H. BLOEDEL.

Tire-Cooler.

No. 51,685. Patented Dec. 26, 1865.

Fig: 4.

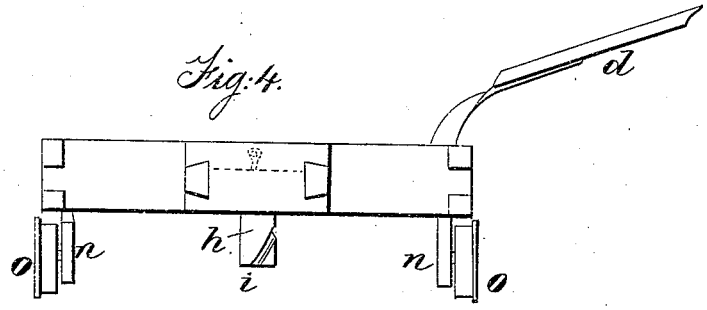


Fig: 1

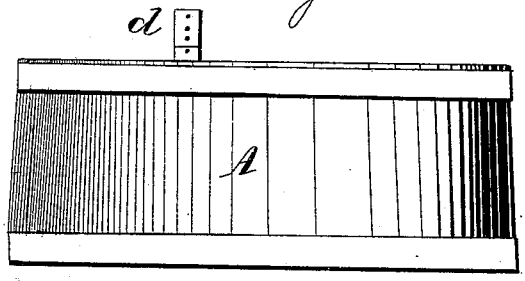


Fig: 2.

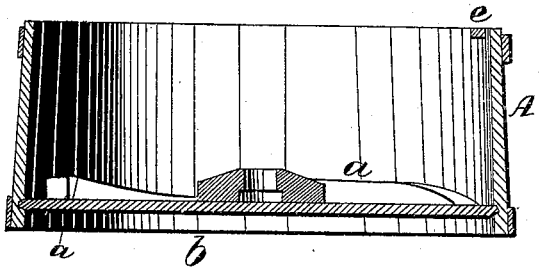


Fig: 5.

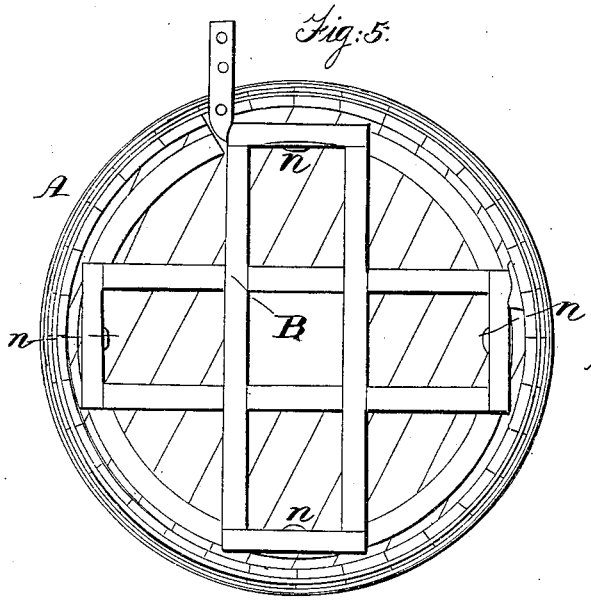
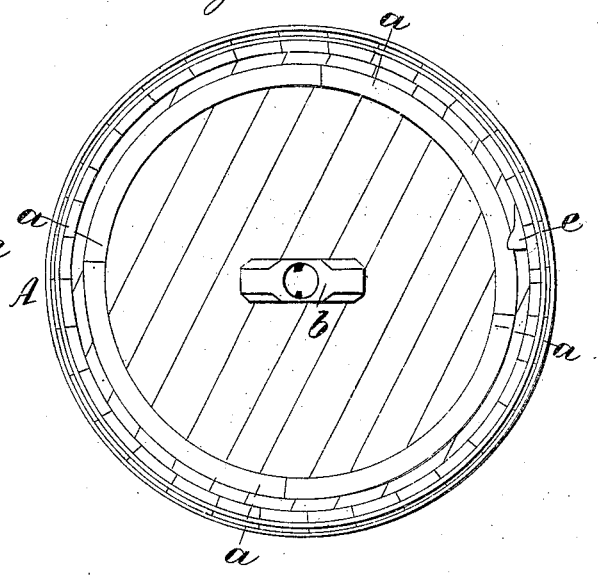


Fig: 3.



UNITED STATES PATENT OFFICE.

HENRY BLOEDEL, OF FOND DU LAC, WISCONSIN.

