

(No Model.)

J. J. CARR.
PATTERN FOR MAKING CAR WHEELS.

No. 512,945.

Patented Jan. 16, 1894

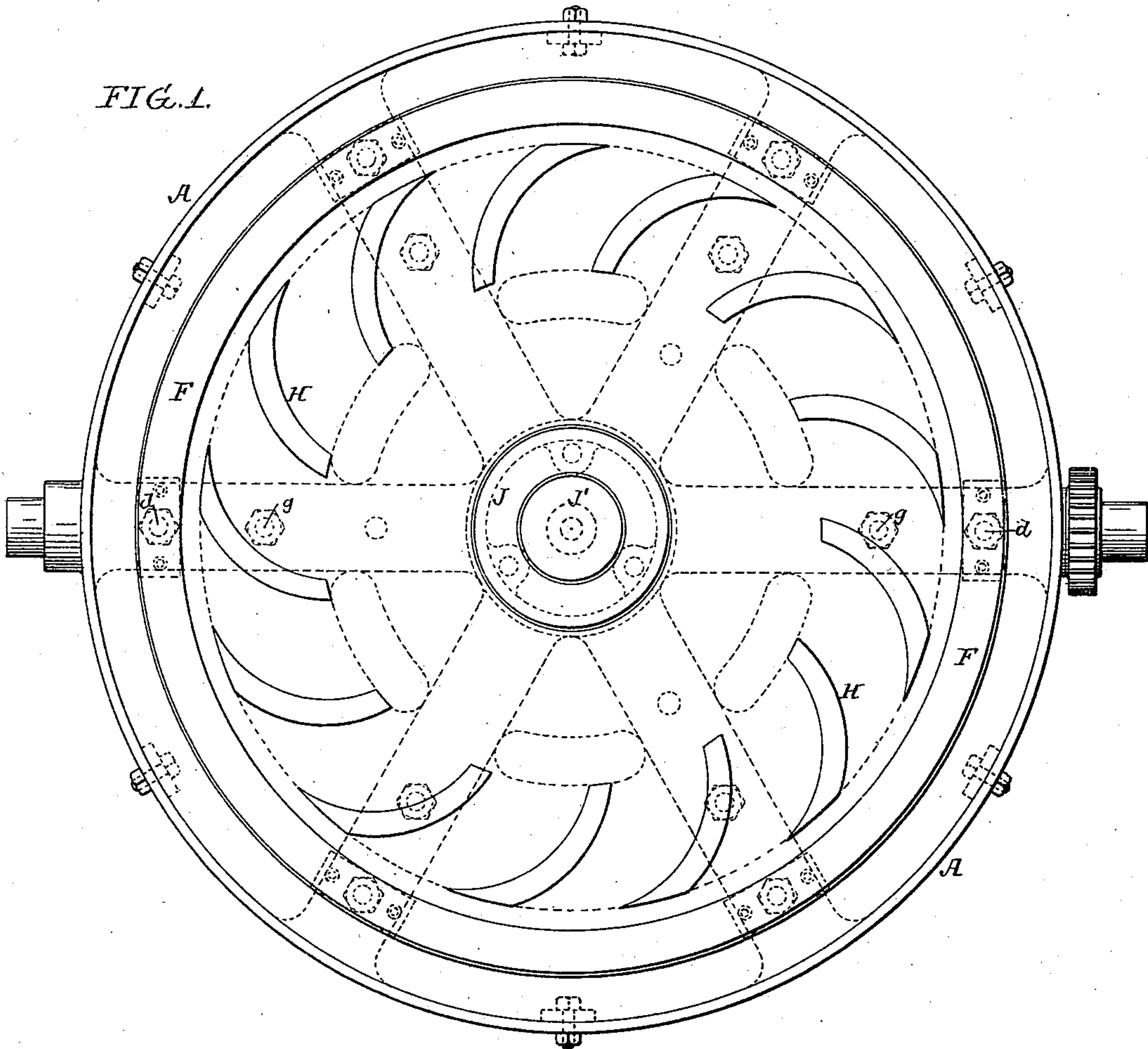
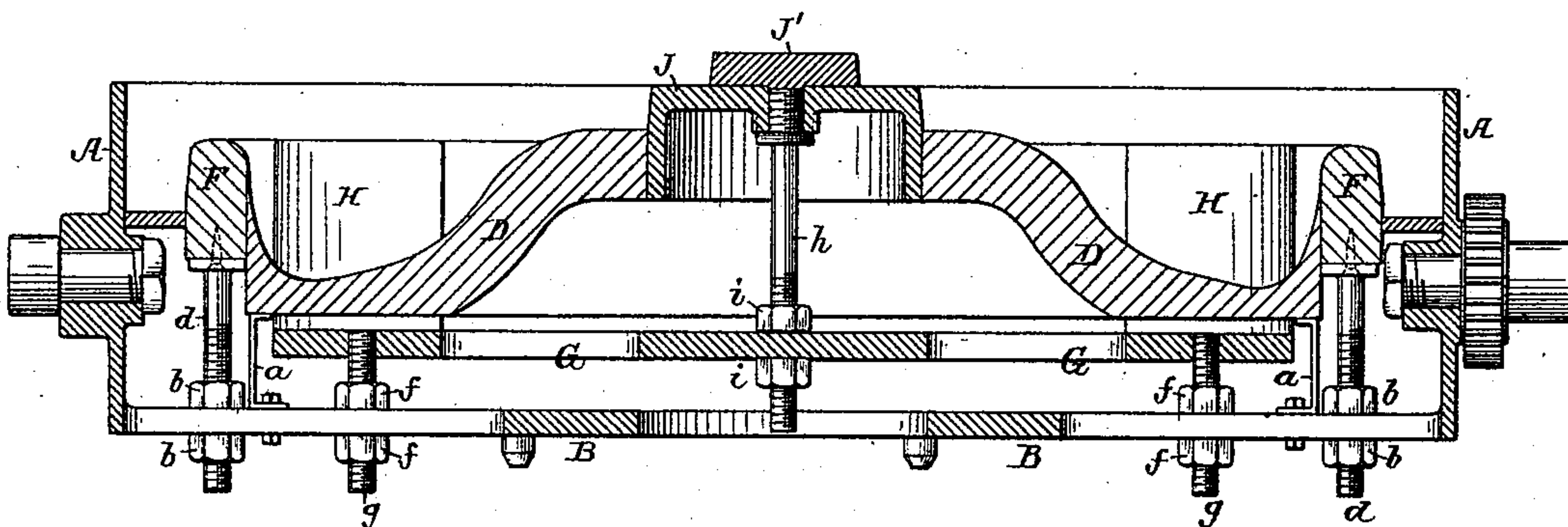


