

Case No. 2,109.

BUERK v. VALENTINE.

[9 Blatchf. 479;¹ 2 O. G. 295; 5 Fish. Pat. Cas. 366.]

Circuit Court, N. D. New York.

March 19, 1872.

PATENTS—WATCHMAN'S TIME DETECTOR—VALIDITY—CORRECTION BY REISSUE—ANTICIPATION—INFRINGEMENT.

1. The reissued letters patent, granted to Jacob E. Buerk, as assignee of John Buerk, the inventor, March 8th, 1870, for 14 years from October 29th, 1856, for an “improvement in watchman's time-detectors,” the original patent having been granted to Buerk, January 1st, 1861, for 14 years from that day, and reissued to him, August 22d, 1865, for the residue of such last-named term, are valid.

2. Buerk having obtained in France, October 29th, 1856, a patent for his invention, it was proper to correct, by a reissue, the error in granting the patent in the United States otherwise than for 14 years from that date.

3. Making a prior device, which will serve the like useful purpose, is not necessarily anticipating an invention. Where the mechanical means employed are different, and the mechanical result is different, one does not anticipate the other.

4. Whether the letters patent granted to Jacob E. Buerk, as inventor, June 6th, 1865, for an improvement on the time detector described in the said patent of 1856, are valid, guere.

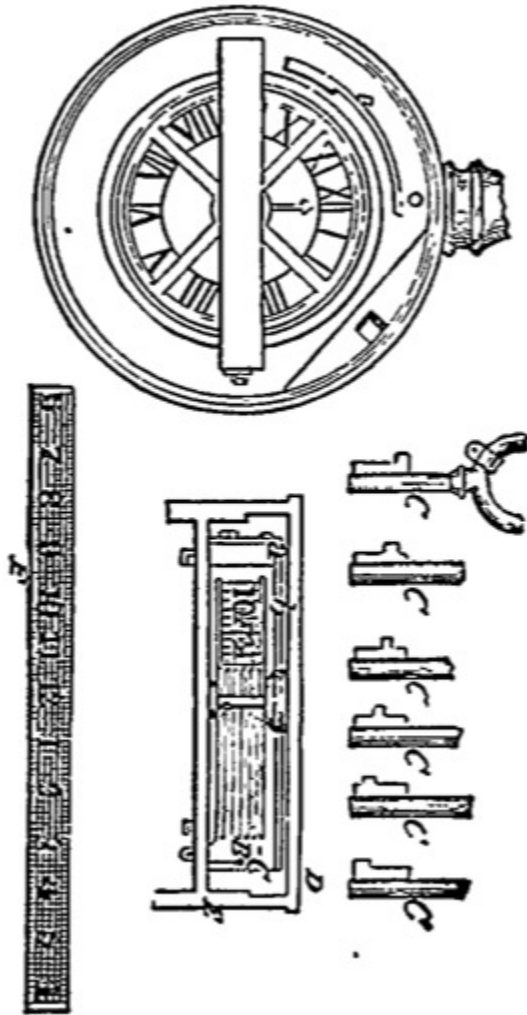
5. The defendant's apparatus held to be an infringement of the plaintiff's patent, where its mechanical construction was the same in all that constituted the principle or mode of operation of the plaintiff's apparatus, and gave it efficiency in securing the object of the invention.

[Cited in *Imhaeuser v. Buerk*, 101 U. S. 647.]

[This was a suit in equity by Jacob E. Buerk against Dennis Valentine.]

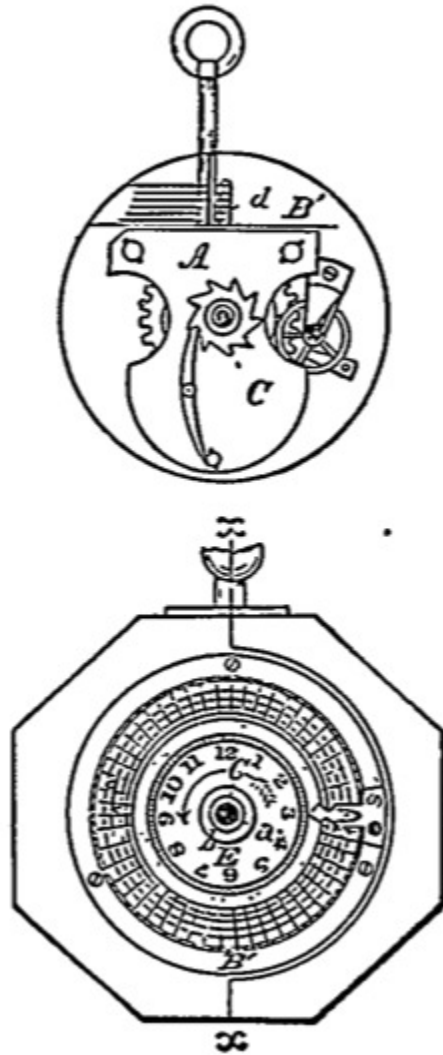
² [Final hearing on pleadings and proofs. Suit brought upon letters patent for “improvement in watchman's time-detectors,” granted to complainant, as assignee of John Buerk, January 1, 1861, for fourteen years from that date; reissued August 22, 1865,

