

Apply that principle to the case before court, and it is clear that the knife in the respondents' machine, when considered in connection with the striker, is substantially the same thing as the cutter in the machine of the complainants when put in operation by the means employed to raise it and let it fall to perform the cutting function, without which the machine would be of no value.

Tested by these considerations, it is clear that the decree of the Circuit Court is erroneous, even if the construction of the patent is that which the respondents assume it to be, as they do not contend that the claim for the cutter used by the complainants, as embodied in the first claim of their patent, is invalid.

The decree will be reversed, and the cause remanded with directions to enter a decree in favor of the complainants, and for further proceedings in conformity with the opinion of this court; and it is

So ordered.

ELIZABETH v. PAVEMENT COMPANY.

1. A foreign patent or publication describing an invention, unless published anterior to the making of the invention or discovery secured by letters-patent issued by the United States, is no defence to a suit upon them.
2. The presumption arising from the oath of the applicant that he believes himself to be the first inventor or discoverer of the thing for which he seeks letters-patent remains until the contrary is proved.
3. The use of an invention by the inventor, or by persons under his direction, if made in good faith, solely in order to test its qualities, remedy its defects, and bring it to perfection, is not, although others thereby derive a knowledge of it, a public use of it, within the meaning of the patent law, and does not preclude him from obtaining letters-patent therefor.
4. Samuel Nicholson having, in 1847, invented a new and useful improvement in wooden pavements, and filed in the Patent Office a *caveat* of his invention, put down in 1854, as an experiment, his wooden pavement on a street in Boston, where it was exposed to public view and travelled over for several years, and it proving successful, he, Aug. 7, 1854, obtained letters-patent therefor. *Held*, 1. That there having been no public use or sale of the invention, he was entitled to such letters-patent. 2. That they were not avoided by English letters-patent for the same invention, enrolled in 1850.

5. Where contractors laid a pavement for a city, which infringed the patent of Nicholson, and the city paid them as much therefor as it would have had to pay him had he done the work, thus realizing no profits from the infringement, — *Held*, that in a suit in equity, to recover profits, against the city and the contractors, the latter alone are responsible, although the former might have been enjoined before the completion of the work, and perhaps would have been liable in an action for damages.
6. Where profits are made by an infringer by the use of an article patented as an entirety or product, he is responsible to the patentee for them, unless he can show — and the burden is on him to show it — that a portion of them is the result of some other thing used by him.
7. No stipulations between a patentee and his assignee, as to royalty to be charged, can prevent the latter from recovering from an infringer the whole profits realized by reason of the infringement.

APPEAL from the Circuit Court of the United States for the District of New Jersey.

The facts are stated in the opinion of the court.

Mr. A. Q. Keasbey and *Mr. Charles F. Blake* for the appellants.

Mr. Clarence A. Seward and *Mr. B. Williamson*, *contra*.

MR. JUSTICE BRADLEY delivered the opinion of the court.

This suit was brought by the American Nicholson Pavement Company against the city of Elizabeth, N. J., George W. Tubbs, and the New Jersey Wood-Paving Company, a corporation of New Jersey, upon a patent issued to Samuel Nicholson, dated Aug. 20, 1867, for a new and improved wooden pavement, being a second reissue of a patent issued to said Nicholson Aug. 8, 1854. The reissued patent was extended in 1868 for a further term of seven years. A copy of it is appended to the bill; and, in the specification, it is declared that the nature and object of the invention consists in providing a process or mode of constructing wooden block pavements upon a foundation along a street or roadway with facility, cheapness, and accuracy, and also in the creation and construction of such a wooden pavement as shall be comparatively permanent and durable, by so uniting and combining all its parts, both superstructure and foundation, as to provide against the slipping of the horses' feet, against noise, against unequal wear, and against rot and consequent sinking away from below. Two plans of making this pavement are specified. Both require a proper

foundation on which to lay the blocks, consisting of tarred paper or hydraulic cement covering the surface of the road-bed to the depth of about two inches, or of a flooring of boards or plank, also covered with tar, or other preventive of moisture. On this foundation, one plan is to set square blocks on end arranged like a checker-board, the alternate rows being shorter than the others, so as to leave narrow grooves or channel-ways to be filled with small broken stone or gravel, and then pouring over the whole melted tar or pitch, whereby the cavities are all filled and cemented together. The other plan is, to arrange the blocks in rows transversely across the street, separated a small space (of about an inch) by strips of board at the bottom, which serve to keep the blocks at a uniform distance apart, and then filling these spaces with the same material as before. The blocks forming the pavement are about eight inches high. The alternate rows of short blocks in the first plan and the strips of board in the second plan should not be higher than four inches. The patent has four claims, the first two of which, which are the only ones in question, are as follows:—

“I claim as an improvement in the art of constructing pavements:

“1. Placing a continuous foundation or support, as above described, directly upon the roadway; then arranging thereon a series of blocks, having parallel sides, endwise, in rows, so as to leave a continuous narrow groove or channel-way between each row, and then filling said grooves or channel-ways with broken stone, gravel, and tar, or other like materials.

