L. KAUFFELD.

APPARATUS FOR TREATING ARTICLES OF GLASSWARE.

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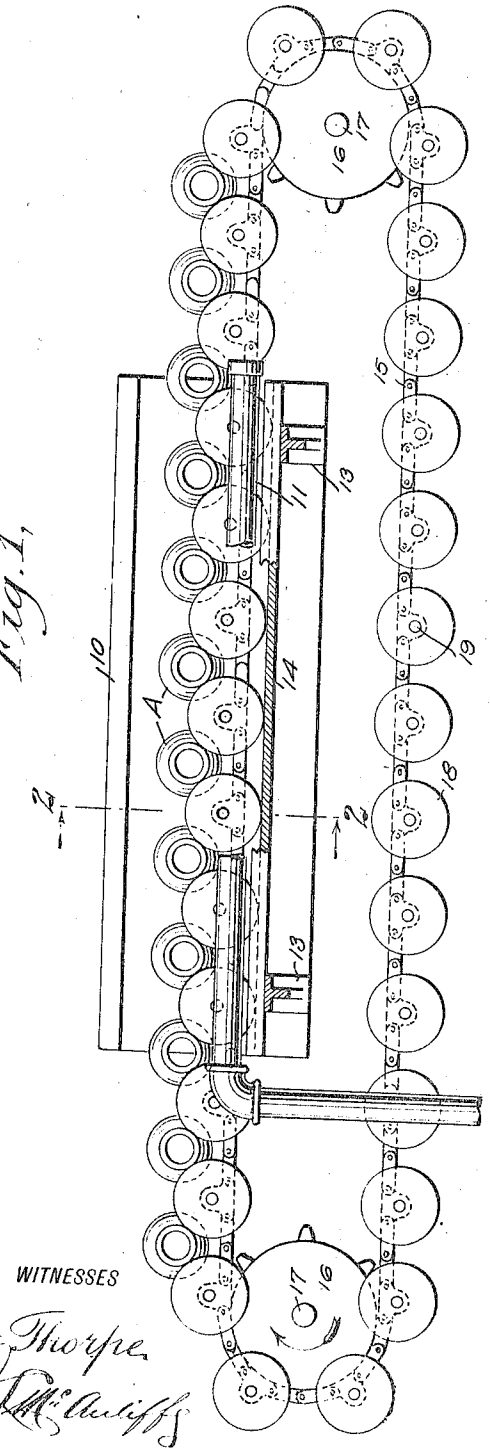


Fig. 1.

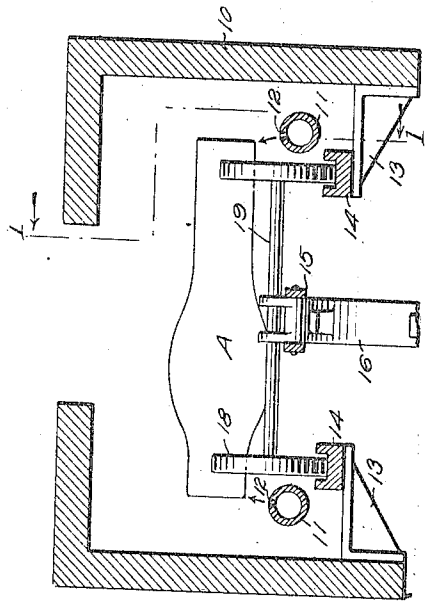


Fig. 2.

WITNESSES

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APPARATUS FOR TREATING ARTICLES OF GLASSWARE.

1,181,771. Specification of Letters Patent. Patented May 2, 1916.

Application filed May 26, 1915. Serial No. 30,486.

To all whom it may concern:

Be it known that I, LOUIS KAUFFELD, a citizen of the United States, and a resident of Star City, in the county of Monongalia and State of West Virginia, have invented a new and Improved Apparatus for Treating Articles of Glassware, of which the following is a full, clear, and exact description.

My invention relates more particularly to an apparatus for treating lamp chimneys and similar articles requiring the heating of the edges thereof, the apparatus being of that type in which provision is made for giving the glass articles a revolving movement on their own axes, whereby to prevent collapsing of the edges when heated.