and again reissued March 8, 1870 [No. 3,869], for the residue of the term of fourteen years from October 29, 1856, the date of a French patent granted to the inventor. Also upon letters patent [No. 48,048] for an "improvement in watchman's time-detector," granted to the complainant June 5, 1865. The nature of the invention is fully set forth in the opinion.



[The above engraving represents the detector described in the first patent. The strip of paper, F, marked with the hours, is wound about a drum, moved by clock-work. A series of steel-bars, B, corresponding in number to the longitudinal divisions on the paper, were so arranged as to be forced by the bit of a key against the paper, when a short point, projecting at right angles near the end of the bar, made a perforation in the paper. Each of these bars was operated by a separate key, and these keys were placed in separate rooms. A perforation therefore indicated that the watchman was present in the room, represented by that longitudinal division, while the position of the perforation in the vertical divisions of

the paper indicated the hour and fraction of an hour at which the visit was paid.



[The above engraving represents the modification of the foregoing apparatus, described in the second patent, in which the strip of paper was replaced by a disk, B', the perforations being made by a series of bars and points, d, having their locations so changed as to adapt them to the change in the position of the dial.]²

J. Van Santvoord, for plaintiff.

C. W. Smith and N. B. Smith, for defendant.

WOODRUFF, Circuit Judge. This is a suit brought to restrain the alleged infringement of two patents, and for an account of gains and profits accruing to the defendant by such infringement, and for damages. The patent first set out in the bill of complaint is based upon an alleged invention by John Burk, of Schweningen, in the kingdom of Wurtemberg, made prior to the 1st. of January, 1861, and assigned to the complainant,

December 3d, 1860. The original patent was granted to the complainant January 1st, 1861, and purported to grant to him the exclusive right to make, use and sell, &c., for fourteen years. This patent was surrendered and re-issued on the 22d of August, 1865, for the residue of the term of fourteen years from the 1st. of January, 1861. John Burk, the alleged inventor, having, as early as October 29th, 1856, obtained a patent for his invention from the government of France, it was perceived that the patents issued in the United States to the complainant had erroneously granted the exclusive right for fourteen years from the 1st. of January, 1861. The complainant, therefore, again surrendered his patent, and the same was re-issued on the 8th of March, 1870, for the term of fourteen years from the 29th of October, 1856, the date of the inventor's French patent. The patent and such re-issues are for an "improvement in watchman's time-detectors." The other patent alleged in the bill to have been infringed by the defendant was granted to the complainant himself, as the inventor of an alleged improvement upon the time-detector described in the other patent. It was granted on the 6th of June, 1865, for the term of seventeen years thence next ensuing.

The invention described in the first patent, as re-issued to the complainant in 1870, provided for the watchman a watch, which he carried with him in his rounds, so constructed, that, by the insertion of a key provided at each of the stations which he was required to visit, he could make, within the watch, a record indicating the several stations visited, the precise time of each visit, and, of course, the order in which the visits to the respective stations were made. The watch was provided with a lock, so that the watchman had no access to its interior; and, as the record of each station could only be made by the peculiar key which belonged to such station and was there secured or made fast, the watchman could make no false record or deceive his employers. Without entering into unnecessary detail, it will be sufficient, in the first instance, to say, that this was effected by using a watch or small portable clock-movement, enclosed in a strong case, the lid of which could be locked, the employer retaining the key. To the arbor of the watch upon which the hour hand was placed, a drum was attached, so as to revolve as the hour hand revolved. The circumference of the drum was a little greater than the ordinary watch dial, and its surface was of width suitable to receive the paper next mentioned. Around the circumference of the drum was placed a strip of paper. By marks thereon, the paper was divided into spaces corresponding, in their position relatively to the centre of the watch, to the hours and minutes of the watch dial, and, by lines drawn lengthwise, it was also divided into several spaces, corresponding in number to the number of markers to be used, as next mentioned. Exterior to the watch-movement, but within the case, there were placed several small steel bars or springs, terminating each in a point bent at right angles, while the other end was fixed firmly to the circular plate or frame of the watch movement. These springs were placed and held, in a gauge, one above another, so that the points were in a row perpendicular to the watch face, at and exterior to the point on the dial of the watch indicating the hour of 12; and