“2. I claim the formation of a pavement by laying a foundation directly upon the roadway, substantially as described, and then employing two sets of blocks: one a principal set of blocks, that shall form the wooden surface of the pavement when completed, and an auxiliary set of blocks or strips of board, which shall form no part of the surface of the pavement, but determine the width of the groove between the principal blocks, and also the filling of said groove, when so formed between the principal blocks, with broken stone, gravel, and tar, or other like material.”

The bill charges that the defendants infringed this patent by laying down wooden pavements in the city of Elizabeth, N. J.,

constructed in substantial conformity with the process patented, and prays an account of profits, and an injunction.

The defendants answered in due course, admitting that they had constructed, and were still constructing, wooden pavements in Elizabeth, but alleging that they were constructed in accordance with a patent granted to John W. Brocklebank and Charles Trainer, dated Jan. 12, 1869, and denied that it infringed upon the complainant.

They also denied that there was any novelty in the alleged invention of Nicholson, and specified a number of English and other patents which exhibited, as they claimed, every substantial and material part thereof which was claimed as new.

They also averred that the alleged invention of Nicholson was in public use, with his consent and allowance, for six years before he applied for a patent, on a certain avenue in Boston called the Mill-dam; and contended that said public use worked an abandonment of the pretended invention.

These several issues, together with the question of profits, and liability on the part of the several defendants to respond thereto, are the subjects in controversy before us.

We do not think that the defence of want of novelty has been successfully made out. Nicholson's invention dates back as early as 1847 or 1848. He filed a *caveat* in the Patent Office, in August, 1847, in which the checker-board pavement is fully described; and he constructed a small patch of pavement of both kinds, by way of experiment, in June or July, 1848, in a street near Boston, which comprised all the peculiarities afterwards described in his patent; and the experiment was a successful one. Before that period, we do not discover in any of the forms of pavements adduced as anticipations of his, any one that sufficiently resembles it to deprive him of the claim to its invention. As claimed by him, it is a combination of different parts or elements, consisting, as the appellant's counsel, with sufficient accuracy for the purposes of this case, enumerates them, 1st, of the foundation prepared to exclude moisture from beneath; 2d, the parallel-sided blocks; 3d, the strips between these blocks, to keep them at a uniform distance and to create a space to be filled with gravel and tar; and, 4th, the filling. Though it may be true that every one of these ele-

ments had been employed before, in one kind of pavement or another, yet they had never been used in the same combination and put together in the same manner as Nicholson combined and arranged them, so as to make a pavement like his. The one which makes the nearest approach to it, and might, perhaps, be deemed sufficiently like to deprive Nicholson of the merit of invention, is that of John Hosking, which, in one form, consisted of alternate rows of short and long blocks, the latter partially resting on the former by their being mutually rabbeted so as to fit together. The spaces thus formed between the longer blocks, and on the top of the shorter ones, were filled with loose stone and cement or asphalt, substantially the same as in Nicholson's pavement. It would be very difficult to sustain Nicholson's patent if Hosking's stood in his way. But the only evidence of the invention of the latter is derived from an English patent, the specification of which was not enrolled until March, 1850, nearly two years after Nicholson had put his pavement down in its completed form, by way of experiment, in Boston. A foreign patent, or other foreign printed publication describing an invention, is no defence to a suit upon a patent of the United States, unless published anterior to the making of the invention or discovery secured by the latter, provided that the American patentee, at the time of making application for his patent, believed himself to be the first inventor or discoverer of the thing patented. He is obliged to make oath to such belief when he applies for his patent; and it will be presumed that such was his belief, until the contrary is proven. That was the law as it stood when Nicholson obtained his original patent, and it is the law still. Act of 1836, secs. 7, 15; Act of 1870, secs. 24, 25, 61; Rev. Stat., secs. 4886, 4887, 4920; and see Curtis, Patents, secs. 375, 375 a. Since nothing appears to show that Nicholson had any knowledge of Hosking's invention or patent prior to his application for a patent in March, 1854, and since the evidence is very full to the effect that he had made his invention as early as 1848, the patent of Hosking cannot avail the defence in this suit.

