

MATTHEWS V. CHAMBERS AND ANOTHER.

Circuit Court, W. D. Pennsylvania. January 15, 1881.

1. RE-ISSUE No. 2,386, AND LETTERS PATENT NO. 44,684, for improvements in bottle-stoppers, *construed*, and *Matthews v. Shoenberger*, 4 FED. REP. 635, *followed*.
2. SAME.

A patent for an improved bottle-stopper, consisting in a compressible valve, capable of being forced into the bottle through the mouth, and incapable of easy passage through it in the opposite direction, and a bottle having the interior of its neck so shaped as to present a bearing surface or seat with which the valve is brought into close contact to close the bottle, *held, not infringed* by bottles closed by a simple wooden or glass plug, which easily passes through the neck of the bottle in either direction, but acts as a stopper when pressed or drawn into a rubber ring placed in the neck of the bottle after the plug is inserted in the bottle.

3. SAME.

Held, further, that a claim in such patent for “the entire stopper of such a length that it cannot turn over in the body of the bottle,” was not to be construed as embracing all manner of internal bottle-stoppers having the specified length, irrespective of other distinguishable characteristics and modes of operation.—[ED.]

In Equity.

Arthur v. Briesen and James I. Kay, for complainant.

Bakewell & Kerr, for respondents.

ACHESON, D. J. This suit is for the alleged infringement of two patents for improvements in bottle stoppers. The first of these patents is re-issue No. 2,386, issued October 30, 1866, to the plaintiff as assignee of Albert Albertson, to 875 whom the original patent issued August 26, 1862. The stopper described in this patent consists of a disk valve which seats against the inside surface of the bottle at the lower end of the neck, and is fixed to the lower end of a central stem which extends in an outward direction up into the neck. The valve is held in place by a

spiral spring fastened to the stem and supported by a shoulder or other device in the neck of the bottle. The valve is formed of flexible disk of rubber, or other yielding substance, interposed between two rigid disks, the under one being just large enough to pass through the narrowest part of the neck of the bottle, and the upper one small enough to permit the flexible disk to fold up around it as the valve is pushed down into the bottle. The stopper is put into the bottle by inserting it in the neck and pressing the spring until the valve has passed through the neck. When once in the bottle the valve cannot be withdrawn, for the lower rigid disk being nearly the size of the opening in the neck, the flexible disk effectually prevents its coming out, and the greater the upward pressure the closer and tighter is the stopper. The stopper is closed by the upward pressure of the spiral spring, and is opened by a downward pressure on the upper end of the stem.

The claims of this patent alleged to have been infringed are as follows: "*First*. A stopper which is inserted through the mouth of the bottle or other vessel, and which, when inserted, is closed perfectly tight against a seat formed within the bottle itself, by pressure in an upward direction; *second*, a prolongation of such stopper by means of a central stem, rod, or other extension of the stopper, in an upward direction, beyond the seat of the valve, for the purpose of affording facility for opening the stopper, or that of receiving the upward pressure of a spring, or other means of drawing the valve to its seat, substantially as herein specified."

The second patent is No. 44,684, issued October 11, 1864, to J. N. McIntire, as assignee of Albert Albertson; and assigned by McIntire to the plaintiff, April 3, 1865.

The stopper described in the patent is also inserted through the mouth of the bottle, and forced down into the bottle. It 876 consists of a stem having thereon

secured or formed a cupshaped valve, opening upward, of gutta percha, or other elastic or yielding substance, so constructed that it can be brought into close contact with a suitable bearing surface or seat on the interior of the neck of the bottle. The position of the valve on the stem is such as to allow the upper end of the stem, or knob of the stopper, to protrude a short distance beyond the mouth of the bottle when the valve is in its seat. The bottle is opened by pressure, or a blow with the hand upon the protruding knob, the stopper falling down into the bottle. The stem is of such a length that the stopper cannot turn over in the bottle, but must always present itself right end foremost to the neck of the bottle. The manner of closing the bottle is to invert it, when the stopper falls into the neck—the valve resting in its seat. When the bottle contains aerated liquid, the upward pressure of the gas seats the valve tightly and keeps the bottle closed. But, in bottling still liquids the valve is brought tightly into its seat by pulling the protruding knob of the stopper, and the compression of the valve in the tapering portion of the neck will insure the retention of the stopper when the bottle is turned up again.

In his specification the inventor states that he prefers to make the valve (as shown in the drawings) conical, with the upper end hollow, and to provide the interior of the neck of the bottle with a shoulder, “for in this form of valve and seat the stopper is readily forced down through the neck, but in being forced up against its seat or shoulder, the valve, *c*, will be bulged or upset, and cannot be forced out.” Other forms of valve, it is stated, may be used. “The valve, *c*, and neck of the bottle should, however, be so shaped (even when the shoulder, *x*, is employed) that the former will be compressed in the taper portion of the neck before it comes against the shoulder, in order to create friction sufficient to prevent the falling in of the stopper when still liquors are contained in the bottle.”

