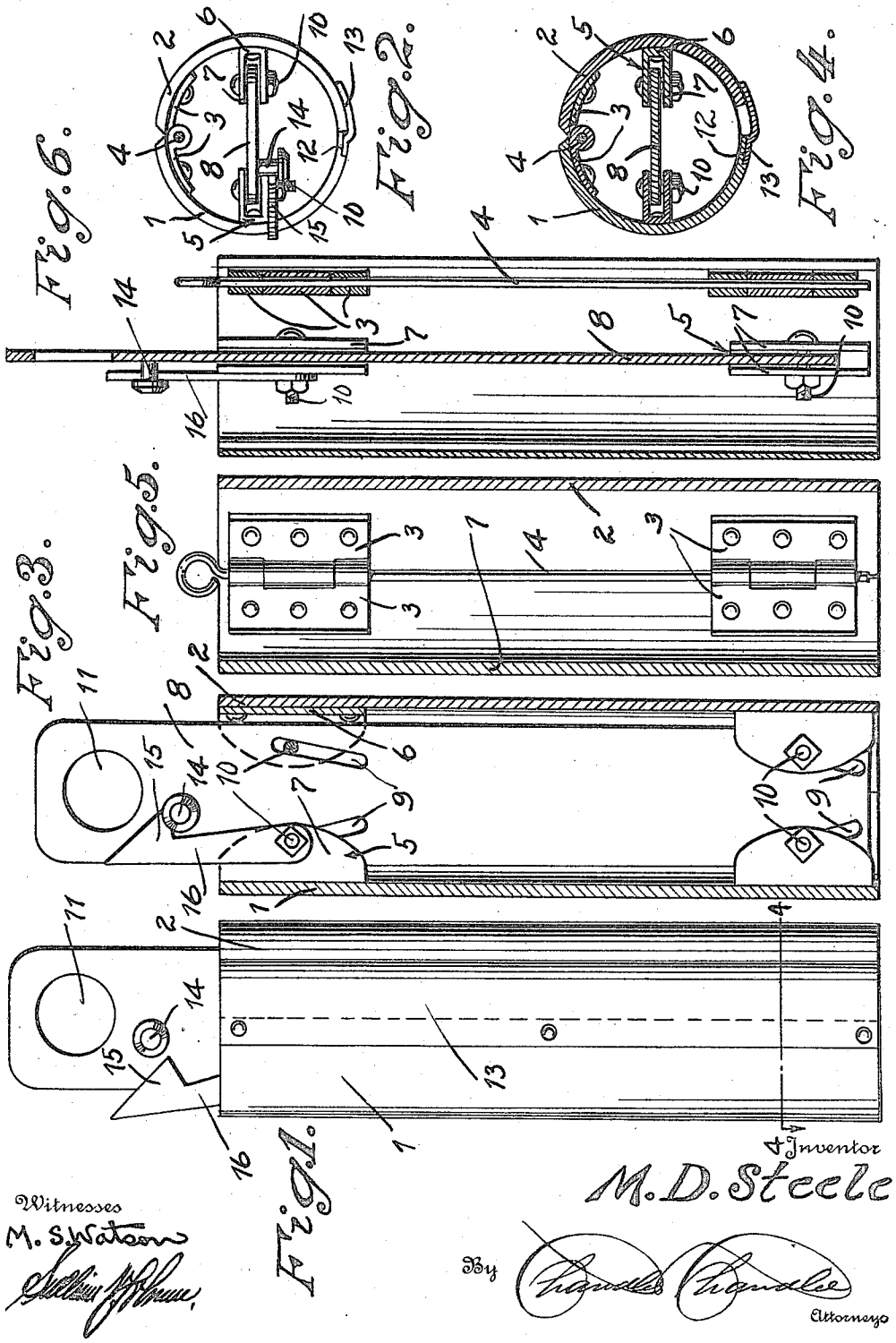
M. D. STEELE.

COLLAPSIBLE CORE.

APPLICATION FILED DEC. 23, 1913.

1,183,324. Patented May 16, 1916.



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UNITED STATES PATENT OFFICE.

MACK DONAL STEELE, OF BLACKSVILLE, WEST VIRGINIA.

COLLAPSIBLE CORE.

