

F. Nishwitz,

Casting Car Wheels.

N^o 19,258.

Patented Feb. 2, 1858.

Fig: 3.

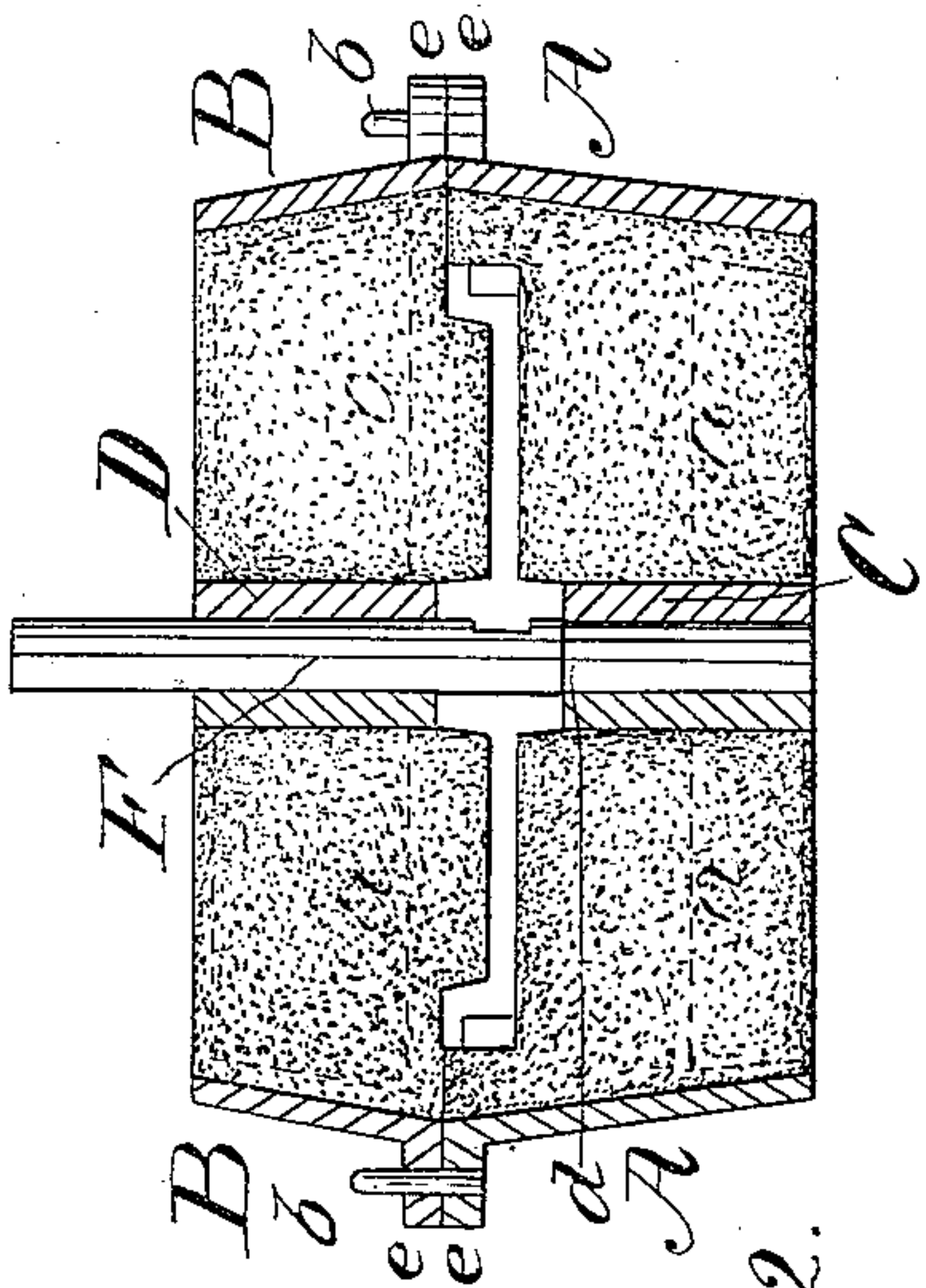


Fig: 2.