The claims of this patent are in these words: “*Firstly*, the employment in combination with a bottle, having the interior 877 of its neck suitably formed to receive it, of a stopper constructed to operate in closing and unclosing the bottle, substantially as described; *secondly*, I claim so constructing the valve, *c*, and the mouth of the bottle, that the former may be readily forced through the latter in one direction, and incapable of easy passage through it in the opposite direction, as hereinbefore described, for the purpose set forth; *thirdly*, I claim making the entire stopper of such a length that it cannot turn over in the body of the bottle, as and for the purpose set forth.”

The bottles manufactured by the defendants are designated in the evidence as the “Christin bottle” and the “Kelly bottle.” The Christin bottle has a loose internal tapered wooden-plug stopper, which is of smaller diameter than the interior of the neck of the bottle, and will pass freely in and out of it. In the inside of the neck of the bottle, just within the lip, an annular groove or recess is moulded. The stopper having first been inserted in the bottle, an annular rubber collar or seat is expanded into the said groove. This being done, the stopper cannot pass out, but, when the bottle is inverted, seats itself in the rubber ring. The top or tapered end of the stopper has a pair of sockets on opposite sides to receive the lower ends of a pair of tongs, which grasp and draw the stopper tightly into place in the rubber seat. To open the bottle the stopper is pushed inwardly. It is of sufficient length to prevent it from turning over in the bottle.

The Kelly bottle has in the inside of the mouth an annular groove, in which there is inserted a rubber ring, similar to that of the Christin bottle, and for the same purpose. The stopper, however, is a pear-shaped glass plug. It is readily inserted through the mouth of the bottle before the rubber ring is put in, but the lower part of the neck of the bottle is so constructed

that the plug cannot pass down into the bottle. The glass plug falls into its rubber seat when the bottle is inverted, and is tightly held there by the upward action of the gas in the liquid below. The bottle is opened by pressing the plug downward.

The construction of the plaintiff's patents was brought in ⁸⁷⁸ question in the case of *Matthews v. Shoenberger*, 4 FED. REP. 635. In that case, Judge Blatchford, speaking of the first patent, says: "The first claim is not a claim to any mechanism; but, if not a claim to a function, is a claim to a mode of operation. It amounts to a claim to inserting a stopper through the mouth of a bottle, and then pressing it upwards till it is closed tight against a seat inside. It seems to be intended to cover every form of stopper, and any form of mouth, and any means of pressure, and any arrangement of seat. As a claim thus broad it cannot be sustained. It must be limited to the mechanism described, having the mode of operation described. The stopper, to infringe, must be inserted through the mouth of the finished bottle substantially as the plaintiff's is, and the pressure upwards must be made by mechanism and not by the gas in the liquid. * *

* As to the second claim the specification says: 'I am aware that an internal flap, valve, or door, acted upon by a spring, float, or counterweight, has been used to close the orifice of vessels as an ink holder or oil vessel, to keep out dust, etc., but intended to give way on a very slight pressure. Such arrangement, however, could not make a stopper which would be air-tight.' This statement shows that it was not new to press from without an internal valve closing the orifice of a vessel, such closing taking place by the action of a spring, and such pressure being made against the outer surface of the valve to open the orifice. This being so, the second claim of the re-issue must be limited to substantially such a form of stopper as the specification shows, with substantially such a prolongation or extension in an

outward direction, if, indeed, the claim can be made at all, in respect to the facility afforded for opening the stopper, in view of the admitted prior arrangement.”

Speaking of the first claim of the second patent, Judge Blatchford says: “The claim is to a mechanism, to a physical structure, to the combination of a bottle which has a neck, and has the interior of its neck suitably formed to receive the stopper, with a stopper constructed as stated in the claim. This means a stopper constructed as described, 879 and which, by reason of its construction, operates as described, in connection with the neck of the bottle, in closing and unclosing the bottle. The claim is not to the employment in a bottle of a given mode of operation resulting from any structure of stopper. Such a claim would not be a claim to a process. It would be a claim to a function of mechanism, aside from the structure of such mechanism. It would not be a valid claim. The proper construction of the claim is that it is a claim to the employment, in combination with a bottle having the interior of its neck suitably formed to receive such stopper, of a stopper constructed substantially as described.”

It was held, therefore, in *Matthews v. Shoonberger*, that an internal gravitating bottle stopper, consisting of a glass marble working inside the neck of the bottle, precisely after the manner of the glass plug in the Kelly bottle, and seating against a rubber ring in the neck by the upward pressure of the gas in the liquid, is not an infringement of either of the plaintiff's patents.

