Lancaster, 129 U. S. 263, 9 Sup. Ct. 299, and is reaffirmed in Miller v. Manufacturing Co., 151 U. S. 207, 14 Sup. Ct. 310. The range of equivalents depends upon the extent and nature of the invention. If the invention is broad or primary in its character, the range of equivalents will be correspondingly broad, under the liberal construction which the courts give to such inventions. Roemer was not a pioneer in the art, and, as was said by the learned judge of the circuit court, if his patent can stand at all, he must be confined to the precise devices mentioned in his claims; and, thus limited, the defendants do not infringe them.

The decree dismissing the complainant's bill is affirmed.

## GREEN et al. v. AMERICAN SODA-FOUNTAIN CO.

(Circuit Court of Appeals, Third Circuit. January 18, 1897.)
No. 34. Sept. Term, 1896.

PATENTS-COMBINATIONS-SODA-WATER FOUNTAINS.

The Witting patent, No. 414,272, for improvements in dispensing apparatus for soda water, etc., compared with prior devices, especially the Adami and Lippincott apparatus, and held invalid as to the second claim, for want of invention and patentable combination. 75 Fed. 680, reversed.

Appeal from the Circuit Court of the United States for the Eastern District of Pennsylvania.

This was a suit in equity by the American Soda-Fountain Company against Robert M. Green and others, trading as Robert M. Green & Sons, for alleged infringement of a patent for a soda fountain. The cause was first heard on exceptions to certain paragraphs of the complaint. 69 Fed. 333. Thereafter the circuit court sustained the second claim of the patent in issue, and entered a decree in favor of complainant. 75 Fed. 680. From this decree the defendants have appealed.

Strawbridge & Taylor and Frederick P. Fish, for appellants. Joshua Pusey, for appellee.

Before DALLAS, Circuit Judge, and BUTLER and WALES, District Judges.

WALES, District Judge. This is a suit for the infringement of the second claim of letters patent No. 414,272, granted November 5, 1889, to Theodore I. Witting, for "improvements in dispensing apparatus for soda water," etc., and by him assigned to the American Soda-Fountain Company, the complainant below. The specification states that the "invention " " consists in the novel construction, combination, and arrangement of parts hereinafter set forth, and pointed out in the claims." The principal defenses were: First, that the combination of the second claim of the patent, in view of the prior state of the art, did not involve invention; and, second, that the claim was for an unpatentable aggregation. On hearing on bill, answer, and proofs, the circuit court overruled both defenses, and entered a decree finding the defendants guilty of infringement.

with the usual award for an injunction. The cause is now here on review.

The Witting patent is not for a primary invention, as will appear from the reading of the second claim, the validity of which is put at issue. The claim is as follows:

"(2) The combination of the outer case provided with a recess for containing glasses, drop doors hinged to said case above said recess and having journaled therein keys or handles for operating the syrup fancets, and laterally movable syrup cans and attached faucets located entirely within the case, for the purpose substantially as herein set forth."

The combination thus described is alleged to be unpatentable for the want of invention by the patentee in the adjustment of the different parts, and which, although, perhaps, it may be a convenient arrangement, called for nothing more than the exercise of mechanical skill in bringing together the well-known devices of prior inventors. The Witting apparatus belongs to that general class of soda fountains in which the syrup cans are horizontally inserted into that part of the casing which is below the ice chamber. Along the lower portion of the entire front of the casing extends a tumbler recess. Through the roof of this tumbler recess are a series of apertures corresponding in location to the faucets of the cans, one to each faucet, so that, when the faucet is opened, the syrup drops through the aperture into the tumbler beneath. The front of the casing is provided with a series of doors corresponding in number with the cans, hinged at the lower edges to the front edge of the roof of the tumbler recess, so that they may be dropped down to permit of the insertion and removal of the cans. In each of these doors is journaled the stem of an externally applied key or handle, the inner end of which stem, as the patent states, is "preferably bifurcated, or provided with a suitable slot, which engages the end, 12, of the plug, 1, readily allowing the door to be opened when required, the slotted or forked end of the key being detached from the plug by the operation of opening the door." This entire arrangement is described in the specification as follows:

"The syrup faucets being located within the refrigerating chamber, it is obvious some provision must be made for operating them from without, which is done by journaling suitable handles or keys, P, in the doors, R, and connecting their inner ends to the thumb pieces or handles, 12, formed on outer end of plug, 1. This may be done in various ways, but I prefer to hinge the doors to the case, A, at their lower ends, by means of hinge, t, so that said doors may open downwardly and out, as shown in Fig. 1."

To understand how much of originality or of invention there may be in the combination of the Witting apparatus, reference will be had to a few of the patents (in defendants' exhibits) for similar structures, of a date prior to the patent in suit. The Mathews patent, No. 50,255, of October 3, 1865, shows the casing of a soda-water fountain which embodies a tumbler recess, and contains vertically disposed cans, the valve-controlled faucets or outlets of which register with openings in the roof of the tumbler recess, and the valve stems of which are operated by handles passing through a hinged door in the top of the casing. The Mathews patent, No. 179,584, of July 4, 1876, shows the casing of a soda fountain which contains sep-

arate series of both horizontally and vertically disposed cans. The Adami patent, No. 316,594, of April 28, 1885, shows a casing which is provided in its upper portion with an ice chamber, and in its central portion with a series of horizontal can chambers for syrup cans. within which a series of horizontally disposed cans may be introduced, and the front face of which is provided with a series of doors hinged along the upper edge of the can chambers, and adapted to close said chambers to permit the introduction and removal of the cans. The Lippincott patent, No. 375,452, of December 27, 1887, shows a soda-water apparatus, the casing of which has a tumbler recess, a series of vertically disposed can chambers in the front of the apparatus, orifices through the roof of the tumbler recess registering with the outlets of the faucets of the cans, and a series of vertically disposed removable cans having syrup faucets located entirely within the case, and each of them provided with a lug or blade adapted to be separately engaged with the bifurcated inner extremity of a stem journaled within the front of the casing, the outer extremity of which stem is provided with a key or handle, by the movement of which from the outside of the case the faucet within the case is wholly controlled.

By comparing the separate parts of the Witting fountain with the corresponding parts of the prior structures as described in the patents just referred to, it will be seen that Witting has not added a single new feature to those contained in one or the other of the old fountains, excepting, perhaps, the drop doors, "having journaled therein keys or handles for operating the syrup faucets." In fact, all that Witting appears to have done was to imitate both Adami and Lippincott, and thereby produce the same results by substantially the same means. Thus, there was no novelty in the insertion of syrup cans from the front of the casing, or in having the faucets of the cases fitted to the apertures in the roof of the tumbler recess, or in journaling keys in the casing for the purpose of operating the faucets of the cans from the outside. Adami showed how horizontally disposed cans could be used with swinging doors hinged at their upper ends; and Lippincott, borrowing the tumbler recess from Mathews, demonstrated, for the first time, the application of a handle journaled through the case, on which was a claw which engaged with the blade of the faucet of the syrup can, by which he could manipulate the syrup from the outside of the case. In the specification of his patent, Lippincott says:

"The invention consists primarily in the combination, with a syrup jar having a cock in the neck thereof, of a shaft projecting beyond the outer casing of the fountain, and provided with a handle on its outer end for operating the key of said cock, the inner end of said shaft being constructed so that the jar, with the cock therein, may be readily removed from, and replaced within, the containing chamber (or another similar jar substituted therefor), without necessitating the breaking or disturbance of any joints or connections, yet, when the jar is in place, the cock therein will be in engagement with said shaft, and may be readily opened or closed by turning the handle on the end of the latter on the outside of the casing."

