

(No Model.)

B. YOUNG.

APPARATUS FOR TREATING WHEELS WITH OIL.

No. 323,015.

Patented July 28, 1885.

Fig. 1.

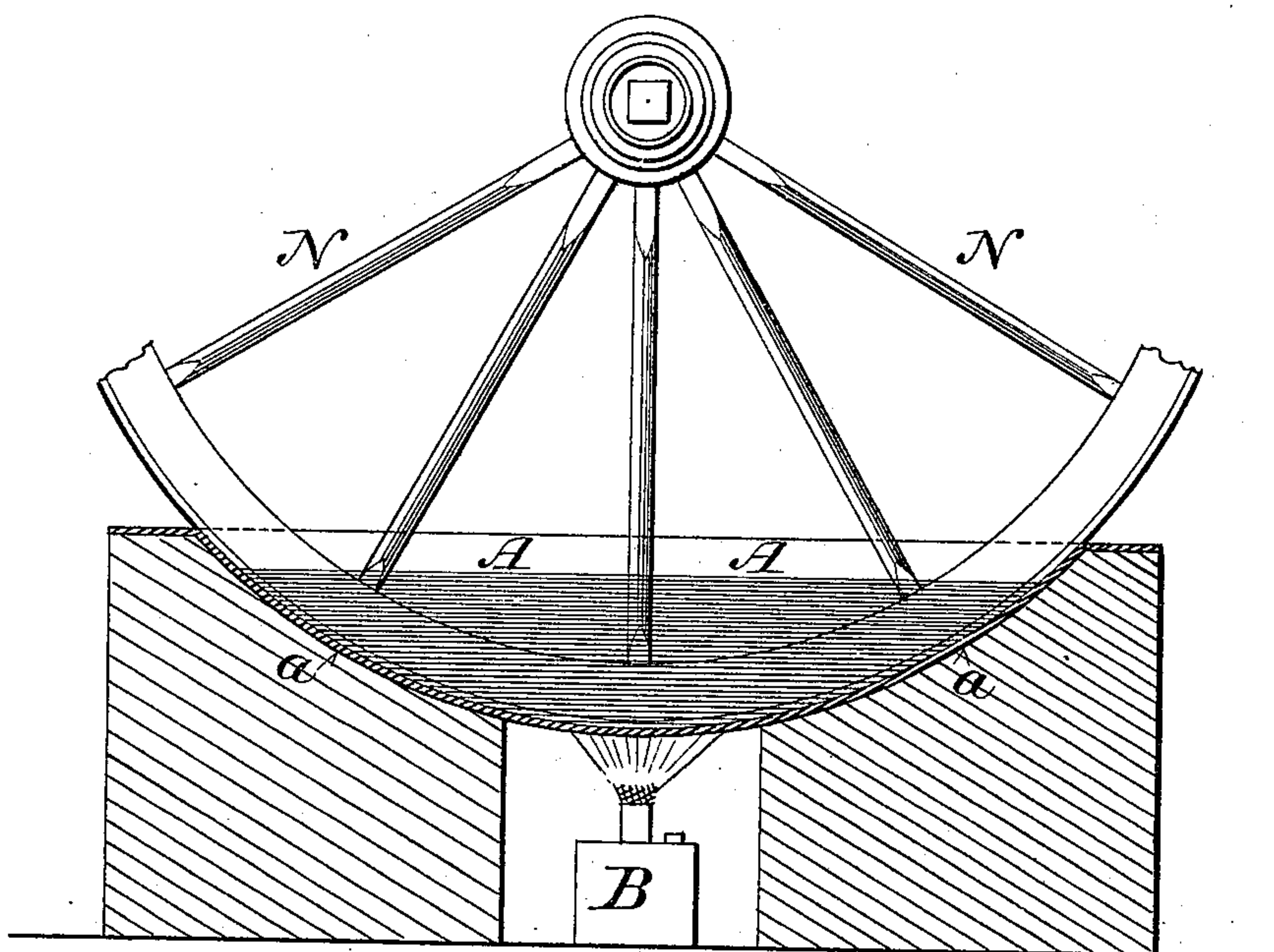
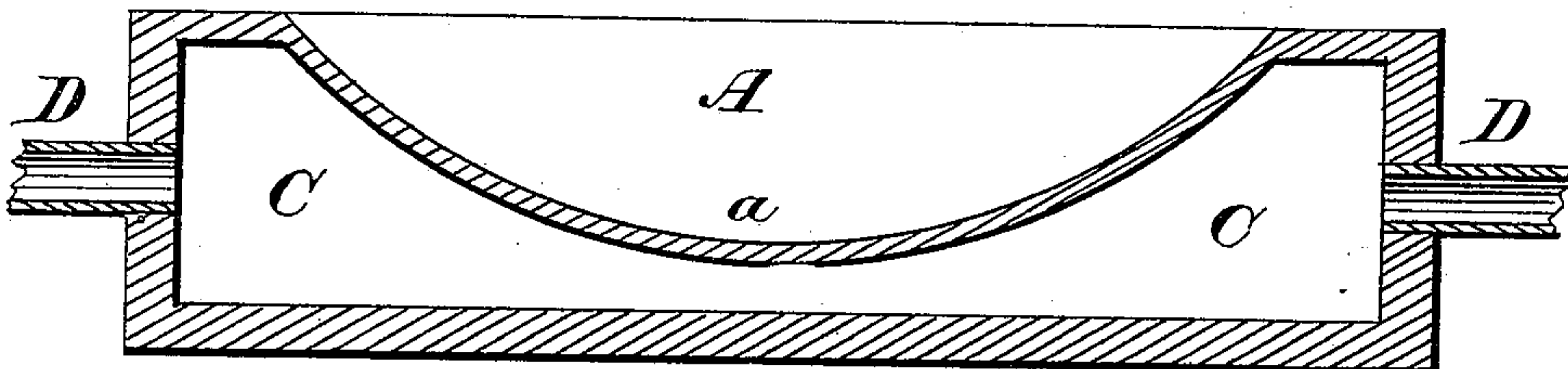


