

(No Model.)

N. WASHBURN.
CASTING CAR WHEEL TIRES.

No. 248,241.

Patented Oct. 11, 1881.

Fig. 1.

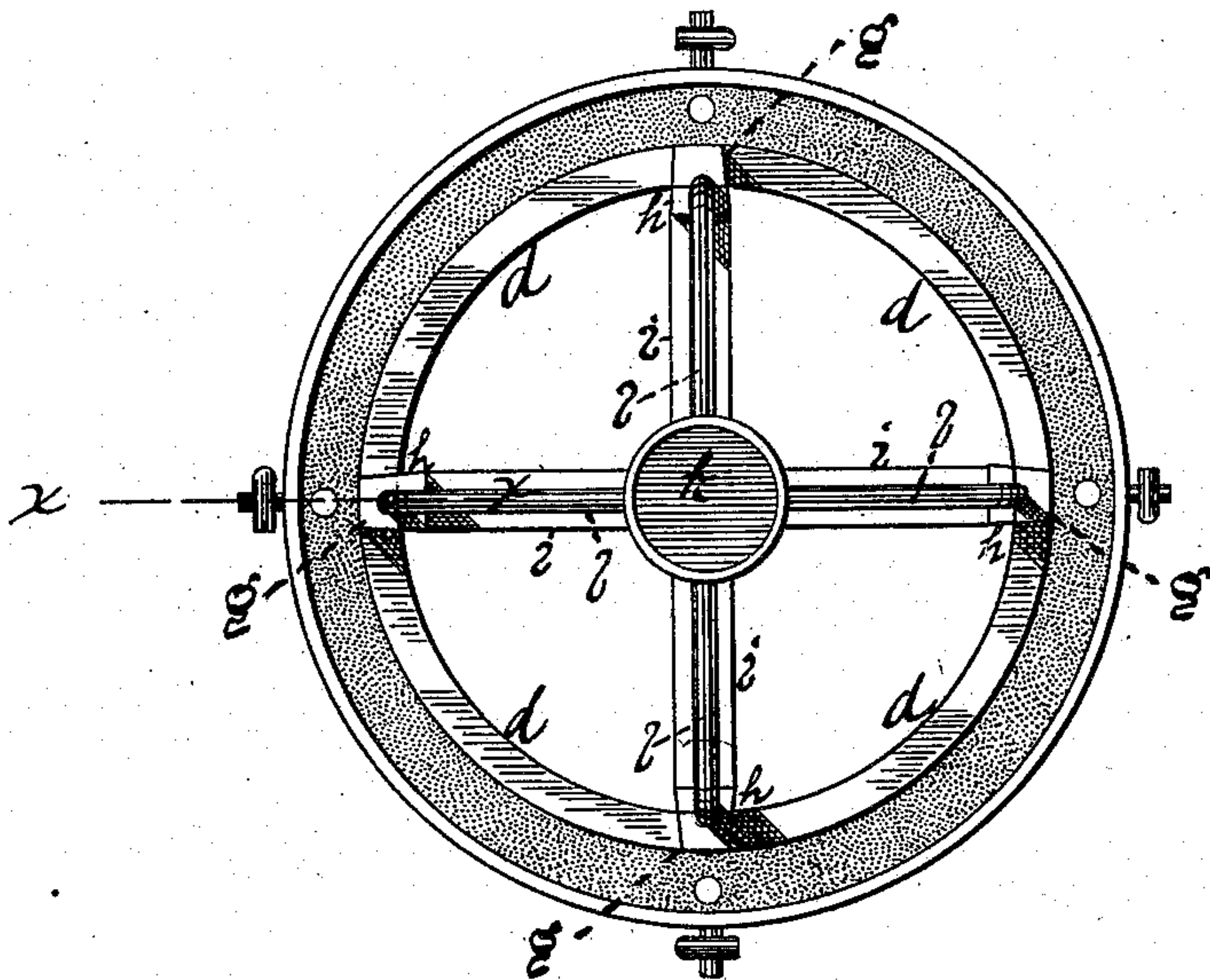


Fig. 2.

