(No Model.)

J. J. CARR.

FLASK FOR CAR WHEELS.

No. 393,615. Patented Nov. 27, 1888.

Fig. 2.

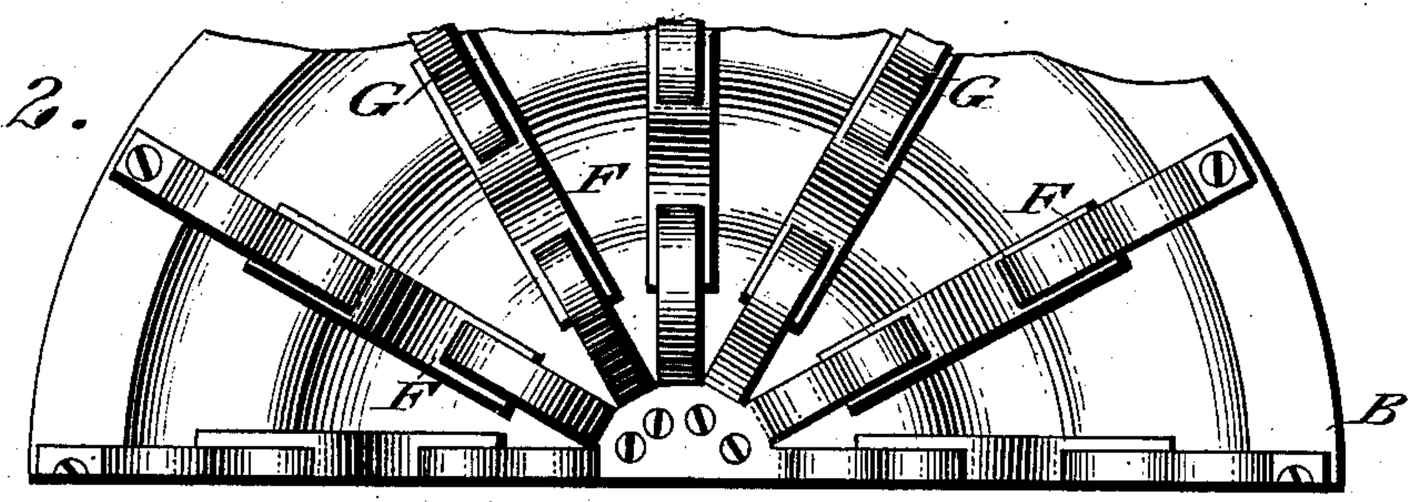


Fig. 1.

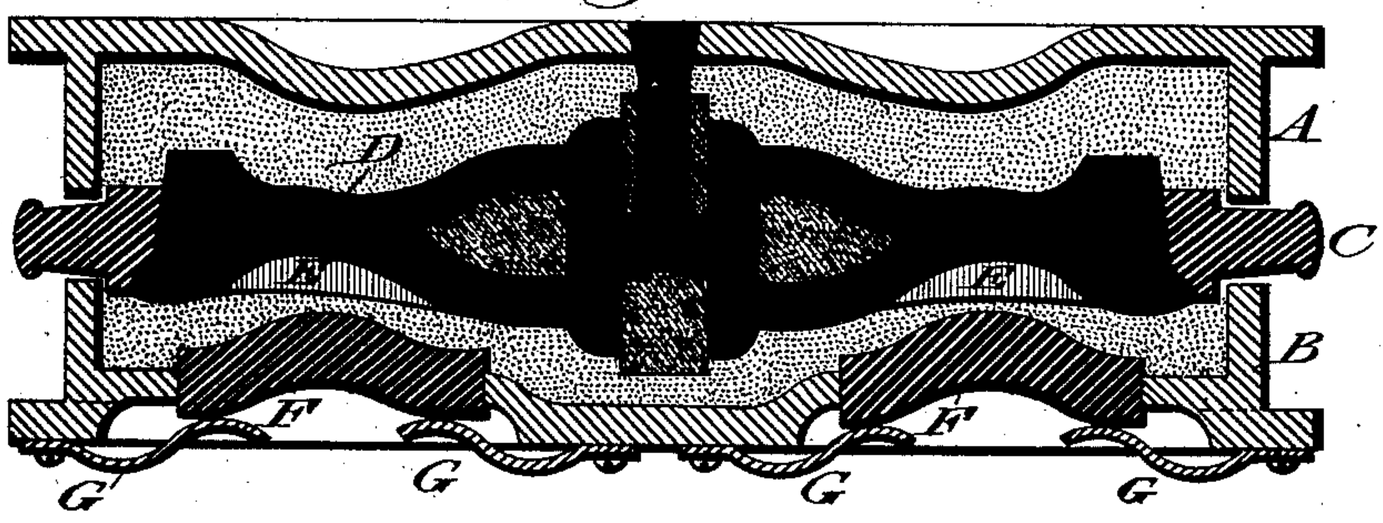


Fig. 4.