Fig. 2.



Witnesses:
Chas. R. Goss.
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UNITED STATES PATENT OFFICE.

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APPARATUS FOR TREATING WHEELS WITH OIL.

SPECIFICATION forming part of Letters Patent No. 323,015, dated July 28, 1885.

Application filed October 16, 1884. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN YOUNG, of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Apparatus for Treating Wheels with Oil; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The object of my invention is a simple and effectual means of treating the rims or fellys of wagon and carriage wheels with hot oil.

It consists, essentially, of a trough shaped to receive the felly of a wheel or a portion thereof, and provided with means for heating the oil therein.

In the accompanying drawings, like letters refer to the same parts in both figures.

Figure 1 is a vertical longitudinal section of my apparatus, shown in connection with a wagon-wheel in process of treatment, and Fig. 2 is a like view of a modification of the apparatus adapted for use with steam.

It has been practically demonstrated that new wheels can be rendered much more durable, and old wheels the fellys of which have shrunk, leaving the tires loose, can be greatly benefited, by giving the fellys a liberal coating of hot oil.

In dry climates and during hot dry weather the fellys of vehicle-wheels soon shrink and the tires become loose. This is particularly the case when imperfectly-seasoned timber is used in their manufacture, and when the paint is worn off and they are exposed to the weather. In such cases it is a common practice to have the tires tightened or reset, the result of which is when the fellys become soaked with moisture and swell the wheel is caused to "dish," and the strength of the timber is destroyed. These difficulties may be remedied by treating the fellys with hot oil, as before stated. For this I prefer linseed-oil, which should be applied to the wood when it is wet and partially dried, so as to fill its cells or interstices by displacing the water therein. The wood thus treated is swelled to its full size, and is rendered capable of resisting

the injurious effect of air and water, and the tire is at the same time effectually tightened.

The means which I employ in the above operation, and which constitutes my invention, is a trough, A, having a longitudinally-concaved bottom, *a*, which conforms as nearly as practicable with the general contour of the wheels to be treated therein. It is provided with an opening or chamber underneath to receive a lamp, B, by which the oil in said trough A may be heated and kept hot. The wheel N may be set in said trough A, as shown in Fig. 1, and slowly turned about until every part of the felly *c* is thoroughly saturated with oil. The form of apparatus just described is inexpensive and convenient for the occasional use of private individuals; but for the use of manufacturers, where the apparatus is to be in constant use, I prefer the form shown in Fig. 2, in which the said trough A is provided underneath with a steam or hot-air chamber, C, and pipe-connections D D, through which the heating-medium is conducted into and from said chamber C.

Instead of resting the wheel upon the bottom of the trough, as shown in Fig. 1, the hub may be placed upon a pin so located as to raise the wheel slightly from the bottom, allowing a portion of the felly to be immersed in the hot oil. By this arrangement the wheel may be more easily turned.

I do not wish to confine myself to the exact construction and arrangement herein shown and described, since the apparatus may be variously modified in these particulars without departing from the spirit of my invention.

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

As a new article of manufacture, a portable trough, A, provided underneath with a recess or chamber for the reception of a lamp, in combination with a lamp, B, substantially as and for the purposes set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

BENJAMIN YOUNG.

Witnesses:

E. H. BOTTUM,

H. D. GOODWIN.