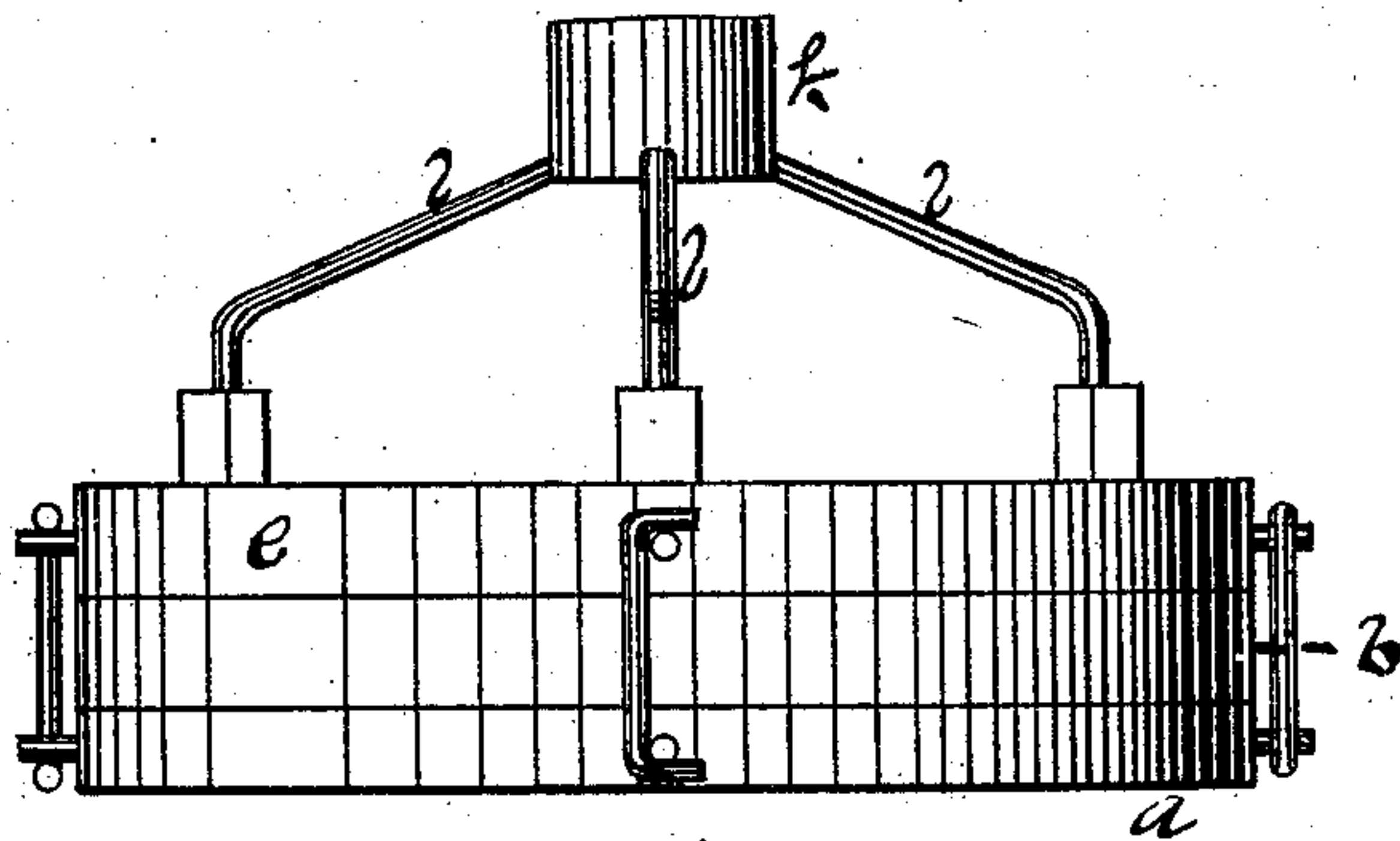
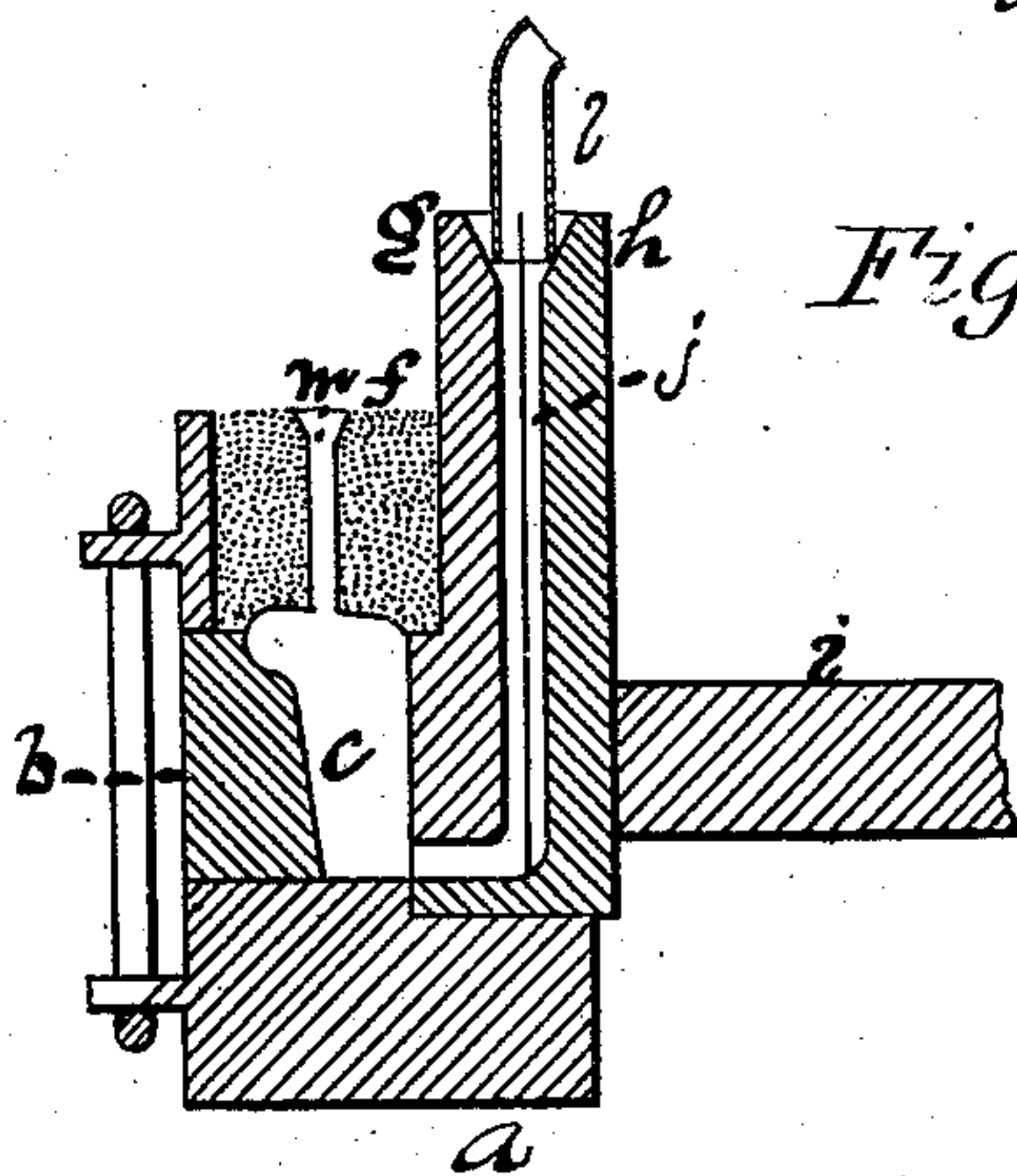


