

Case No. 1,401.

BIGELOW v. MATTHEWS.

[7 Blatchf. 77.]¹

Circuit Court, S. D. New York.

Dec. 22, 1869.

PATENTS—INFRINGEMENT—NOVELTY—IMPROVED SODA-WATER APPARATUS.

1. In the apparatus described in the reissued patent granted to Edmund Bigelow, December 4th, 1866, for “improved apparatus for supplying and measuring syrups in soda-water,” the original patent having been granted to him April 6th, 1858, an air tube or vent in the chamber of the faucet is necessary to enable such chamber to fill and discharge, and is a part of such faucet.
2. Under the first claim of such patent, namely, “the employment of reservoirs in permanent cases or stands, revolving or otherwise, as herein described, with the registering faucets, substantially as and for the purposes herein set forth,” a faucet, to be the faucet of such claim, must be a faucet with such air tube or vent.
3. The second claim of such patent, namely, “a self-registering apparatus, with an air tube or vent, substantially as herein set forth, combined with a reservoir, as and for the purposes herein described,” is, in this view, a mere duplication of the first claim.
4. The first claim of the reissued patent granted to Edmund Bigelow, August 6th, 1867, for “improved soda-water apparatus,” the original patent having been granted to him January 25th, 1859, namely, “the combination of the conduit through which the mineral waters are drawn, and the syrup-cans, with the ice reservoir, all in one stand or castor, substantially as and for the purpose described,” is void for want of novelty.
5. The measuring faucet is not a part of the combination in such claim and is not a part of the syrup-can.
6. The second and third claims of such reissued patent of 1867 are valid and are infringed by apparatus constructed in accordance with letters patent granted to John Matthews, Junior, October 3d, 1865, for a “soda-water apparatus.”

In equity. This is a final hearing, on pleadings and proofs, of a suit [by Edmund Bigelow against John Matthews] founded on two letters patent of the United States granted to the plaintiff. [Decree for perpetual injunction and an accounting.]

One of the patents [No. 19,824] was originally granted to him April 6th, 1858. It was reissued to him May 4th, 1858, and again reissued to him December 4th, 1866, [No. 2,406,] for “improved apparatus for supplying and measuring syrups in soda-water.” The other patent [No. 22,697] was originally granted to him January 25th, 1859. It was reissued to him August 6th, 1867, [No. 2,711,] for “improved soda-water apparatus.” The bill alleged an infringement of both of the patents by the defendant, by the making and selling of soda-water apparatus containing the inventions claimed therein.

Charles M. Keller, for plaintiff.

Thomas A. Jenckes and Francis C. Nye, for defendant.

BLATCHFORD, District Judge. The reissue of 1866 declares the nature of the invention described therein to be, “the provision of any desired number of apartments, reservoirs or separate chambers, to be filled with syrups or other liquids, used as a bever-

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age, and having a measuring faucet affixed to each reservoir, so as to draw from it, and at the same time measure, a given quantity of the fluid contained therein, without removing or handling said reservoir, which is

set in contact with, or adjacent to, ice, by which its contents are kept cool.” The specification states, that the reservoirs may be placed in a line, side by side, in a permanent or rotating stand. The drawings show a circular stand of reservoirs, with a central space as a receptacle for ice to cool the contents of the reservoirs. The measuring faucet has in it a registering or measuring chamber, which communicates by a pipe with the reservoir. A rod or stem runs through the faucet in a vertical direction, and carries and operates two valves. The upper valve is a conical valve, which fits the supply opening from the pipe leading to the reservoir. The lower valve is on the lower end of the stem and serves to open and close the discharge orifice of the measuring chamber. The upper end of the stem passes out from said chamber through a packing box at its top. The lower end of the stem is guided in its movement by a bar, on which rests a spiral spring, which bears on the upper valve and keeps it raised from its seat or open, and also keeps the lower valve closed. In this condition, the communication between the reservoir and the measuring chamber, by which the latter is filled, is left open. By pressure downwards on the top of a head or thumb-piece affixed to the upper end of the valve-stem, the stem is depressed, forcing the upper valve down to its seat, and thus cutting off the communication between the chamber in the faucet and the reservoir, and at the same time opening the lower valve, which closes the exterior of the discharge orifice. By this operation the contents of the faucet are discharged. By removing the pressure from the stem, the spring throws up the stem, the lower valve is closed and the upper valve is opened, and the measuring chamber is again filled. The specification states, that, to enable the chamber of the faucet to fill and discharge, it is necessary to have a vent therein, which may be at any convenient and proper point, and that a tube should extend from the vent up to the top of the reservoir, or other convenient point, “that will prevent the overflow of the contents of the reservoir when it is filled.” The claims of this patent are as follows: (1.) The employment of reservoirs in permanent cases or stands, revolving or otherwise, as herein described, with the registering faucets, substantially as and for the purposes herein set forth; (2.) A self-registering apparatus, with an air tube or vent, substantially as herein set forth, combined with a reservoir, as and for the purposes herein described.