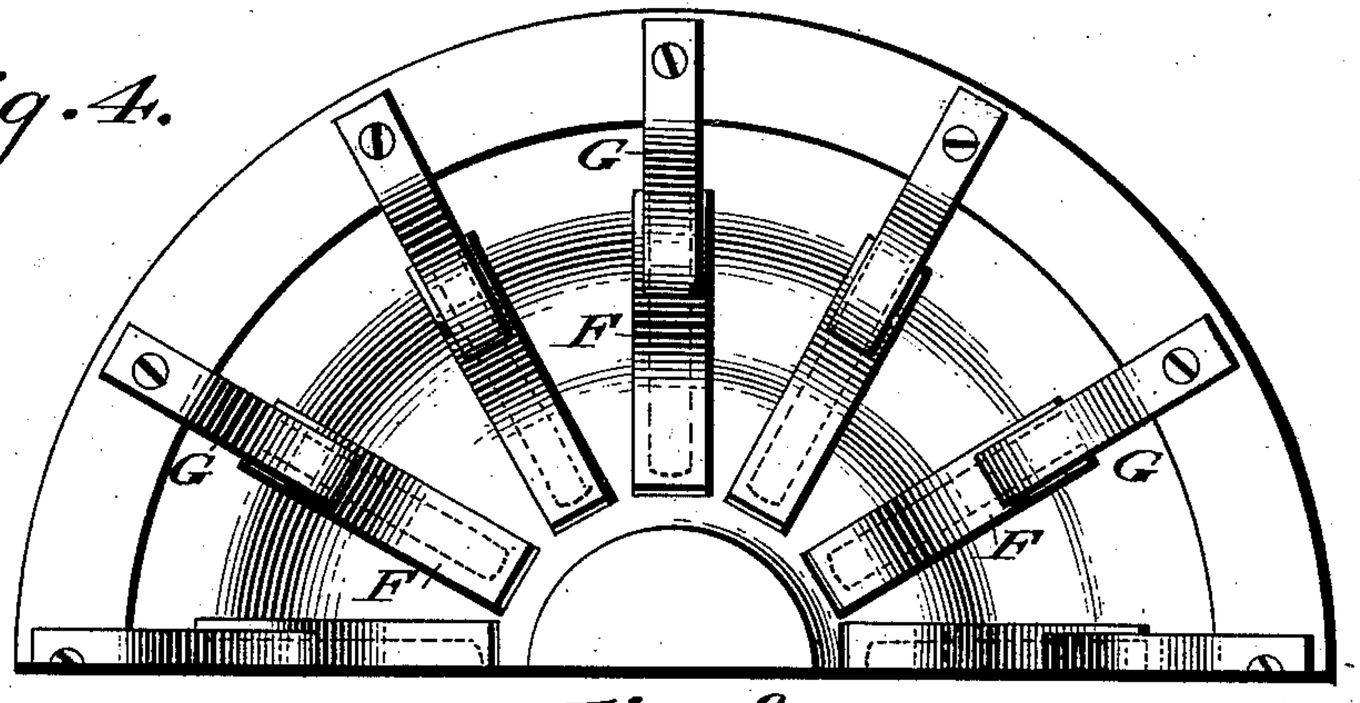
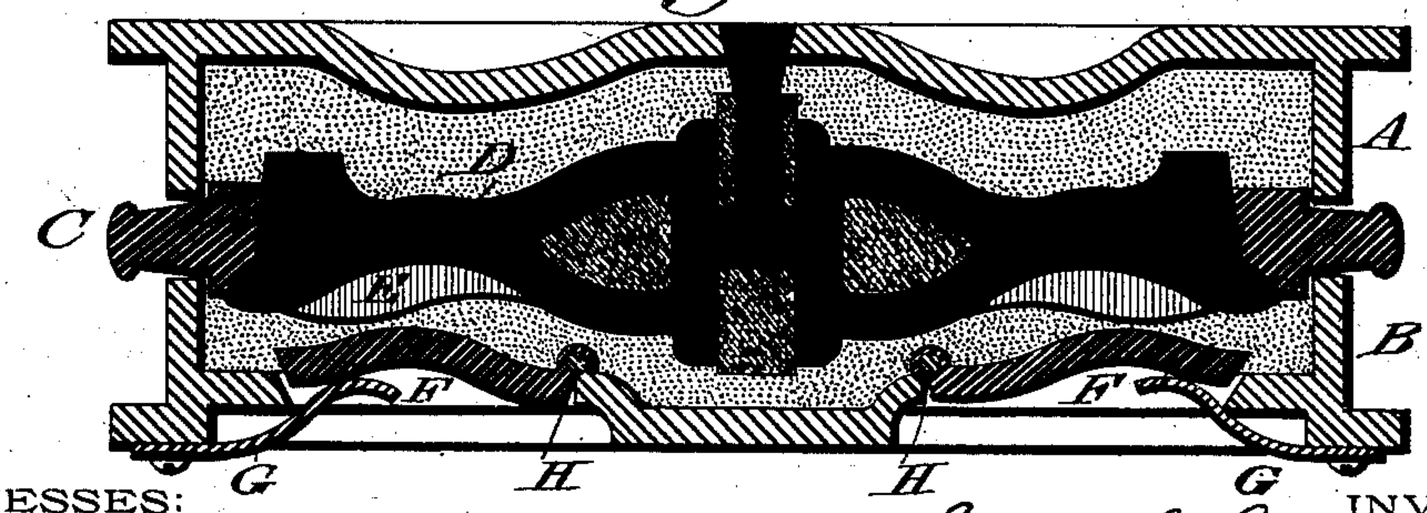


Fig. 3.