If this was all he did, it would not be contended that he was entitled to a patent; and this was the view taken by the patent

office when Witting first formulated his claims. Having these two patents before his eyes. Witting applied the journaled key of Lippincott to the swinging door of Adami in the only way in which it could be done, and placed the cans and their faucets entirely within the casing, as Lippincott had done, and, finally, used the horizontally disposed cans of Adami, and by this adjustment of parts secured the result which had already been accomplished by Lippincott, viz. the discharge of the syrup into the tumbler beneath by "the adaption of the valve-operating handle shown by Lippincott to the swing door shown by Adami." It is true, there is a slight distinction between the united Adami and Lippincott inventions and the Witting patent, consisting in the fact that the Adami doors are hung from the top, while the Witting doors are hung from the bottom; and this appears, from the proceedings in the patent office, to have been the only ground on which the patent was granted. Witting's original application contained seven claims, which were finally reduced to two. The original fifth claim, as subsequently amended, is the present claim 2, now in suit, and read as follows:

"(5) The combination of the outer case provided with a recess for containing glasses, doors hinged to said case, and carrying keys or handles for operating the syrup faucets, and syrup cans and attached faucets located entirely within the case, for the purpose substantially as herein set forth."

This claim was rejected because—

"Deemed to involve no invention over what is shown in patents to Lippincott of record, and Adami, 316,594, April 28, 1885 (dispensing fountains). The claim seems to involve nothing more than the adaptation of the valve-operating handle shown by Lippincott to the swinging door shown by Adami."

Several amendments followed, until claim 5 was made to read as claim 2 now appears in the patent, thus (the italicized words show the amendments):

"The combination of the outer case provided with a recess for containing glasses, drop doors hinged to said case above said recess and having journaled therein keys or handles for operating the syrup fancets, and laterally movable syrup cans and attached faucets located entirely within the case, for the purpose substantially as herein set forth."

Leaving out the "drop doors," it appears that nothing new was added by Witting to the Adami-Lippincott structures. The patent office had, in the first place, decided that "Lippincott is deemed to show the full equivalent of claims 5 and 7," and again held, after claim 7 had been canceled, that claim 5 involved "nothing more than the adaptation of the valve-operating handle shown by Lippincott to the swinging door shown by Adami." It would seem, therefore, that the patent was granted to Witting only on the addition of the drop doors. It was evident to the patent office that the application of the Lippincott patent to the Adami patent did not amount to invention; and it was not until Witting, without making any other material amendment, limited his invention to drop doors, that his patent was granted. In avoidance of the reference to Adami, Witting states, "Adami's doors are hinged at the top; they cannot drop." If there is anything of which it can be

possibly said that it has passed out of the domain of invention, it would seem to be the hinging of a door; that is, whether a door should be hinged at the top or bottom, at one side or the other, and made to open in any particular direction. The decision of such questions may be safely left to the judgment of a mechanic of ordinary skill and intelligence. It was a mere matter of mechanical choice with Witting to make a lift door or a drop door, and he preferred the latter. Lippincott journaled his key through the front casing in order to engage the stem of the handle with the valve of the faucet. Witting put in a door as Adami had done, and journaled the key in the door; and in making use of the Adami door he was compelled to adopt Lippincott's method of using the key. . The patents of Adami and Lippincott are not public property, and, as Lippincott could not appropriate the former's invention by the application to it of his own, neither should Witting be permitted to combine them by a mere mechanical adjustment which it required no invention to make. For these reasons we are unable to concur with the circuit court in sustaining the second claim of the Witting patent. He has produced no new result, nor has he invented any novel and improved means of obtaining an old result. The whole object of his device is to discharge the syrup from the can faucet, through the aperture in the roof, into the tumbler directly beneath it, and he attains this end in almost precisely the same way and by the same means which are shown in the Lippincott drawings. We do not regard the cutting of a door in front of the casing as proof of invention, since Adami has already preceded him in doing the same thing, and certainly there can be no invention in converting a lift door into a drop door. In Hoffman v. Young, 2 Fed. 74, the claim in a combination patent was sustained on the ground that it presented evidence of invention, because a new result had been produced, though it was conceded the case was near the border line of nonpatentability. In National Cash-Register Co. v. American Cash-Register Co., 3 C. C. A. 559, 53 Fed. 369, this court decided that the invention there in suit was a primary one, and that the result achieved by the inventor was absolutely and entirely new, and had not, by any means, been previously attained. In each of these cases, cited by counsel for the appellee, the production of a new result is made the test of patentability. On the other hand, numerous authorities may be found in which patents for combinations in machinery and in compositions have been held void for want of invention. We refer to a few only: Vinton v. Hamilton, 104 U. S. 485; Heald v. Rice, Id. 737; Heating Co. v. Burtis, 121 U. S. 286, 7 Sup. Ct. 1034. In Aron v. Railroad Co., 132 U. S. 84, 10 Sup. Ct. 24, a patentee had made use of devices of earlier patents. All that he did was to adapt them to the special purpose to which he contemplated their application, by making modifications which did not require invention, but only the exercise of ordinary mechanical skill. This was held insufficient to sustain his patent.