The apparatus of the defendant is constructed in accordance with letters patent granted to John Matthews, Junior, October 3d, 1865, for a “soda-water apparatus.” It has a series of syrup-reservoirs, arranged in a permanent case or stand, with a registering or measuring chamber under each reservoir, constructed and operated in such manner as to be capable of measuring and discharging a definite quantity of syrup. Such chamber has at its bottom a discharge orifice and at its top a filling orifice. The filling orifice opens directly into the reservoir. A rod or stem runs vertically from above the top of the reservoir through the syrup in it, and through the measuring chamber to the bottom of it, and, on the stem and within such chamber, are two valves, one of which fits the lower side of the filling orifice

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and the other of which fits the upper side of the discharging orifice. These valves are so arranged that the lifting of the stem opens the discharge orifice and closes the filling orifice, and permits the contents of the chamber to be discharged, and the depression of the stem closes the discharge orifice and opens the filling orifice, and allows the chamber to be filled, the movements of the two valves in both directions being simultaneous. The raising of the stem in the defendant's apparatus effects what is effected by the depression of the stem in the plaintiff's, and the depression of the stem in the defendant's effects what is effected by the raising of the stem in the plaintiff's. In the defendant's apparatus there is no such vent, with a tube extending up from it, as is found in the plaintiff's patent of 1866, that is, no vent from the measuring chamber, when empty or being filled, other than such vent as is afforded by the orifice through which the syrup comes from the reservoir; whereas, in the plaintiff's patent of 1866, there is such vent, with a tube, in addition to what vent may be afforded by the pipe through which the syrup comes from the reservoir. Such additional vent is described, in the plaintiff's patent of 1866, as necessary to enable the chamber to fill and discharge, and it is shown by the testimony to be thus necessary, in the apparatus described in that patent.

The first question is, whether the defendant's apparatus, thus described, infringes the plaintiff's patent of 1866. It is necessary, in order to determine this question, to first define the scope of what is claimed in the patent. As the defendant does not employ a self-registering apparatus, with such an air-tube or vent as is described in the plaintiff's patent, it is not insisted by the plaintiff that the defendant's apparatus infringes the second claim of the patent. The inquiry will, therefore, be confined to the construction of the first claim of the patent. As the air-tube or vent, before referred to, is necessary to enable the registering chamber to fill and discharge, it is impossible to employ the reservoir in connection with the registering faucet which contains the registering chamber, for the purpose, specified in such first claim, of filling such chamber with syrup from the reservoir and then discharging such syrup from such chamber, without using such air-tube or vent. Such vent is described in the specification as being at some point in the chamber of the faucet and as having the tube extending

from it The vent is, therefore, a part of the faucet The faucet is not such a registering faucet as is referred to in, and intended by, the first claim of the patent, unless it is a faucet with such a Vent In this view, the second claim of the patent is a mere duplication of the first claim. Each claims a combination of the reservoir with the self-registering faucet containing the vent There is no patentable substance in having several reservoirs, each with such a faucet, beyond what is found in having one reservoir with such a faucet; and the first claim of the patent would be infringed by employing one reservoir with such a faucet As the defendant's measuring chamber has not the additional vent referred to, it does not infringe the first claim of the patent.