WITNESSES:

P. H. Eagles.

F. Norman Dixon

INVENTOR:

Joseph J. Carr,

By his attorneys,

W. C. Strawbridge.

J. Bonsall Taylor.

UNITED STATES PATENT OFFICE.

JOSEPH J. CARR, OF WILKES-BARRÉ, PENNSYLVANIA.

FLASK FOR CAR-WHEELS.

SPECIFICATION forming part of Letters Patent No. 393,615, dated November 27, 1888.

Application filed December 15, 1887. Serial No. 257,983. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH J. CARR, a citizen of the United States, residing in the city of Wilkes-Barré, in the county of Luzerne, and State of Pennsylvania, have invented an Improvement in Flasks for Car Wheel and other Molds, of which the following is a specification.

The object of my invention is to provide devices for especially compressing or compacting the sand in the mold, at particular and desired points, against the pattern, for the purpose of rendering the sand mold, at said points, more solid, and it consists as hereinafter described and claimed.

In the drawings, Figure 1 is a longitudinal sectional elevation of a mold-containing flask embodying my invention; Fig. 2 a bottom plan view of the drag flask shown in Fig. 1; Fig. 3 a longitudinal sectional elevation of a mold-containing flask embodying a modified form of my invention; and Fig. 4 a bottom plan view of the mold shown in Fig. 3.

In the drawings, A is a flask containing that part of the mold which is commonly called the "cope;" B a flask containing that part of the mold which is commonly called the "drag;" and C a cast iron ring called a "chill;" D a cast car wheel and E the ribs or spokes thereof. Opposite these ribs or spokes of the cast wheel, and opposite those parts of the pattern, when it is in place in the sand in the flask, which form the parts of the mold in which the spokes of the wheel are to be cast, the bottom of the flask B is provided with movable and adjustable sections F, which may be thrust inward to compress the sand in the mold between said sections and that part of the pattern which lies opposite thereto.

The movable sections F F may, in any given positions of adjustment, be held in place by springs G G, or by other suitable devices.

In Fig. 3, the movable sections F F are shown as hinged at H, in such manner that their opposite ends are free to be moved inwardly, and in said figure they are shown as having been moved inwardly to effect the compression desired.

It is well understood that in the manufacture of molds for casting car wheel, and for other purposes, it is frequently desirable that certain parts of the sand from which the mold is formed should be more compactly rammed than other parts. To provide devices to accomplish this result is the object of my invention.

It will be understood that my invention is not confined to flasks for the manufacture of car wheels, as it may be embodied in flasks for the manufacture of molds for other articles, by so shaping and locating the movable sections as to adapt them to be moved and adjusted to compact or ram the sand at the points desired.

The word "adjustable" as used in this specification is employed to denote the fact that the movable sections F F are capable of being set at different positions relatively to the bottom of the flask after sand has been introduced into said flask for the purpose of forming the mold therein, and that said sections are capable of being held in their respective positions of adjustment by springs G G which are in contact with the outer surfaces of said sections and which follow and remain in contact with them in their inward movement to said positions of adjustment.

The manner of operating the flasks shown in the drawings and above described, is as follows:—Sand is supplied to the flask B in sufficient quantity to form a mold and the pattern D is placed in upon, and in contact with, the sand contained in said flask. The movable sections F F are then by hand, or in any convenient manner, forced inwardly or upwardly, with the result that the sand lying between said movable sections and that part or those parts of the pattern to which the said sections are opposite, is compressed and made more solid. The strength and shape of the springs G G are such as to cause said springs to follow said movable sections F F in their movements just described and to retain said sections in their new positions to which as above described they have been moved.

In use, the drag flask shown in the drawings may be supported upon legs, or it may rest upon a table having proper openings therein opposite to the sections F F, through which the operator may have access to and may move said sections.

Having thus described my invention, I claim:—

1. A flask for car wheel or other molds, pro-

vided, in its bottom, with movable and adjustable sections, substantially as set forth.

2. A flask for car wheel or other molds, provided, in its bottom, and at such points therein as it is desired to, in the formation of a sand mold, compress the sand against the pattern, with movable and adjustable sections, substantially as set forth.

In testimony whereof I have hereunto signed my name this 26th day of November, A. D. 1887.

JOSEPH J. CARR.

In presence of—
J. BONSALL TAYLOR,
F. NORMAN DIXON.