each point was directly opposite one of the longitudinal spaces in the strip of paper around the circumference of the drum. In this position, it is obvious, that, if the point of one of the springs was pressed inward upon the revolving drum, it would perforate the paper within its proper longitudinal division, and the perforation would show the hour and minute at which it was made; and, in order to permit such perforation without injuring the steel point, the periphery of the drum was channeled by narrow longitudinal grooves, beneath each of the said longitudinal spaces in the paper placed thereon. Keys were provided, which varied from each other in the location of the bit thereon, in the width of such bits, and also in the number of bits, in such wise, that, one of the keys toeing inserted in a key-hole contiguous to the steel springs, and turned, the bit of the key would press one of the springs inward upon the paper and make one perforation, another key would press two springs inward and make two perforations, another three, and so on; and one key would press the first of the springs, another the second, another the third, and so on; and one key would press inward the first and second, another the first and third, another the first and fourth, another the second and third, another the second and fourth, another the third and fourth, another the third and fifth, and so on, through all the variations of which the number of springs used was susceptible; and, one key being fastened at each station, the marks or punctures which would indicate a visit to that station could not be made by any other key, nor by any means but by an actual visit to that station and the use of the key there suspended.

The claims in the specification annexed to the re-issued patent for this invention are: (1) The drum, carrying a removable piece of paper, or other suitable material, marked or divided off in a convenient number of parts, in combination with a chronometer movement or time-piece, and with one or more marking devices, substantially as and for the purpose set forth. (2) The combination of the marking devices, fastened internally, to a time-piece, with a watch movement, and with a series of keys, and a surface for receiving marks, substantially as described.

The invention described in the second patent, and claimed to be the invention made by the complainant himself, was for the same purpose as the other, and is only claimed as an improvement thereon. In its main features, it consisted in removing the drum entirely and the paper wound thereon. It attached a circular disk to the arbor of the hour hand, to revolve therewith, and attached thereto a circular flat paper dial, of larger diameter, divided by radial lines corresponding with the hours and minutes of a watch dial, and having a portion of its exterior divided into spaces by circular lines drawn at uniform distances, such spaces corresponding, as the paper disk revolved, to the location of the steel points next mentioned. Beneath the circular plate forming the support or frame of the watch movement, the gauge of steel bars or springs was firmly attached to such plate, in such position that the points were in a straight line radial to the centre, and, over each point, was a hole in the said plate, so that each spring could be pushed upward, the point thereof passing through the hole, and upward, sufficiently to perforate the revolving paper dial, in the space corresponding to the point of the spring so raised. Over the row of holes was placed what is called a fixed index—a small strip of metal fastened to the circular plate or frame of the watch, and extending towards the centre of the disk, raised

sufficiently above the revolving disk to permit the paper dial to revolve freely under it and over the holes through which the spring points were to rise; and, to prevent injury to those points, holes were made in its under surface, opposite each point, into which the points, as they rose and perforated the paper, would enter, and then, by the power of the spring, be immediately withdrawn to their respective positions below such plate. The keys were the same as used in the former invention, and were inserted in a key-hole so located that the bits of the keys, when turned, forced the springs upwards instead of inwards, as before, the springs lying flat upon or near the inner surface of the circular plate or frame before mentioned. By this means, the perforation was made in the exterior portion of the revolving paper dial, and the place of perforation indicated the precise hour and minute it was made, and the particular keys by which it was made, with all the variations above stated as to the former patent; and the perforations were all from beneath the paper, upward, through it. The claims of this patent are: (1) The use of the false revolving dial, in combination with the stationary index and spring points, constructed and operated substantially as and for the purpose set forth. (2) Producing the perforations on the paper dial, or its equivalent, from the inside out, instead of from the outside in, as before.

The defendant imports and sells a watchman's time-detector, which serves the same purpose as those above described, and is operated by keys having like bits, and varied in the same manner in the location of the bits. It is susceptible of like variations in the form of the keys, to adapt it for use at numerous stations. It makes the record by perforations in a revolving paper dial, attached to a circular disk fastened to the arbor of the watch on which the hour hand is placed. That paper dial is divided in the same manner as is above described; and the perforations are made by the points of steel springs arranged in a like gang side by side, moved

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by the bit of the respective keys in like manner.