The plaintiff's patent of 1867 states the purpose of the invention therein described to be, "to economize ice, by combining with an ice-reservoir, placed on a counter, or other convenient stand, for drawing mineral water or other beverage, a conduit or pipe, through which said liquids are drawn, and a syrup-can or cans, by which said liquids are flavored; also, to economize syrup and effectually measure the same by thoroughly ventilating the measuring faucet affixed to said cans." The syrup-cans are described as being placed in juxtaposition to the ice chamber, in a stand or caster. To each syrup-can is attached a measuring faucet like that described in the patent of 1866, with the addition of a vent or air-passage in the valve-stem, so as to admit air into the measuring chamber when the discharge valve is opened to discharge the contents of the chamber. The stem has two openings in it, one above the other, the portion of the stem between such two openings being hollow. The upper opening always remains outside of the measuring chamber. The lower opening is outside of the chamber when the discharge valve is closed and the supply valve is open, but the depression of the stem, which closes the supply valve and opens the discharge valve, carries such lower opening within the chamber, so that the air which issues from it into the chamber, and which is free to come through the hollow stem from the communication between that and the atmosphere, through the upper opening, aids in discharging the syrup from the measuring chamber. The conduit for the passage of the mineral water passes through the ice-chamber, so that such conduit and the syrup-cans are cooled by the ice in one and the same ice-chamber. The claims of the patent of 1867 are as follows: (1.) The combination of the conduit through which the mineral waters are drawn, and the syrup-cans, with the ice-reservoir, all in one stand or caster, substantially as and for the purpose described; (2.) An air-vent, in or connected with the valve-stem of a measuring faucet, as above set forth, or in any manner substantially the same; (3.) In combination with a syrup-caster, substantially as herein described, a measuring faucet, or its equivalent, so made that, when the discharge port is opened, the supply port is closed by proper plug or other formed valves, connected with a stem so constructed and arranged that it admits external air in to the measuring chamber when the discharge port is opened by the movement of said stem, all substantially in the manner and for the purposes herein

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set forth. It is alleged by the plaintiff, that the defendant's apparatus infringes each one of the three claims of the patent of 1867. The defendant's apparatus has a conduit or pipe through which the mineral water is drawn, and a series of syrup-cans or reservoirs to contain the syrups, and an ice-reservoir to contain ice for the purpose of cooling the articles, and a stand or case by which the conduit, the syrup-cans and the ice-reservoir are all combined together, so as to constitute a combined apparatus for drawing mineral water and syrups. Each of the three instrumentalities in the defendant's apparatus, forming part of such combination has the same mode of operation in itself, and in reference to its co-members in the combination, and in reference to the combination, and is used for the same purpose, as the corresponding one of the three instrumentalities in the plaintiff's combination in his first claim; and such combination, in the defendant's apparatus, has the same mode of operation, and is used for the same purpose, as the combination in the plaintiff's first claim. Therefore, the defendant's apparatus infringes the first claim of the patent of 1867. But I think that claim is void for want of novelty. The Hubbell apparatus and the Parrish apparatus anticipated the invention coveted by such first claim. Each of them employed a series of syrup-cans arranged around a central ice-chamber, and the draught pipe of the mineral water was arranged so as to be refrigerated by the same chamber. The counsel for the plaintiff seeks to save the first claim of the patent of 1867, by contending that the measuring faucet is a part of the combination in such claim, and is virtually a part of the syrup-can. But this view cannot be admitted. The specification speaks of the measuring faucet as being affixed to the can, and, again, as being attached to the can. It cannot be regarded as a part of the can. It was admitted by the counsel for the plaintiff that, unless the faucet could be regarded as a part of the can, the first claim was anticipated by the apparatus of Hubbell and by that of Parrish.

