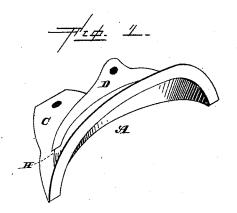
(No Model.)

## J. H. BLACKMORE.

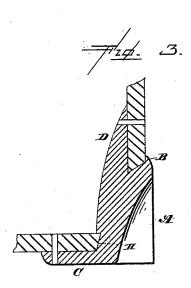
RUB IRON FOR VEHICLES.

No. 304,160.

Patented Aug. 26, 1884.







Louis J. Gardner Jewhanner Jas. A. Blackmore,

per

J. W. Lehmann,

atty

## UNITED STATES PATENT OFFICE.

JAMES H. BLACKMORE, OF DEFIANCE, OHIO.

## RUB-IRON FOR VEHICLES.

SPECIFICATION forming part of Letters Patent No. 304,160, dated August 26, 1884.

Application filed March 31, 1884. (No model.)

To all whom it may concern:

Be it known that I, James H. Blackmore, of Defiance, in the county of Defiance and State of Ohio, have invented certain new and useful Improvements in Rub-Irons; 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in rub-irons; and it consists in a rub-iron which is cast in a single piece, and which is provided with suitable flanges, so as to catch in between and over the bottom and side of the body, and thus enable the iron to be secured in position, as will be more fully described hereinafter.

as will be more fully described hereinafter.

The object of my invention is to so construct the iron that it can be held in position between the side and bottom of the body by the flanges formed upon it, and without the necessity of bolts or rive's of any kind.

Figures 1 and 2 represent perspectives of 25 two different forms of my invention. Fig. 3 is a vertical cross-section showing the iron secured in position.

A represents the body, which is preferably made concave along its outer side, where the wheel is to strike against it, and which has the flange B formed along its top edge, for the purpose of catching over the outer lower edge of the side of the body. Projecting horizontally inward from the bottom of the rub-iron is another flange, C, which will preferably be made wider than the flange B, and which catches against the under side of the body. Rising from the bottom A, at a suitable distance inward from the vertical flange B, is a third flange, D, which catches against the inner side of the side of the body. The groove between

the two flanges BD is just wide enough to re-

ceive the bottom edge of the side of the vehicle, as shown. The groove in between the two flanges may be perfectly straight, or may be 45 curved, as may be desired. If the bottom of the side piece is to be cut out to receive the rubiron, it will be made curved. Where the bottom of the side of the body is not to be cut, it will be made straight. In between the lower 50 edge of the flange D and the flange C is made a second groove, H, in which the outer edge of the bottom catches.

From the above it will be seen that the outer edge or flange, B, of the body A and the flange 55 C catch over the edge of both the side and bottom of the body of the vehicle, while the inner flange catches inside of the body. In all cases the outer edge of the bottom of the vehicle will be notched or cut away, so as to receive the 60 rub-iron; but the lower edge of the side need not necessarily be cut. The rub-iron is thus held rigidly in place without the need of bolts, screws, rivets, or other fastenings of any kind; but they may be used, if so preferred.

Having thus described my invention, I

1. A rub-iron provided with suitable holding-flanges, and which is adapted to be held between the bottom and the side of the vehitoele, without the help of other fastenings, substantially as shown.

2. In combination with the body of the vehicle, the rub-iron A, provided with flanges B C D, there being suitable grooves formed 75 between the flanges, so as to receive the edges of the side and bottom of the body of the vehicle, substantially as shown.

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

JAMES H. BLACKMORE.

Witnesses:
SOLOMON DEAMER,
WALLACE W. BURTON.