HOBBS AND OTHERS *V.* KING AND OTHERS.

Circuit Court, W. D. Pennsylvania. May 3, 1881.

1. PATENT No. 132,208—GRADUATED GLASS—WARE—ANTICIPATION—VALIDITY—INFRINGEMENT.

Letters patent No. 132,208, granted October 15, 1872, to John H. Hobbs, for improvement in manufacture of graduated glass-ware, *held, valid,* and *infringed* by graduated glass-ware manufactured under letters patent No. 217,050, granted July 1, 1879, to Marx Block.

A *glass* measure graduated on its *outer* face, and a *metallic* measure graduated on its *inner* face, *held,* not to anticipate a *glass* measure graduated OL its *inner* face.

Complainant's invention, consisting of glass-ware having a graduated scale on its inner surface, *held, infringed* by defendant's construction, in which the graduation extends entirely around the inner face of such glass-ware.

In Equity.

Geo. H. Christy, for complainants.

Wm. Henry Browne, for defendants.

ACHESON, D. J. On the fifteenth of October, 1872, letters patent No. 132,208, for an improvement in the manufacture of graduated glass-ware, issued to John H. Hobbs, who subsequently assigned the patent to the plaintiffs, who sue for the infringement thereof. To graduate the cavity of a glass mold, and thereby produce articles of glass-ware graduated on their *outer* faces, was practiced prior to Hobbs' invention, and this is stated in his specification. But Hobbs describes in his specification an apparatus and method of producing *internally* graduated hollow glass-ware. The operation of pressing is that ordinarily practiced, but his plunger is graduated to any desired scale, and in this way is produced any desired kind of open-topped glass-ware, with a graduation on its inner face exactly corresponding to that used on the plunger. Hobbs' claim is in these words: "Glass-ware graduated on its inner face, substantially in the manner set forth." In his

original specification, filed with his petition for letters patent, Hobbs also claimed: "A glass-mold plunger graduated on its face, substantially as set forth." But this claim the office rejected; and Hobbs, acquiescing in the decision, amended his specification and struck out that claim. The effect of this amendment was to restrict the claim to the manufactured product or glass-ware graduated on its inner face, substantially in the manner set forth in the specification; but for all practical purposes the letters patent, as granted, secured to Hobbs all the benefits of his invention.

The defendants insist that Hobbs' patent is invalid for uncertainty.

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"The plunger, *a*," (says the specification,) "is made of the form which is desired to be given to the inside of the article to be made, and of any suitable construction, with this addition, that it is graduated as at *a*', to any desired scale, and from the lower end upward to any desired distance. * * * If the plunger be accurately graduated the work produced will, in every case, be equally correct," etc.

It is objected that the specification does not disclose how an accurately-graduated plunger is to be made. But this is a matter so obvious that it was unnecessary to add anything to what the specification states and the drawings exhibit. The specification, it seems to us, concisely but very clearly explains Hobbs' apparatus and method of producing internally-graduated hollow glass-ware. But the novelty of his invention is called in question; and the defendants have put in evidence two earliers patents—one to William Hodgson, Jr., dated February 18, 1862; and one to Samuel H. Simmons, dated September 18, 1866, which it is claimed anticipates Hobbs' invention. But by Hodgson's invention the glass measures have exterior graduations communicated from graduating marks on the interior walls of the mold.

Timmons' patent shows a cup attached to the stopper or neck of a bottle, with graduation marks to indicate its capacity, "the graduation being in the interior if the cup be of metal, or blown or cut on its exterior if the cup be of glass." He does not expressly state how the interior graduations are to be made in the case of a metallic cup, but there is nothing in his specification to indicate that they could be formed otherwise than by turning each graduation by a separate operation,—a tedious process as compared with the great rapidity with which glass-ware may be internally graduated by Hobbs' method. It is quite evident, moreover, that a metallic cup is liable to the objection—a most serious one in the case of powerful medicines—that the quantity of liquid in the cup cannot be accurately determined by looking down into the cup, whereas by holding the glass up to the light the quantity of liquid can be readily and accurately discerned. Timmons' patent does not show, or in the remotest degree suggest, internal graduations upon glass-ware, or any method of producing the same. On the contrary, he declares that if the cup is of glass, the graduation is to be blown or cut on its exterior face. From the uncontradicted evidence it appears that Hobbs' invention is a decided improvement upon the anterior methods by which articles of glass-ware were graduated on their outer faces, in that it secures accuracy in the graduations and perfect uniformity in the 93 glass measures. It is shown that where the graduations are on the cavity of the glass mold the correctness of the work produced is affected by unavoidable variations in the quantity of molten glass put in the molds, for these variations affect the thickness of the articles of glass-ware through the bottom; but with Hobbs' apparatus and method the thickness of the article through the bottom makes no difference, for if the plunger goes down deeper into the mold the graduation made in the article will be

correspondingly low down, and *vice versa.* We are of opinion that Hobbs' invention was not anticipated by either of the prior patents relied on, and that his improvement is both new and useful.

Finally, the defendants deny that they are infringers. They manufacture graduated glass-ware under and in accordance with letters patent No. 217,050, dated July 1, 1879, granted to Marx Block, one of the defendants, and they rely upon the Block patent for their justification.

Block's patent relates to the manufacture of internally-graduated glass-ware, and his improvement consists in a cup or other article of glass-ware formed on the inside with graduations extending entirely around the same, and also in the construction of a plunger for forming such graduated glass-ware. His plunger consists of a shaft, over which, and resting upon the head, are placed one, two, or more removable tapering rings, which are of gradually-increasing diameters and adjustable to the desired scale, and so arranged that the edges of the rings form shoulders or graduations around the inside of the glass, the parts of the apparatus being held together by a follower, and a nut screwed on the shaft in the manner described in the specification.

Block's first claim is as follows:

(1) "As a new article of manufacture, graduated glass-ware having the graduations in the form of shoulders on the inside of the glass, and extending entirely around the same, substantially as and for the purposes herein set forth."

He also claims the plunger; and the combination of the shaft, tapering rings, nut, etc. In his specification, Block states that by his invention—

"The outside of the glass is left smooth, and the graduations are on the inside in the form of shoulders, extending entirely around the glass, so that the exact quantity can easily be measured without liability of

mistakes, as the slightest variation caused by an inclination of the vessel on any side would be detected at once on account of the circular rings or shoulders."

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Specimens of internally-graduated glass-ware manufactured under the Hobbs patent, and by the defendants in accordance with the Block patent, have been submitted to the inspection of the court as exhibits in the case. The difference between these specimens is that in the former the graduation marks extend only partly around the glass cup, while in the latter the graduations extend entirely around the cup. In all other respects the specimens of the two manufactures are substantially alike. In Hobbs' improvement the desired graduations are in the first instance made upon the face of the plunger, and thereby corresponding graduations are made in the glass-ware, while in the Block plunger the edges of the rings form the graduations; but the principle of the two plungers is identical, their methods of operation practically alike, and the result substantially the same. The extension of the graduations entirely around the glass may have its advantage; but if it were conceded that such extension is a patentable improvement upon Hobbs' invention, still this would not justify the defendants in using his invention.

Upon the whole, we are of opinion that the infringement complained of is established. Let a decree be drawn in favor of the plaintiffs.