We come now to the question, whether the second and third claims of the patent of 1867 are infringed. The rod or stem of the defendant's apparatus is hollow. It is open at its lower end and there is an aperture in it near its upper end, which last named aperture remains at all times above the surface of the syrup in the syrup-reservoir. The atmospheric air can thus pass freely through the rod or stem. When the

measuring chamber is full of syrup and the discharge orifice is closed, the lower aperture in the stem is entirely below the discharge orifice. When the stem is raised, thus opening the discharge orifice, such lower aperture in the stem passes up, with the lower end of the stem, through the descending syrup, until the valve which fits the lower side of the filling orifice reaches its seat and closes such orifice, and the air which passes through the length of the stem from above issues from such lower aperture in the stem into the measuring chamber, above the syrup which is being discharged from it, and aids in the discharge of such syrup. The principle or character of the air-vent in the valve-stem of the plaintiff's apparatus, and of such valve-stem with such air-vent, is, that the stem has a linear motion, and, in such motion, carries the orifice from which the air issues, from the outside of the measuring chamber to the inside thereof, and to a point behind the syrup that is being discharged from such chamber, so that the air so issuing may follow and press upon the receding syrup; and that the motion of such orifice is co-incident with the motion of the two valves that are carried by the stem; and that such orifice is always outside of the measuring chamber when such chamber is being filled, and is always within such chamber when such chamber is being emptied. The second claim of the patent of 1867 is for the combination of such an air-vent with such a valve-stem, in a faucet which has a measuring chamber. It is not necessary that the faucet should be one having, in addition, the air-vent in the measuring chamber, described in the patent of 1866. On this construction, there is no doubt that the defendant's apparatus infringes the second claim of the patent of 1867. It has an air-vent in the valve-stem, and the principle or character of such air-vent, and of such valve-stem with such air-vent, is the same as the principle or character, before described, of the plaintiff's air-vent and valve-stem. The mode of operation of the valve-stem and the air-vent in the defendant's apparatus is the same as the mode of operation of the valve-stem and the air-vent in the plaintiff's apparatus. The differences between the movements of the two apparatuses, in that the valve-stem in the plaintiff's apparatus moves downward to close the filling orifice, and to open the discharge orifice, and to carry the air-vent in the valve-stem into the measuring chamber, and in that the valve-stem in the defendant's apparatus moves upward to perform the same three functions, are mere formal differences and not differences in substance. They are outside of the real invention claimed by the plaintiff in the second claim.

The proper construction of the third claim of the patent of 1867 is, that the measuring faucet, or measuring apparatus, must be so made, that the discharge port shall be opened and the supply port be closed simultaneously, by valves, which valves must be connected with a stem, so constructed and arranged as to admit external air into the measuring chamber of the apparatus when the discharge port is opened by the movement of the stem; that the stem must have a linear motion; that the movement, by the stem, of the orifice so admitting air into such chamber, and the motions and relative positions of such

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orifice at different times, shall be as before defined in respect to the second claim; and that such faucet or apparatus shall be combined with a syrup-caster, substantially as in the plaintiff's patent. It is not necessary, in respect to the third claim, any more than in respect to the second, that the measuring faucet, or measuring apparatus, should have, in addition, the air-vent described in the patent of 1866. Nor is it necessary, in either the second or the third claim, that the measuring apparatus should be technically a faucet. Any measuring apparatus, having the characteristics of the plaintiff's faucet, is Ms faucet. The defendant's apparatus is a manifest infringement of the third claim of the patent of 1867. It has a measuring apparatus, containing a measuring chamber, which has a discharge port and a supply port, each closed by a valve. Both of such valves are closed simultaneously. Such valves are carried by a stem, which has a linear motion. The stem is so constructed and arranged, as to admit external air into the measuring chamber when the discharge port is opened by the movement of the stem, and the principle or character, and mode of operation, of the air-vent, and of the valve-stem, and of the valves, and of the orifices in the stem, and the combination of the measuring apparatus with the syrup-caster, are the same, in substance, as in the plaintiff's apparatus.

I have examined carefully all the testimony introduced on the part of the defendant, to affect the novelty of the inventions covered by the second and third claims of the patent of 1867, and find nothing to affect the novelty of either of those claims, according to then: construction before given. Nor is there evidence satisfactory to show that the plaintiff was not both the original and the first inventor of what is covered by both of those claims, as thus construed.

There must be a decree for a perpetual injunction and an account, in respect to the second and third claims of the patent of 1867. The question of costs will be reserved until the coming in of the master's report.

¹ [Reported by Hon. Samuel Blatchford, District Judge, and here reprinted by permission.]