The leading feature in which it differs from the time-detector as alleged to be improved by the devices mentioned in the complainant's second patent, is this: The gang of steel springs, instead of being placed beneath the circular plate or frame of the watch movement, is attached to the lid of the case of the instrument, immediately over the location of the gang of springs in the complainant's detector. When closed, the line or row of points is in the same straight line radially from the centre; and, in order to perforate the paper dial they must be pressed downward, instead of upward. To that end, the key-hole is placed in the side of the lid, over the gang of springs, instead of being placed in the body of the case, below the springs, as in the detector of the complainant. Instead of the complainant's fixed index, placed over the holes through which, in his detector, the points rise to perforate the paper, there is, in the same location, a row of holes in the plate or frame of the movement, into which the points enter, to protect them from injury when making the perforation. The necessity of making such fixed index in such manner that it will sustain the paper during the act of perforation, being obviated by making the motion

of the springs downward, whereby the plate of the watch performs the same office during such act, a mark in the form of an arrow is made on the plate or frame, opposite the row of holes which performs the office of the index, in indicating the point corresponding with the figure 12 of the watch dial, as a guide in setting the paper dial, when the watch is placed in the hands of the watchman.

There are some minor differences in the manner in which the paper disk is attached to the revolving disk upon the arbor, but they are deemed to be very clearly not of the substance of the complainant's invention; and the examples which are produced as exhibits show, also, a watch dial and hands, on the defendant's detector, which does not appear in the complainant's, but that is a matter which is not supposed to be included in the complainant's patent, or to be, in itself, any infringement. This, however, involves another variation in the marking and figuring of the paper dials. As the complainant's dial is placed on what is ordinarily the face of the watch, and revolves as the hour hand revolves, the figures thereon denoting the time, (and passing successively under the index, where perforations may be made,) are necessarily printed in an order in reverse of the figures on the watch dial; while, in the defendant's detector, as the paper dial is put on the other end of the arbor, (opposite the face of the watch,) the figures on the paper dial are printed in the same order as on the face of the watch, but the motion thereof, relatively to the points for perforation, is reversed. The results of the revolution, in respect to the record of the time, are, therefore, the same in each. If, in either of these points of difference, the detector of the defendant is an improvement, that alone will not protect the defendant from liability, if the complainant's patents are valid, and the devices protected thereby are, in substance, incorporated in such detector.

It is, I think, entirely clear, that John Burk was the inventor of the detector for which the patent was granted to the complainant, as his assignee. No one of the prior devices mentioned in the proofs contains a combination of spring points to be operated upon by a series of keys, (susceptible of numerous combinations,) with a watch-movement, all in one case carried by the watchman, and, by successive punctures, indicating the particular key, and, thereby, the station at which it was made. Still less is it true, that any prior device was constructed in the same manner, or by the use of mechanical equivalents. Most of the detectors were stationary, and operated in an entirely different manner. Biram's tell-tale was operated by the pressure of the hand of the person desiring to register his presence, on a pin or button exterior to the instrument. He could make that record wherever the instrument might be, and nothing in the record indicated the visit of the watchman to more than the single station where it was. He could make as many records as he saw fit, without at any time moving from the one place. Rowbotham's device was simply to print upon a revolving paper, within the case of the watch, the impression of various type keys, or stamps, dipped in colored ink from a reservoir in the watch case. The differing form of the keys or stamps at the successive stations may have been useful in disclosing the time and place where the marks were made, and so disclosing the fact and the time of the visit to each station. This may have been more or less efficient in accomplishing the purpose of a detector, but as a machine or mechanical structure, it was not like the plaintiff's. Making a prior device which will serve the like

useful purpose, is not necessarily anticipating an invention. Where the mechanical means employed are different, and the mechanical result is different, one does not anticipate the other. If this were not so, an inventor who had made a machine which would serve a useful purpose would exclude all others from the right to a patent for other mechanical devices or combinations producing the like useful result in other modes, or producing a different mechanical result which served the same purpose. This is also true of a device shown in the evidence as described in the German publication called "The Polytechnisches Central Blatt, for 1855." There is much obscurity in the description there given, and it is at least doubtful whether it is sufficiently clear or