Fig. 3.



Witnesses.

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NATHAN WASHBURN, OF ALLSTON, MASSACHUSETTS.

CASTING CAR-WHEEL TIRES.

SPECIFICATION forming part of Letters Patent No. 248,241, dated October 11, 1881.

Application filed March 7, 1881. (No model.)

To all whom it may concern :

Be it known that I, NATHAN WASHBURN, of Allston, in the county of Suffolk and State of Massachusetts, have invented a certain new and useful Improvement Pertaining to Casting Car-Wheel Tires, of which the following is a description, reference being had to the accompanying drawings, where—

Figure 1 is a top view of a mold for carrying
10 ing my said invention into practice. Fig. 2 is a side view of same. Fig. 3 is a view of one side of same in vertical cross-section on plane *xx*.

The parts of the mold shown in the drawings—which is for casting the tire for a car-
15 wheel—are mainly metallic—*i. e.*, practically cast-iron.

The letter *a* denotes the base-plate, which may well be annular.

b denotes an annular ring or casing for forming the periphery of the tire, sitting upon the
20 base *a*.

c denotes the matrix.

d denotes ring-sections for forming the interior or inner face of the tire.

25 *e* denotes a sand-ring—*i. e.*, a ring for outwardly confining the sand *f*—which is inwardly confined by a corresponding sand-ring appurtenant to the ring-sections *d*.

The letter *g* denotes pieces which are wedges
30 for setting the ring-sections to place. They also form portions of the interior of the tire. Back of each of these pieces *g* is a piece, *h*,

which I will call a “wedge-back.” The bars *i* bear against these wedge-backs and hold them and the wedges *g* in place. A conduit, 35 *j*, is formed in the meeting surfaces of the wedge and wedge-back, partly in each, for conducting the fluid molten metal to or near the bottom of the matrix. The molten metal is poured into the central pot, *k*, from which it flows 40 through radial runners *l* to the conduits *j*, through which it enters at or near the bottom of the matrix and rises to fill the matrix, the surplus rising in vents *m* forming sprues, afterward broken off. 45

The advantage of having molten metal enter at the bottom of mold-matrices is well known. The problem solved by this invention was the devising of a practicable mode for doing this in the casting of a tire or ring in a metallic mold; and the novelty consists (speaking 50 now generally) in making the wedges of the ring-sections in two parts and having the conduit for the molten metal between them.

I claim as my invention—

55 In a mold for casting tires and rings, the wedges and wedge-backs *g h*, containing the conduits *j*, in combination with the interior ring-sections *d*, and with other suitable mold parts, substantially as shown and described.

NATHAN WASHBURN.

Witnesses:

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