Having thus disposed of the first branch of the defense, it is unnecessary to discuss the question of aggregation, with which it is

so closely connected. We are of the opinion that the decree of the circuit court, by which the second claim of the Witting patent was sustained, should be reversed, and the cause remanded with directions to dismiss the bill; and it is so ordered

## ROBBINS et al. v. ILLINOIS WATCH CO.

(Circuit Court, N. D. Illinois. January 30, 1897.)

1. PATENTS-INFRINGEMENT-ACCOUNTING FOR PROFITS.

Where the books of a corporate infringer of a patent for an improvement in watches and the testimony of its officers and employes fail to show any profit on the infringing watches, the profits made by another manufacturer on watches claimed to be of the same grade cannot be taken as the measure of profits, and no decree for profits can be made.

2. SAME-APPORTIONMENT OF PROFITS.

Defendant made and sold, as an entirety, watch movements on which it placed infringing stem-winding and hands-setting devices; but no profits were made on such sales. Hcld, that there was no sum to which any possible apportionment could be made, as between the infringing devices and the movement proper, and no profits could be recovered.

3 SAME

An infringer is under no obligation to the patent owner to so use the patented device or to so manage his infringing business as to make a profit, for which he may be compelled to account.

This was a suit in equity by Leroy E. Robbins and Thomas M. Avery against the Illinois Watch Company for alleged infringement of reissued letters patent No. 10,631, issued for an improvement in stem-winding watches. The cause was heard on exceptions to the report of the master, to whom it was referred to take an account of profits.

Lysander Hill and Prindle & Russell, for complainants. Bond, Adams, Pickard & Jackson, for defendant.

SHOWALTER, Circuit Judge. Complainants sued for the infringement of reissued letters patent of the United States, No. 10,-631. After a hearing in the circuit court defendant was found guilty of infringement, and a perpetual injunction was awarded, and the case referred to a master, to take testimony and report his conclusions on the matter of damages and profits. Defendant prayed an appeal from so much of the decree as adjudged the infringement and awarded the perpetual injunction. The court of appeals affirmed the decree. The circuit court opinion is found in 50 Fed. 542; the opinion of the court of appeals, in 3 C. C. A. 42, 52 Fed. 215. The cause now comes on again on exceptions by the defendant to the report of the master pursuant to the reference for the accounting.

In reaching his conclusions and making up his report the master, following what he conceived to be the theory of the patent as declared in the opinion of the court of appeals, held the watch movement itself, as constructed with the winding and hands-setting mechanism,—in other words, the entire watch, exclusive of the case,—to be the subject-matter of the patent and of the infringement. He finds that the defendant has made and sold such uncased watches