Objects of the invention are to provide improved means whereby the articles will be carried through the furnace on wheels so arranged that the frictional contact of the wheels with the articles will give the desired turning movement to the latter.

The invention will be particularly explained in the specific description following.

Reference is had to the accompanying drawings forming part of this specification, in which similar characters of reference indicate corresponding parts in all the views, and in which—

Figure 1 is a longitudinal vertical section on the line 1—1 of Fig. 2; and Fig. 2 is a cross-section on the line 2—2, Fig. 1.

In carrying out my invention in accordance with the illustrated example, a furnace 10, of any approved general construction, is provided, open for the passage therethrough of the articles to be treated. In the illustrated form the furnace is provided with elongated burners 11 to receive fuel gas and having upwardly disposed jet orifices 12. At the sides of the furnace 10 tracks 14 are provided spaced apart, the tracks being preferably channeled and being supported in the present instance on brackets 13 carried by the walls of the furnace.

My improved carrying means for the articles, which may be lamp chimneys A, or similar articles, consists of a conveyer 15, preferably an endless chain. The chain 15 runs around sprockets 16, one of the shafts 17 of which may be driven by any suitable means (not shown). The chain 15 is provided with wheels 18, and these are sufficiently close together so that the peripheries of two adjacent wheels will form a rest for a glass article A. In the illustrated construction two sets of wheels 18 are employed, the sets of wheels running on the respective tracks 14 and a pair of wheels being mounted on a transverse axle 19 carried by the chain 15. The upper run of the chain disposes the wheels in position to take the tracks 14, and upon entering the tracks the contact of the wheels 18 therewith will turn the said wheels on their individual axes, as will be readily understood. The glass articles A are placed on the upper run of the chain before it enters the furnace 10, each article resting on the peripheries of adjacent wheels. Thus the frictional engagement of the wheels 18 at their peripheries with the glass articles A will cause the said articles to be revolved about their own axes. The turning of the glass articles will thus prevent the edges thereof, made molten under the influence of the burner 11, from collapsing or becoming deformed.

The employment of the wheels for frictionally turning the glass articles permits of the articles being readily placed and removed, and the effective revolving motion of the articles is insured.

It is to be observed that the walls of the furnace overhang the tracks and conveyer at the top and that the walls serve to retain the heat in the furnace about the bodies of the chimneys so that the latter are generally heated in addition to the direct high heat to which the edges are subjected by the burners, thereby preventing cracking due to disparity of heat at the edges.

The described construction affords a practical means for carrying my invention into effect, and I would state in conclusion that I do not limit myself strictly to the mechanical form of the machine as illustrated, since manifestly the same can be considerably varied without departure from the spirit of the invention, as defined in the appended claims in effecting the operation of simultaneously rotating the articles by means of their direct frictional engagement with revolving traveling elements.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent, is:

1. An apparatus for treating glass articles, comprising a traveling conveyer having means to support and turn articles to be treated, said means comprising wheels on

the conveyer and traveling therewith, said wheels being arranged so that the peripheries of adjacent wheels constitute a rest for an article to be treated, means to turn the wheels and thereby revolve the articles on their own axes by frictional engagement with the revolving wheels, a furnace through which the conveyer travels, the walls of the furnace serving to subject the complete articles to heat while traveling and turning, and burners disposed in the furnace at the sides of said wheels in position to heat the articles at the edges.

2. An apparatus for treating glass articles, comprising a traveling conveyer, actuating means therefor, a relatively fixed furnace through which said conveyer travels, a track longitudinal of the furnace, and wheels positioned on the conveyer to run on said track for turning the wheels, the peripheries of adjacent wheels forming jointly a seat for an article to be treated, and acting by frictional contact to turn the article on its own axes, and burners positioned along the furnace adjacent to the track and adapted to direct a softening heat against the ends of the revolving and traveling articles.

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

LOUIS KAUFFELD.

Witnesses:

W. J. WAMBAUGH,

D. E. BEALL.