1,183,324. Specification of Letters Patent. Patented May 16, 1916.

Application filed December 23, 1913. Serial No. 808,455.

To all whom it may concern:

Be it known that I, MACK D. STEELE, a citizen of the United States, residing at Blacksville, in the county of Monongalia, State of West Virginia, have invented certain new and useful Improvements in Collapsible Cores; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The present invention is directed to collapsible cores, and more particularly to one designed for making cement wells or the like.

The invention has for its object to so construct a core of this type that the sections thereof may be firmly locked in their expanded positions, said sections being also capable of being easily and quickly collapsed to permit ready removal of the core.

With this and other objects in view, this invention resides in the novel features of construction, formation, combination and arrangement of parts to be hereinafter more fully described, claimed and illustrated in the accompanying drawing, in which:—

Figure 1 is a front view of the device. Fig. 2 is a plan view showing the parts in the positions they will occupy when the device is being used as a mold. Fig. 3 is a vertical sectional view showing the core in its open position. Fig. 4 is a similar view on line 4—4 of Fig. 1, showing the core expanded. Fig. 5 is a similar section taken at right angles to Fig. 3, and Fig. 6 is a longitudinal sectional view.

The core consists of sections 1 and 2, said sections being semi-circular in cross section and have their rear edges provided with hinge plates 3, which are pivotally connected by the pintle 4, which is readily removable so that the sections may be separated for nesting. Connected to the interior surfaces of the sections 1 and 2 are clips 5, said clips consisting of plates 6, the edges of which terminate in inward extending flanges 7, said flanges being spaced apart for slidably receiving the operating plate 8, said operating plate being provided near its upper and lower ends with spaced inclined slots 9 which slidably engage the bolts 10 which are passed through flanges 7 of the clips.

The extreme upper end of the operating plate 8 is provided with an opening 11, which serves as a medium for receiving a bar or tool for raising or lowering the plate so as to expand or contract the sections 1 and 2. The forward edge of the section 1 is rabbeted, as at 12, for receiving one edge of the strip 13, which is secured in the rabbeted portion 12, the other edge of which is adapted to overlap the adjacent edge of the section 2 so that the core will be practically circular in cross section when in its operative position.

A headed lug 14 is carried by the operating plate 8, the same being located adjacent the upper end thereof and is designed to be engaged by the bill 15 of the hook 16, said hook having its lower end pivotally connected to one of the bolts 10 carried by one of the uppermost clips 5 and when the bill 15 is engaged with the stud 14 the bolts 10 have ridden upwardly in the slots 9, thus holding the sections in their expanded position.

When it is desired to remove the core it is only necessary to disengage the bill 15 from the stud 14, whereupon the operating plate 8 may be moved upwardly, during which time the bolts 10 will ride downwardly in the slots 9, thus permitting the sections to collapse.

When the above operation has been accomplished the pintle 4 is withdrawn from the hinges 3 and the sections 1 and 2 of the core moved in circular paths until the edges remote from the hinge edges abut. At this time the tubular portions of the hinged plates of each hinge will be moved out of alinement so that each section may have independent movement. This will be advantageous inasmuch as the sections may be loosened from the cement more readily when they are acted upon independently. Of course after they are loosened they may be readily withdrawn together. It is for this reason that I have made the pintle 4 removable.

What is claimed is:—

In a collapsible core, a pair of semi-cylindrical hollow sections, the edges thereof being arranged in alinement, a pair of hinged plates having tubular ears thereon secured to the inner face of one of the sections, an additional pair of hinged plates having tubular ears thereon secured to the inner face of the other section, the said tubular ears being in alinement, a rod extending through the tubular ears of all of the hinge plates,

a strip secured to the edge of one of the sections opposite the hinge plates thereon, the said strip overlapping the adjacent edge of the other section, and means to move said sections about the aforementioned rod as a pivot so as to spread the free ends thereof within the extent of the said strip, the said rod being removable from the ears whereby the sections of the core may be moved in circular paths until the edges remote from the hinged edges abut and the tubular portions of the hinge plates move out of alinement so that the sections of the core may be loosened independently.

In testimony whereof, I affix my signature, in the presence of two witnesses.

MACK DONAL STEELE.

Witnesses:
L. L. THOMAS,
JNO. A. GAFFNEY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."