It seems to me the construction which Judge Blatchford has given to the plaintiff's patents is the only one consistent with their validity; for, unless limited to the exact construction of the devices they show, I do not see how it is possible to save the patents at all, in view of the prior state of the art. An internal closing stopper for bottles was by no means a new thing at the time of Albertson's earlier invention.

This clearly appears from the patents in evidence, to a few of which a brief reference will be made.

Thus, Blyth's English patent of 1857 shows an internal stopper for bottles which is inserted through the mouth of the bottle, and is closed against a seat within the bottle by the upward pressure of a helical spring, which is situated beneath the lower end of a movable vertical stem, which acts beneath the center of the closing valve; and the stopper is opened by outward pressure upon the valve.

The Zouf French patent of 1844 shows a stopper which is inserted through the mouth of the bottle, and which, when inserted, is closed tightly against a seat, which is within the 880 bottle, by upward pressure of a spiral spring working around an upwardly projecting stem; and the stopper is opened by pressure applied to the top of the stem. And an internal bottle stopper, having substantially the same arrangement and method of operation, is shown by the Nouvean English patent of 1858. If it be true that in the patents just referred to the valve does not close against a seat formed in the *substance of the bottle itself*, it is equally true that in the Christin and Kelly bottles the plug does not seat against the substance of the bottle, but against an elastic packing or detachable rubber seat enclosed in a recess within the neck of the bottle. As bearing more particularly upon the claims of the plaintiff's second patent, the McCallum English patent of 1862 is worthy of especial observation. The specification, after stating that the invention is "peculiarly suitable for aerated liquids," describes the bottle as "formed with a construction in the neck, A, presenting internally a kind of valve seat, B." This valve seat does not differ from the plaintiff's shoulder, x, and is for the identical purpose; for it is stated that after the bottle is filled, and the stopper drawn "into its place against the seat, B, in the neck, A, of the bottle, * * * the internal pressure keeps the stopper securely in its place."

The stopper is described as “a kind of valve,” consisting “of a washer made of a flexible material, such as leather, or caoutchouc, and fixed on a short spindle or center in such a way, that, on being pushed into the bottle in one direction, the washer bends inwards towards or against the upper part of the center or spindle, and passes easily, whilst on being moved in the other direction the washer expands and cannot be forced or drawn through the contracted neck of the bottle.” In closing the bottle the stopper is grasped and drawn into its seat by an instrument inserted into the mouth of the bottle for that purpose. The bottle is opened by pushing the stopper inwardly, and the stopper “remains in the bottle, and can be used over again repeatedly.”

If it be conceded that the plaintiff’s patents were not fully anticipated, it is, nevertheless, clear to my mind that the differences 881 between his devices and those shown by the earlier patents are less marked and substantial than are the differences between the defendants’ devices and those of the plaintiff.

The defendants do not use the mechanism described in the plaintiff’s first patent, nor anything that is the equivalent thereof. They do not employ a spiral or any spring, nor a disk valve. Neither in form nor in mode of operation is either of their stoppers at all similar to the stopper described in that patent.

The distinguishing and indispensable features of the plaintiff’s second patent are a compressible valve, capable of being forced into the bottle through the mouth, and incapable of easy passage through it in the opposite direction, and a bottle having the interior of its neck so shaped as to present a bearing surface or seat with which the valve is brought into close contact to close the bottle. These characteristics are wholly wanting in the defendants’ devices. The defendants use no valve. Their bottles are closed by a simple wooden or glass plug, which easily passes through

the neck of the bottle in either direction, but acts as a stopper when pressed or drawn into a rubber ring placed in the neck of the bottle after the plug is inserted in the bottle.

In my judgment the defendants' devices differ essentially from, and in point of simplicity and utility are vastly superior to, those of the plaintiff. It is true that the defendants' stopper is of sufficient length to prevent it from turning over in the bottle, and therefore it is contended infringes the third claim of the second patent. But to provide a valve with a stem of such length as to prevent it from turning over in its chamber, so that it shall always present itself right to the orifice it is to close, was certainly an old and well-known expedient. In view of this fact, and looking to the terms of the claim, it must, I think, be restricted to the form of stopper shown by the specification. "*In all instances, however, the stopper is formed as shown, and is forced into the bottle as seen in figure 2,*" is the language of the specification; and the language of the claim is, "making the entire 882 stopper of such a length," etc. Manifestly the specified length is but a single feature of the stopper. The claim, therefore, is not to be read as embracing all manner of internal bottle stoppers having the specified length, irrespective of other distinguishable characteristics and modes of operation. Construed so broadly, the claim could not be sustained. *Matthews v. Shoenberger, supra.*

I am of opinion that no infringement of either of the plaintiff's patents has been shown.

Let a decree be drawn dismissing his bill, with costs.

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