It is unnecessary to make an elaborate examination of the other patents which were referred to for the purpose of showing

an anticipation of Nicholson's invention. They are mostly English patents, and we will only advert in a summary way to such of them as seem to be most nearly relevant to the question in controversy, premising that in England the enrolment of the specification is the first publication of the particulars of a patented invention.

Stead's patent, enrolled in November, 1838, shows a plan of pavement consisting of a series of hexagonal, triangular, or square-sided blocks, standing close together on the surface of the roadway, in a layer of sand, and being a little smaller at the bottom than at the top, so as to admit a packing of sand, or pitch and sand, in the interstices between them, below the surface. Small recesses at the top, around the edges of the blocks, are suggested, apparently for giving a better hold to the horses' feet. It had no prepared foundation like Nicholson's, and no spaces filled with gravel, &c.

Parkins's patent, enrolled October, 1839, proposes a pavement to consist of blocks leaning upon each other, and connected together with a mixture of sand and bitumen, and connected by keys laid in grooves, and having grooves cut in the surface, either across the blocks or along their edges, to give the horses a better foothold. This plan exhibits no spaces to be filled with gravel or other filling.

Wood's patent, enrolled in April, 1841, shows a pavement made of adjoining blocks fitted together, but alternately larger and smaller at the top, like the frustum of a pyramid, and not parallel-sided; those larger at the top standing slightly higher than the others, so that when pounded down, or pressed by rollers or loaded vehicles, they would act as wedges, binding the whole pavement more tightly together. No filling is used on the surface, and no prepared foundation is suggested. In one form of his pavement he describes continuous grooves, the grooves being formed of blocks which are shorter than the others; and states that the groove is to be filled with concrete, coal-tar, &c., mixed with gravel or sand: but there is no foundation described for the pavement; and the description given for laying down the pavement, viz. by ramming down the taller blocks after considerable surface has been covered by the pavement, shows that the road-bed on which the blocks

are to be laid is to be a yielding one, capable of conforming itself to the under surface of the blocks in the same way as sand does to the ordinary stone pavement when the stones are rammed.

Perring's patent, enrolled January, 1843, shows a pavement consisting, in one form, of blocks leaning one upon another in rows, with strips of board between the rows, coming to within an inch or so of the top of the pavement, and the same distance from the bottom, leaving gutters for the water underneath, and the adjoining rows being connected with pins passing through the strips of board. The rows are thus separated to enable the horses' feet to get a better hold. No filling is suggested, and, indeed, would not be admissible, as the boards have no support but the pins; and no prepared foundation is required.

Crannis & Kemp's patent, enrolled Aug. 21, 1843, presents, amongst other things, first, a pavement consisting of rows of blocks adjoining each other, but each block having a small recess on one side, on the surface, to enable the horses to get a better foothold; secondly, a pavement of alternate blocks adjoining each other, but differing in width, and slightly differing in height, the top of one block being rounded off so as to make a groove next to the adjoining blocks, and the rounded blocks in one row alternating with the rectangular-topped blocks in the next row, the object of rounding off the alternate blocks being to give a foothold to the horses. This pavement is to be built on a flooring of plank, either of one or two thicknesses, but without any preparation to exclude moisture, and it has no filling in the depressions or grooves formed by rounding the alternate blocks.

A French patent, granted to Hediard in 1842, shows a pavement constructed of rows of blocks laid on a board foundation, cemented together by a thin filling (four-tenths of an inch thick) of cement or mastic, from top to bottom; no provision being made to prevent the accession of moisture from the ground below, and no strips between the rows to keep them separate from each other.

None of these pavements combine all the elements of Nicholson's, much less a combination of those elements arranged and disposed according to his plan. We think they present

no ground for invalidating his patent, and no defence to this suit.

The next question to be considered is, whether Nicholson's invention was in public use or on sale, with his consent and allowance, for more than two years prior to his application for a patent, within the meaning of the sixth, seventh, and fifteenth sections of the act of 1836, as qualified by the seventh section of the act of 1839, which were the acts in force in 1854, when he obtained his patent. It is contended by the appellants that the pavement which Nicholson put down by way of experiment, on Mill-dam Avenue in Boston, in 1848, was publicly used for the space of six years before his application for a patent, and that this was a public use within the meaning of the law.

