

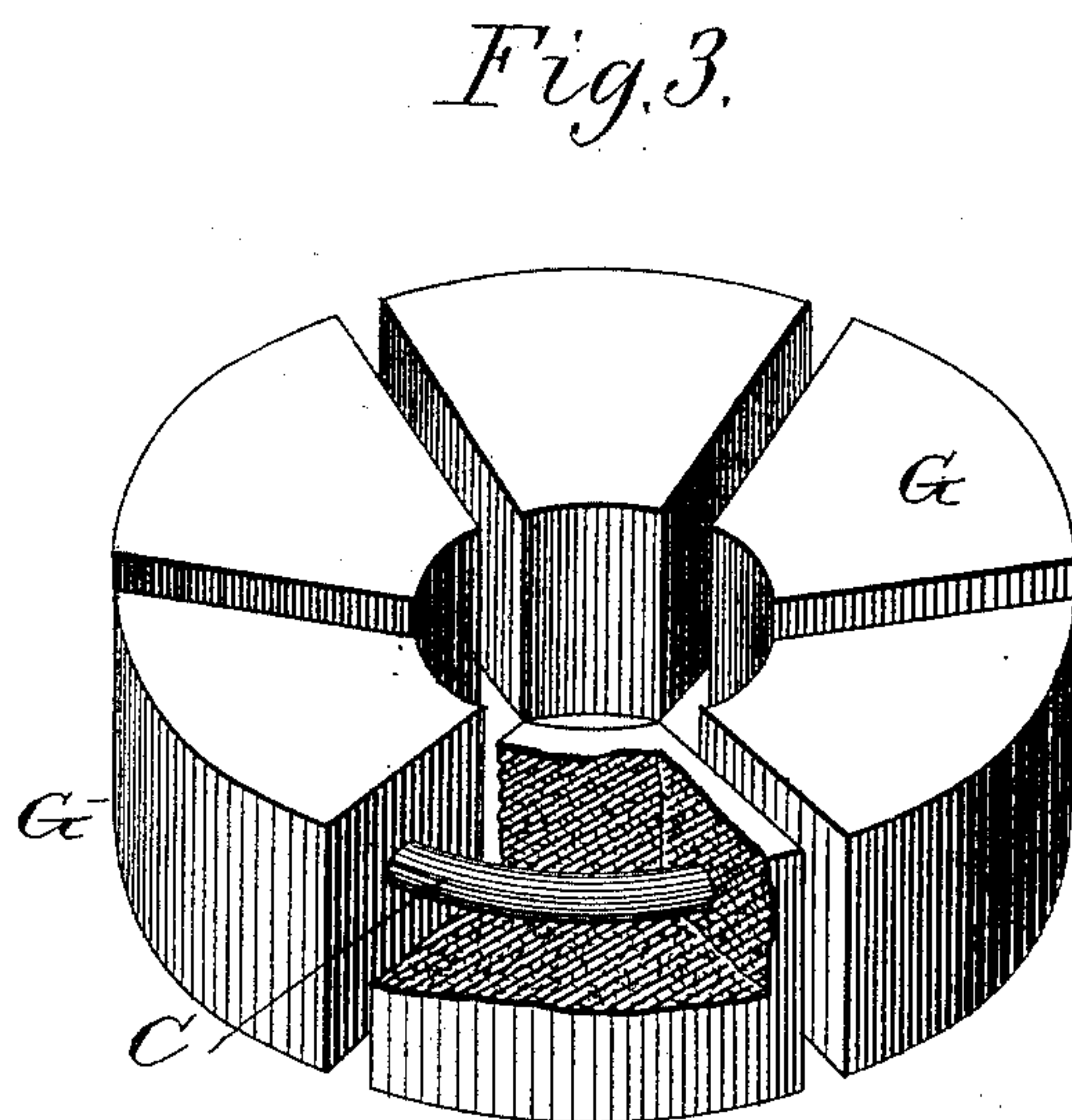
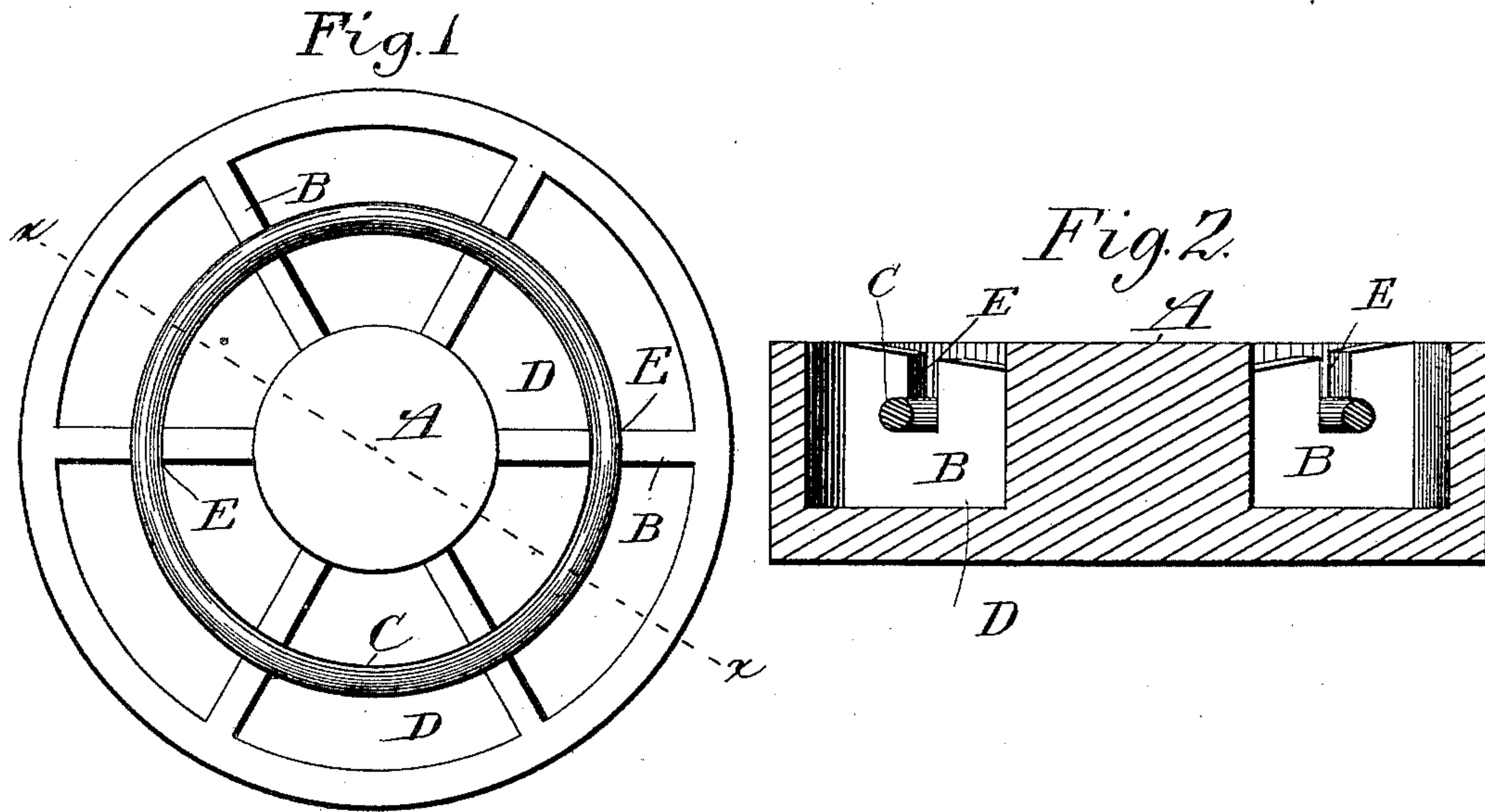
(Model.)