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specific to enable a skilful mechanic to construct the instrument by that mere description. Probably, by the use of inventive skill, he might contrive auxiliary devices supplying the omissions, so that the instrument could be operated; but, whether, when completed, the instrument would be the same, in respect of those devices, as the machine of which such imperfect description is given, is, at least, very doubtful. If, however, he should succeed, the instrument would, in mechanical construction and operation, be unlike the complainant's detector. It would have but one marker. That marker must be moved from its ordinary position, at each station visited. For this purpose, it requires as many key-holes as there are stations, the key at each station operating upon it in a different manner. The number of keys which it would be possible to apply to the marker must, of necessity, be very few, and, of consequence, the number of stations at which it could be used must be small. It has no capacity, by combination of marks or punctures, to furnish a record at many stations, either by one key at each or through the same key-hole. The minutes of the Leipsie Association, in 1864, not only recognize the invention of John Burk, but they are subsequent to his foreign patent, and subsequent to the original patent of 1861, granted to the present complainant. In that view, it is not necessary to decide whether, in fact, it was such a publication as would, in any event, impair the validity of a patent issued in this country after its date.

I do not deem it necessary to decide how far the invention described in the patent granted to the complainant in June, 1865, (in which the circular paper dial is substituted for the paper strip described by John Burk,) was anticipated by the invention of John Burk. Some of the testimony seems to indicate that the substitution of the revolving disk for the drum, and the circular dial for the strip of paper around the drum, together with the adaptation of the spring points by an arrangement which made the perforations of the paper disk practicable, were but a substitution of merely equivalent devices. I certainly cannot express any concurrence in that view of the two patents. But, for the purposes of this case, it is enough to say, that, if such changes were the mere use of equivalents, than the re-issued patent of 1870 embraces both forms or modes of construction, and the defendant is in no wise aided. The question of infringement will still be—Does the defendant's detector infringe either? Nor can I regard that as seriously questionable. He employs every substantial device in the detector as now made by the complainant, and described in his patent of June 6th, 1865, above recited, save only, that he places the

springs in the lid of the box or case, perforating therewith downward, in, stead of placing them under the plate or frame supporting the watch movement, and perforating therewith upward, thereby dispensing with the special form of what is called the fixed index, but for which, as an index serving to point to the hour at which the revolving dial should be set, he substitutes the mark of an arrow at the same point. Whether this change in the location of the springs is or is not an improvement, it is no part of my duty to say. There is some evidence that it is, because there is no opportunity for the entrance of dust, through the key hole, to the works of the watch. On the other hand, the partition, in the specimen of the complainant's detector produced in evidence entirely separates the complainant's springs and the key-hole leading thereto, from the watch movement, so that no dust can enter, and obviates the supposed disadvantage. Be that as it may, the mechanical construction is the same, in all that constitutes the principle or mode of operation of the instrument, and gives it efficiency as a record of the watchman's visits to the several stations. It violates, in terms, the second claim of the re-issued patent of 1870; and, if the paper dial and the revolving disk are equivalents of the drum and strip of paper around its periphery, then it violates the first claim of that patent. It also violates the first claim of the complainant's patent of June 6th, 1865. Reversing its position, so that the points perforate downward, instead of upward, cannot avoid that claim, notwithstanding, by so doing, the defendant is able to substitute the mark of an arrow for the stationary index in the complainant's instrument. As already remarked, the minor specific differences in the means by which the paper dial is held upon the revolving disk, and the like, do not affect the substance of the inventions. If they are improvements the defendant is at liberty to use them, if he obtains a license from the complainant to use his invention.

I am, also, of opinion, that the error testified to have been a mistake, by which the original patent of 1861 was granted for fourteen years from that date, cannot affect the complainant's rights under his re-issued patent of 1870, whereby that mistake was corrected. Independent of the question, whether the re-issued patent can be thus collaterally impeached, I think it sufficiently appears that the error was a proper one to be corrected by a re-issue; and, if so, then the complainant's rights are not other than those of any inventor whose first patent is void for mistake or error, which is corrected by a re-issue. He cannot recover for alleged Infringements prior to the re-issue, but may for subsequent infringements. Nor, in such case, will the notoriety or use of the patented invention, after his first application, and prior to the re-issue, render such re-issue void, although the original patent issued on such application was wholly invalid. If I was brought, however, to the conclusion, that the complainant could not sustain the

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re-issue, on the ground last referred to, it would still remain true, that the defendant's detector infringes the first claim of the patent of June 6th, 1835. The complainant is entitled to a decree awarding an injunction and account, as prayed in his bill.

[NOTE. For other cases involving this patent, see *Buerk v. Imhaeuser*, Cases Nos. 2,106–2,108; *Imhaeuser v. Buerk*, 101 U. S. 647.]

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

² [From 5 Fish. Pat. Cas. 366.]

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