



United States Patent Office.

CHARLES TAYLOR, OF LITTLE FALLS, NEW YORK.

IMPROVEMENT IN CASTING BEARINGS IN IRON WHEELS.

Specification forming part of Letters Patent No. 18,111, dated September 1, 1857.

To all whom it may concern:

Be it known that I, CHARLES TAYLOR, of Little Falls, in the county of Herkimer and State of New York, have invented a new and useful Improvement in Casting Iron Pins for Bearings in Iron Wheels for General Purposes; and I hereby declare that the following is a full and exact description.

To enable others to make and use my invention, I proceed to describe its construction and operation, reference being had to the drawings hereunto annexed, and making part of

Figure 1 is a side elevation of the flask;
Fig. 2, a side view of the pin and bevel cappiece; Fig. 3, a plan view of nowel sand mold and core-print; Fig. 4, a plan view of cope sand mold and core-print; Fig. 5, a side view of cap-piece; Fig. 6, a side view of the pin without the cap-piece; Fig. 7, a plan view of large pin; Fig. 8, a plan view of small pin;

Fig. 9, a plan view of cap-piece.

A is a piece of wood, made tapering or oval for a cap-piece, attached temporarily to the small iron pin B. B B are cast-iron, wrought or steel pins for bearings. C C are sand molds in the nowel D and cope F. D is a nowel. F is the cope. E E are core-prints in the sand molds C C, for the purpose of receiving or setting the pins B B.

The construction of my improvements for casting iron pins or bearings in cast-iron wheels is so simple in its arrangements that the most ordinary person at all skilled in

mechanism could make it.

The principal feature of my invention is the arrangement of the oval or beveled cappiece, as in the peculiar manner I arrange it it admits of the small pin B of being cast of a uniform or equal size—that is, without either end of it being beveled or oval—which could not be effected except it was provided with a movable temporary cap-piece and attached in the manner I attach it. This movable cappiece A is placed upon the pin B, and is made

to adhere temporarily to it by means of any sticky substance that would hold it sufficiently to prevent it falling off, or that which would be equivalent thereunto. Afterward it is placed in the core-print E of the sand mold C in the nowel D. The cope F is then placed upon the nowel D and the small pin or bearing B, having the movable beveled cap-piece A attached to it, permits it to enter the core-print E in the cope F without destroying or injuring the print in the least manner possible, which could not be the case if the pin B were not provided with the beveled cap-piece A. Another advantage is gained which could not be effected in any other manner, and that is the small pin B, as it is necessary that it should be for a bearing or a uniform size, and as it could not be turned off after casting it into wheels for general purposes, for the reason that the long pin would be in the way of turning it off and adapting it to the form of a bearing, therefore, as the pins B B are finished for practical purposes and in working condition previous to casting, without regard to their length, it forms quite a desideratum in everything connected with wheels or other castings requiring one or more, particularly two, bearings. Thus the advantages of my invention can be readily seen, I think, as the same work is accomplished at less expense, besides a portion of the work could not be done so effectually any otherwise and answer substantially the same purpose.

What I claim as my invention, and desire

to secure by Letters Patent, is—

The employment of the bevel or oval cappiece A, or its equivalent, when it is used in connection with the pins B B, or their equivalent, and made to operate in the manner and for the purposes within described.

CHARLES TAYLOR.

In presence of—
NATHANIEL FOSDICK,
WILLIAM G. BLISS.