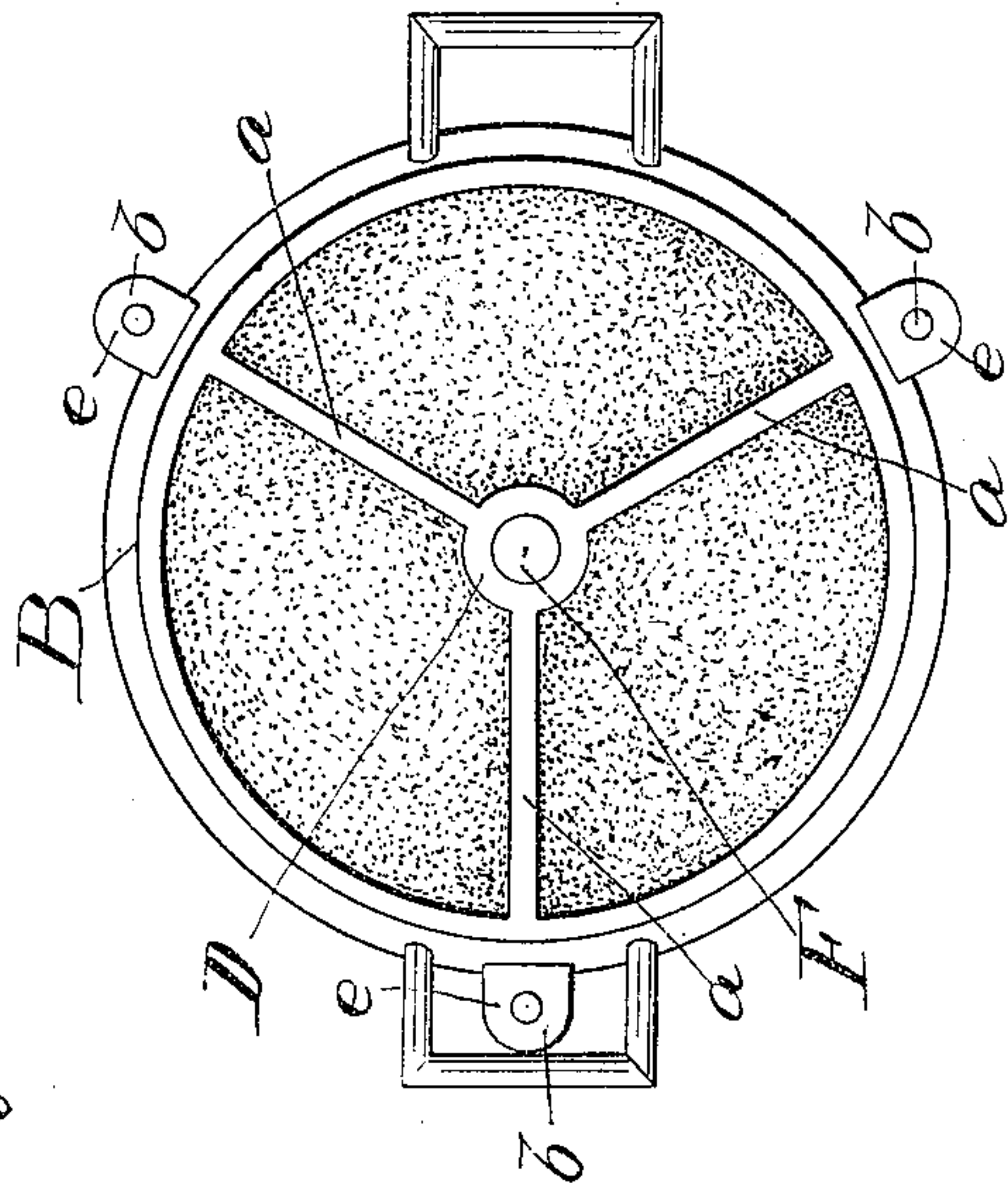
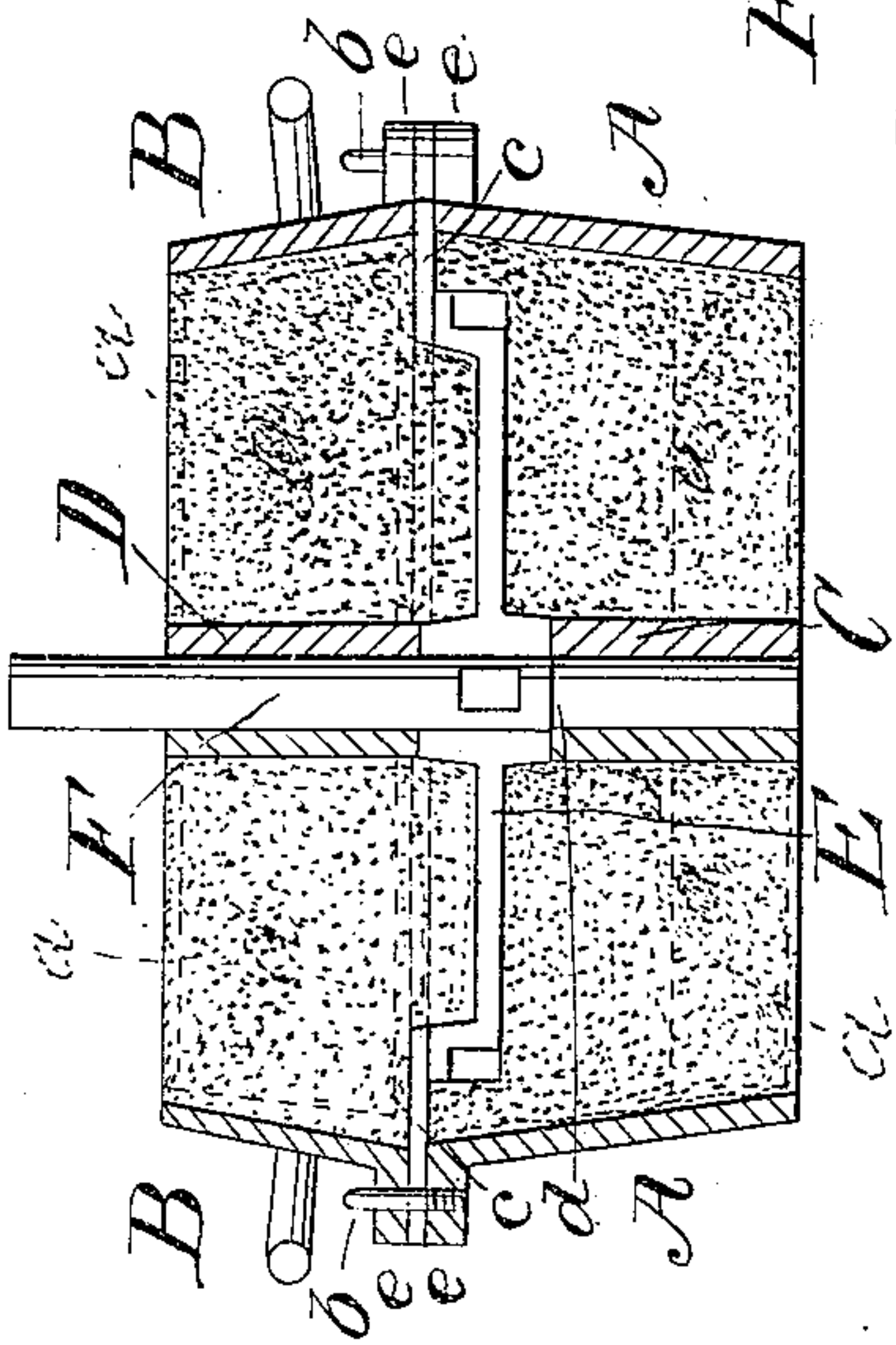