M. FITZGERALD.

CORE BOX.

No. 394,108.

Patented Dec. 4, 1888.



Witnesses.

*Geo. G. Ginnison.*  
*F. B. Koch.*

Inventor.

*M. Fitzgerald.*

# UNITED STATES PATENT OFFICE.

MICHAEL FITZGERALD, OF CUMBERLAND, MARYLAND, ASSIGNOR TO  
ROBERT C. PAUL, SR., OF SAME PLACE.

## CORE-BOX.

SPECIFICATION forming part of Letters Patent No. 394,108, dated December 4, 1888.

Application filed January 31, 1888. Serial No. 262,582. (Model.)

*To all whom it may concern:*

Be it known that I, MICHAEL FITZGERALD, a citizen of the United States, residing at Cumberland, in the county of Alleghany and State of Maryland, have invented a new and useful Improvement in Core-Boxes for Molding Car-Wheels, of which the following is a specification.

The object of my invention is to facilitate the molding of a series of cores for car-wheels which have an oil-box surrounding the hub on the exterior side when the oil-box has a greater diameter than the hub of the wheel, and extends some distance over the arms.

Referring to the accompanying drawings, Figure 1 is a plan view of the core-box with the core-supporting ring lying in the notched arms. Fig. 2 is a section on the line *x x*, Fig. 1. Fig. 3 is a perspective view of the sand cores, one of the cores being broken away to show the supporting-ring.

The core-box is made as deep as the width of the arms of the wheel to be made require, its interior diameter being large enough to mold cores of proper size to fit the central part of the mold when the pattern is drawn.

It is provided with the hub A and arms B, the arms in number and size corresponding to the size and shape of the hub of the wheel. About midway between the center and circumference of the box notches E are cut in all the arms to about half their depth, for receiving a metal ring, C, which is let down in the arms to the bottom of the notches, the dimensions of the ring being about three-eighths by three-eighths inch. When the ring is in this position, the compartments D between the arms are packed with sand, which surrounds the ring C and forms the cores G. When the cores G are removed from the box, they are held by the ring C in the proper position to be set in the mold, where they are also firmly held by it when the metal is poured. When the wheels are cast, the ring can be broken from the arms.

What I claim is—

A core-box having the hub A and notched arms E, in combination with the ring C, substantially as set forth.

MICHAEL FITZGERALD.

Witnesses:

G. H. MCKEEHAN,  
I. C. LAMBERT.