IMPROVED TIRE-COOLER.

Specification forming part of Letters Patent No. **51,685**, dated December 26, 1865.

To all whom it may concern:

Be it known that I, HENRY BLOEDEL, of Fond du Lac, in the county of Fond du Lac and State of Wisconsin, have invented certain new and useful Improvements in Tire-Coolers; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, and to the letters of reference marked thereon, in which—

Figure 1 is a side elevation; Fig. 2, a transverse vertical section of the case with the frame removed; Fig. 3, a top-plan view of the same; Fig. 4, a side elevation of the frame detached, and Fig. 5 a top-plan view of the whole ready for use.

Similar letters, where they occur, indicate corresponding parts in the various figures.

The nature of my invention consists in a new and improved method of constructing and arranging a tub with a movable frame therein, so that when the tire has been placed on the wheel, resting on the frame, the latter, with the wheel and tire, can be readily immersed in the water for the purpose of quickly and uniformly cooling the tire.

To enable others skilled in the art to construct and use my invention, I will proceed to describe it.

I first construct a strong tub, A, of the required size, as shown in Figs. 1, 2, 3, and 5. Upon the bottom of this tub, on the inside, I secure a circular ring or way, formed of a series of inclined planes, *a*, of uniform height and length, as shown in Figs. 2 and 3. In the center of the bottom I secure a block, *b*, which has a vertical hole in it, as shown in Fig. 3, this hole being at the center of the bottom of the tub. From opposite sides of the block *b* project two small pins, *c c*, said pins projecting a short distance into the hole in block *b*, as clearly shown in Fig. 3.

B represents a frame for receiving the wheel when the tire is to be applied after being heated. This frame is constructed of cross-timbers, framed together in the usual manner. It is then provided with four standards, *n*, which project downward from its under side, as shown in Fig. 4; and to each of these standards is secured a flanged wheel, *o*, as there shown, the standards *n* and wheels *o* being located at the outer ends of the cross-frames, thus bringing them equidistant, so as to correspond exactly with the four inclined planes *a* of the circular track, so that when placed thereon the frame B will stand level and true and bearing equally upon all four of the wheels.

At the center of the frame B is firmly secured a round stem or stud, *h*, which projects downward therefrom, as shown in Fig. 4. This stem is made of the proper size to fit in the hole in block *b*, and has a spiral groove, *i*, cut in opposite sides, of proper size to receive the pins *c* projecting from the sides of the hole in block *b*, these grooves being made to agree in their inclination with the face of the inclined planes *a*. The stem *h*, being inserted in the hole in *b* in such a position as to cause the pins *c* to enter the grooves *i*, serves to keep the frame in position and prevent it from rubbing against the sides of the tub, and at the same time serves to keep the wheels upon the track. The pins *c*, working in the spiral grooves *i*, operate as a screw, holding the wheels *o* in close contact with the track, and also keep the frame B from rising by its buoyancy in the water, and thus prevent it from becoming displaced from the track.

A block, *e*, is secured to the inside of tub A, near its top, in such a position that when the frame B is rotated so as to bring the wheels *o* to the top of the inclined planes *a* the end of frame B comes in contact with the block *e*, which thus serves as a stop to prevent the further rotation of the frame B, there being a small portion of the track at the top of each incline *a* that is level or flat, on which the wheels stand when the frame is elevated, and thus prevents it from running back and being immersed when not desired. A handle, *d*, is attached to the frame B, as shown in Fig. 4, by which it is rotated at pleasure.

An eyebolt, *m*, is secured to the center of the frame B, on its upper side, as shown in dotted lines in Fig. 4, for the purpose of securing the wheel to the frame, and by means of a bolt and nut drawing it down so as to give it more or less "dish," as may be desired.

I am aware that various devices have heretofore been made for the purpose of cooling tires, some in which the frame is elevated and depressed by means of inclined planes moved by levers and operating as wedges, and others

having inclined circular ways secured to the sides of the tub. Therefore I do not claim, broadly, the idea of raising and lowering a frame in a tub of water; but,

Having thus fully described my invention, what I claim is—

The apparatus herein described, consisting of the frame B, provided with the wheels *o*, attached as shown, and the central stud, *h*, having the spiral grooves *i*, in combination with the tub A, provided with the inclines *a*, secured to its bottom, and the central block, *b*, provided with its central hole, and pins *c*, when arranged to operate as and for the purpose herein set forth.

HENRY BLOEDEL.

Witnesses:
PHILIPP STAMMF,
BENJ. T. MIDGLEY.