Fig: 1.



UNITED STATES PATENT OFFICE.

F. NISHWITZ, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN FLASKS FOR CASTING WHEELS.

Specification forming part of Letters Patent No. 19,258, dated February 2, 1858.

To all whom it may concern:

Be it known that I, FREDERICK NISHWITZ, of the eastern district of the city of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Flasks for Casting Wheels upon their Shafts or Axles; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a vertical central section of a flask containing the pattern of a wheel, the shaft, and the mold. Fig. 3 is a plan of the same. Fig. 3 is a vertical central section of the flask containing the shaft and the casting of the wheel, the latter being shown tinted red.

Similar letters of reference indicate corresponding parts in the several figures.

This invention consists in providing the flasks with guides or sockets, of metal or wood, of a proper size to receive the shaft snugly within them and properly arranged to hold the shaft in its proper place within the mold, independently of the sand, thereby enabling the mold to be made more expeditiously and the wheel to be cast more truly upon the shaft.

To enable others to make and use my invention, I will proceed to describe its construction and operation.

A is the lower portion of the flask, and B is the upper portion.

C and D are the guides or sockets which constitute my invention, one in each portion of the flask, connected with the exterior of the flask by arms *a a*, said guides or sockets being bored truly to receive the shaft and to stand exactly in line with each other when the two parts of the flask are put together and confined to each other by their pins *b b* and lugs *e e*.

I prefer, when practicable, to make the whole flask of cast-iron and to cast the guides or sockets C D and arms *a a* with their respective portions of the flask; but when, from the size of the flask, this is not practicable or

convenient, the guides or sockets may be made of metal, or of wood bushed with metal, and secured properly to the exterior of the flask.

E is the pattern, made without a core, but with a hole of proper size to receive the shaft F snugly within it. This pattern is molded in the sand in the usual manner, the shaft being in the flask and pattern at the time of molding. I prefer generally to have the pattern attached to a match-plate, *c c*, as shown in Fig. 1; but this match-plate forms no part of my invention, as it is commonly used in casting wheels and various other articles. When the mold is complete, the top portion, B, of the flask and the pattern may be removed and the top portion of the flask replaced, while the shaft remains in the guide or socket C of the lower portion of the flask; or the shaft may be lifted out of the mold before removing the upper portion of the flask and the mold, and replaced after the upper portion of the flask has been replaced. The metal is poured into the mold in the usual manner, and as the shaft is held firmly by the sockets or guides, so as to be incapable of moving in the least degree from its true position, the wheel cannot fail to be cast true, which is not always the case, even with the greatest care, when the shaft is only held in place by the sand.

To insure the wheel being cast in a proper position longitudinally of the shaft, I provide a small shoulder on the shaft, as shown at *d* in Figs. 1 and 2, to rest on the top of the guide or socket C of the lower portion of the flask.

What I claim as my invention, and desire to secure by Letters Patent, is—

The employment of guides or sockets C D, of metal or wood, attached to the flask, to receive and hold the shaft or axle within the sand-mold independently of the sand, substantially as and for the purpose herein set forth.

F. NISHWITZ.

Witnesses:

W. TUSCH,

JAMES F. BUCKLEY.