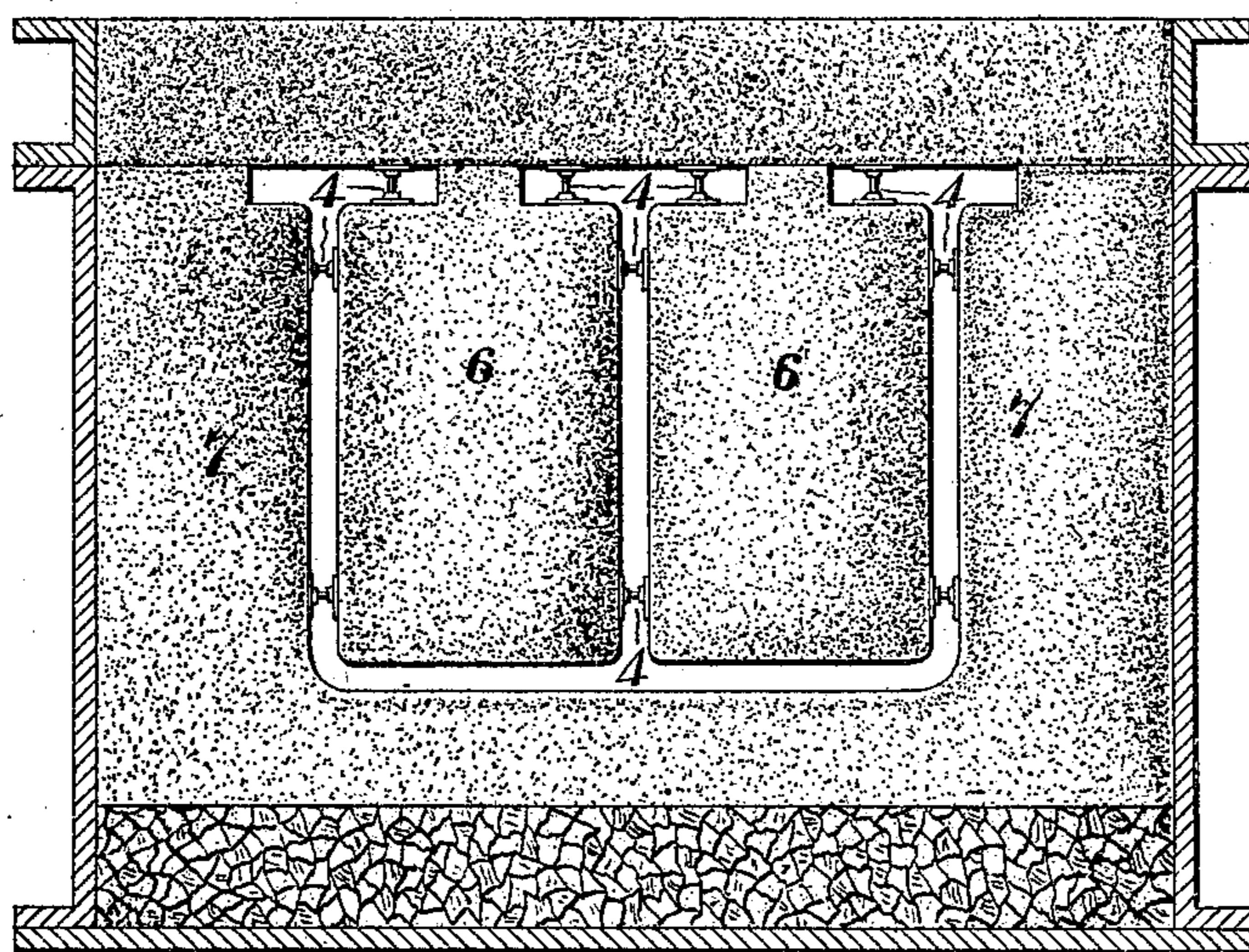


Fig. 3.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

WILLIAM A. BOLE, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR TO THE WESTINGHOUSE MACHINE COMPANY, A CORPORATION OF PENNSYLVANIA.

## CHAPLET FOR SUPPORTING CORES IN MOLDS.

SPECIFICATION forming part of Letters Patent No. 702,620, dated June 17, 1902.

Application filed October 10, 1900. Serial No. 32,591. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM A. BOLE, a citizen of the United States, residing at Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Chaplets for Supporting Cores in Molds, of which the following is a specification.

My invention relates generally to the art of forming metal castings, and particularly to the means employed for supporting and separating the cores of molds employed for making castings.

Heretofore it has been the practice to employ chaplets of invariable lengths for the separation of cores in molds, different sizes of chaplets being provided in accordance with the thickness of the casting to be made, and consequently the width of the spaces between and around the cores. It is well known that there is more or less variation in the forms and dimensions of cores brought about by the baking operation. Such variation may be due to either shrinking or swelling; but whatever its nature it is apt to be uncertain and unequal at different points. It has been the practice generally, therefore, among molders where the chaplets at hand were too short, as would usually be the case on account of the shrinkage of the cores, to wedge them in position by any small fragment of metal or other substance that might be at hand, and such wedging has been unreliable, insecure, and generally unsatisfactory. In order to overcome the difficulties that have been experienced in the direction above indicated, I have devised an adjustable chaplet that is adapted for satisfactory use in spaces which may vary within considerable limits. The device is illustrated in the drawings, in which—

Figure 1 is a view, partially in side elevation and partially in section, of one form of my invention; and Fig. 2 is a similar view of a modification. Fig. 3 is a sectional view of a mold and two cores separated by chaplets constructed in accordance with my invention.

In the form shown in Fig. 1 the device 4 comprises two heads 1, the outer faces of which are preferably plane surfaces. These heads are bored out centrally and internally 50 screw-threaded, as indicated at 2, and are mounted upon a screw-threaded stem 3, so that their outer faces are substantially in parallel planes. The screw-threaded engagement between the heads and the stem 3 will 55 preferably be free-fitting, so that the heads may be turned easily on the stem.

The chaplet 4<sup>a</sup> (shown in Fig. 2) comprises two heads 1<sup>a</sup> like the heads 1, (shown in Fig. 1,) except that each of them is provided with 60 a central cylindrical opening 2<sup>a</sup> of slightly-greater diameter than the stem 3. In order to vary the length of this form of chaplet, I provide two nuts 5 to serve as adjustable stops for the heads 1<sup>a</sup>.

It will be seen that either form of chaplet may be placed between the cores 6 and between the sides of the cores and the adjacent walls of the mold 7, as indicated in Fig. 3, and if these spaces are not equal either 70 or both of the heads may be adjusted on the screw, so as to make the chaplets of exactly the right length to properly support the cores and hold them in exactly the position to which they are adjusted.

I claim as my invention—

1. A chaplet for separating and supporting cores in molds, comprising a stem and two heads which have outer faces of relatively large area and are adjustably mounted upon 80 the ends of the stem.

2. A chaplet for separating and supporting cores in molds, comprising a screw-threaded stem and two internally-screw-threaded heads which have outer faces of relatively large area 85 and are mounted upon the ends of the stem.

In testimony whereof I have hereunto subscribed my name this 8th day of October, 1900.

WILLIAM A. BOLE.

Witnesses:

T. S. GRUBBS,  
T. L. BROWN.