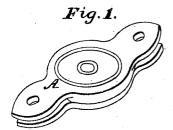
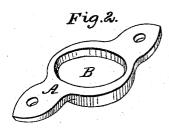
J. B. CLARK.

Whiffltree Plate.

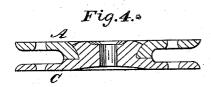
No. 86,811.

Patented Feb. 9, 1869.









Witnesses:

a J. Libbits J. J. Shuumay Inventor.

Temes B. Clark

By his Attorney.

Ahn E Cail.



JAMES B. CLARK, OF MERIDEN, CONNECTICUT.

Letters Patent No. 86,811, dated February 9, 1869; antedated February 1, 1869.

IMPROVEMENT IN WHIFFLE-TREE PLATES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, James B. Clark, of Meriden, in the county of New Haven, and State of Connecticut, have invented a new Improvement in Whiffle-Tree Plate; and I do hereby declare the following, when taken in connection with the accompanying drawings, and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a perspective view of the plate complete;

Figure 2, a perspective view of one part;

Figure 3, a longitudinal section of the same; and in Figure 4, a longitudinal section of the two parts united.

This invention relates to an improvement in the article of manufacture known to the trade as "whiffle-tree irons;" that is, the plate which lies between the whiffle-tree and cross-bars in carriages, and forms the joint upon which the whiffle-tree vibrates, the object of the invention being to produce a strong, substantial, and cheap plate; and to this end,

The invention consists in casting, first, one part of the plate with a circular opening through the centre, of larger diameter upon one side than the other; then placing the part so east into a flask, and casting the other part on to the first, so that the central part of the last extends into and fills the circular space left in

the first.

In order to the clear understanding of my invention, I will fully describe the same, as illustrated in the accompanying drawings.

A, the one part, is cast with ears, for the purpose of

securing it to the whiffle-tree or cross-bars, and through the centre a circular recess, B, is formed, as seen in fig. 2, which is of larger diameter upon one surface than the other, and the part finished in the usual manner for finishing small castings, (as by tumbling, &c.) The other part, C, is moulded in sand in the usual

The other part, C, is moulded in sand in the usual manner, and the part A put into the flask, so as to form a part of the mould, and in such relative position to the part C that, when the metal is poured into the flask to form the part C, it will flow into the recess D, in the part A, as denoted in fig. 4, forming, as it were, a head in the said recess, to secure the two parts together.

Removed from the flask, the two parts are turned upon each other, to work out the sand, and the whole made malleable in the usual manner of making malleable iron. Then, if the two parts shall not be sufficiently tight in the joint, the head of the part C may be hammered and set down on to the part A until the joint is sufficiently firm.

By this means, I construct the cheapest possible kind of a plate, and one equally as strong as any in use.

Having thus fully described my invention,

What I claim as new and useful, and desire to secure by Letters Patent, is—

A whiffle-tree plate, as an improved article of manufacture, in which the two parts are united together by the process of easting, substantially as set forth.

JAMES B. CLARK.

Witnesses:

A. J. TIBBITS, J. H. SHUMWAY.