FIG. 2.



Witnesses:
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UNITED STATES PATENT OFFICE.

JOSEPH J. CARR, OF WILKES-BARRÉ, PENNSYLVANIA, ASSIGNOR TO THE
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PATTERN FOR MAKING CAR-WHEELS.

SPECIFICATION forming part of Letters Patent No. 512,945, dated January 16, 1894.

Application filed April 10, 1893. Serial No. 469,679. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH J. CARR, a citizen of the United States, and a resident of Wilkes-Barré, Luzerne county, Pennsylvania, have invented certain Improvements in Patterns for Making Car-Wheel Molds, of which the following is a specification.

The object of my invention is to so construct a mold box for use in casting car wheels as to provide for changing the relation of the parts of the pattern to accord with the different forms of wheel which may have to be produced, and this object I attain in the manner hereinafter set forth, reference being had to the accompanying drawings, in which—

Figure 1, is a plan view of a box or flask with pattern constructed in accordance with my invention; and Fig. 2 is a transverse section of the same.

A represents a box or casing having at the bottom a frame or spider B, upon which is rigidly mounted, by means of brackets *a*, a plate D, which conforms in shape, as to its upper surface, with the central plate or web of the wheel which is to be produced.

Secured to the spider B by means of nuts *b*, located respectively above and below the same, is a series of threaded stems *d*, which carry a ring F, the latter fitting snugly to the periphery of the plate D and forming the thread portion of the pattern. Also mounted upon the spider B, by means of upper and lower nuts *f* are another series of threaded stems *g*, which carry a second frame or spider G, from which project a series of curved plates or blades H, extending upward through slots formed in the plate D and forming the prints for the ribs of the wheel. Threaded stem *h*, secured by upper and lower nuts *i* to the frame G, carries a cylindrical block J, which constitutes the hub print, and fits snugly in a central opening in the plate D, said block having, by preference, mounted upon it a core print block J'. This pattern is intended as a preliminary pattern for use in the process of molding car wheels as set forth in another application filed by me of even date herewith, Serial No. 469,680, the curved plates or blades H forming in the sand the preliminary impressions for the ribs of the wheel, which impressions receive their final

shape from the properly shaped ribs of the final pattern. It will be noted that by the construction which I have adopted the tread ring F, rib prints H and hub print J are all adjustable independently of each other in respect to the web plate D, so that a wheel having any desired projection of tread, ribs or hub can be produced by the use of the same pattern. The web pattern D might be adjustable, if desired, but when all of the parts F, H and J are adjustable the adjustment of the pattern D is, of course, not necessary.

Having thus described my invention, I claim and desire to secure by Letters Patent—

1. The combination of the mold box, with a pattern consisting of the web or plate pattern, the tread ring surrounding the same, the series of rib prints and the hub print projecting through openings in said web pattern, and means for mounting said parts of the pattern whereby the vertical relation of either in respect to each of the others may be altered, substantially as specified.

2. A box or frame having fixedly mounted thereon a pattern for the web or plate of the wheel, in combination with a tread ring surrounding said pattern and a series of rib prints and a hub print projecting through the same, said tread, rib and hub prints being independently adjustable, so that they can be caused to project more or less in respect to the said web pattern, substantially as specified.

3. The combination in a mold box for molding car wheels, of a box or frame having a pattern for the web or plate of the wheel rigidly mounted thereon, a tread ring carried by adjustable studs, a secondary frame also carried by adjustable studs and provided with a series of rib prints, and a hub print adjustably mounted on said secondary frame, substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOSEPH J. CARR.

Witnesses:

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EDWARD E. HOYT.