To determine this question, it is necessary to examine the circumstances under which this pavement was put down, and the object and purpose that Nicholson had in view. It is perfectly clear from the evidence that he did not intend to abandon his right to a patent. He had filed a *caveat* in August, 1847, and he constructed the pavement in question by way of experiment, for the purpose of testing its qualities. The road in which it was put down, though a public road, belonged to the Boston and Roxbury Mill Corporation, which received toll for its use; and Nicholson was a stockholder and treasurer of the corporation. The pavement in question was about seventy-five feet in length, and was laid adjoining to the toll-gate and in front of the toll-house. It was constructed by Nicholson at his own expense, and was placed by him where it was, in order to see the effect upon it of heavily loaded wagons, and of varied and constant use; and also to ascertain its durability, and liability to decay. Joseph L. Lang, who was toll-collector for many years, commencing in 1849, familiar with the road before that time, and with this pavement from the time of its origin, testified as follows: "Mr. Nicholson was there almost daily, and when he came he would examine the pavement, would often walk over it, cane in hand, striking it with his cane, and making particular examination of its condition. He asked me very often how people liked it, and asked me a great many questions about it. I have heard him say a number of times that this was his first experiment with this pavement, and he

thought that it was wearing very well. The circumstances that made this locality desirable for the purpose of obtaining a satisfactory test of the durability and value of the pavement were: that there would be a better chance to lay it there; he would have more room and a better chance than in the city; and, besides, it was a place where most everybody went over it, rich and poor. It was a great thoroughfare out of Boston. It was frequently travelled by teams having a load of five or six tons, and some larger. As these teams usually stopped at the toll-house, and started again, the stopping and starting would make as severe a trial to the pavement as it could be put to."

This evidence is corroborated by that of several other witnesses in the cause; the result of the whole being that Nicholson merely intended this piece of pavement as an experiment, to test its usefulness and durability. Was this a public use, within the meaning of the law?

An abandonment of an invention to the public may be evinced by the conduct of the inventor at any time, even within the two years named in the law. The effect of the law is, that no such consequence will necessarily follow from the invention being in public use or on sale, with the inventor's consent and allowance, at any time within two years before his application; but that, if the invention is in public use or on sale prior to that time, it will be conclusive evidence of abandonment, and the patent will be void.

But, in this case, it becomes important to inquire what is such a public use as will have the effect referred to. That the use of the pavement in question was public in one sense cannot be disputed. But can it be said that the invention was in public use? The use of an invention by the inventor himself, or of any other person under his direction, by way of experiment, and in order to bring the invention to perfection, has never been regarded as such a use. *Curtis, Patents*, sect. 381; *Shaw v. Cooper*, 7 Pet. 292.

Now, the nature of a street pavement is such that it cannot be experimented upon satisfactorily except on a highway, which is always public.

When the subject of invention is a machine, it may be tested and tried in a building, either with or without closed doors.

In either case, such use is not a public use, within the meaning of the statute, so long as the inventor is engaged, in good faith, in testing its operation. He may see cause to alter it and improve it, or not. His experiments will reveal the fact whether any and what alterations may be necessary. If durability is one of the qualities to be attained, a long period, perhaps years, may be necessary to enable the inventor to discover whether his purpose is accomplished. And though, during all that period, he may not find that any changes are necessary, yet he may be justly said to be using his machine only by way of experiment; and no one would say that such a use, pursued with a *bona fide* intent of testing the qualities of the machine, would be a public use, within the meaning of the statute. So long as he does not voluntarily allow others to make it and use it, and so long as it is not on sale for general use, he keeps the invention under his own control, and does not lose his title to a patent.

It would not be necessary, in such a case, that the machine should be put up and used only in the inventor's own shop or premises. He may have it put up and used in the premises of another, and the use may inure to the benefit of the owner of the establishment. Still, if used under the surveillance of the inventor, and for the purpose of enabling him to test the machine, and ascertain whether it will answer the purpose intended, and make such alterations and improvements as experience demonstrates to be necessary, it will still be a mere experimental use, and not a public use, within the meaning of the statute.

Whilst the supposed machine is in such experimental use, the public may be incidentally deriving a benefit from it. If it be a grist-mill, or a carding-machine, customers from the surrounding country may enjoy the use of it by having their grain made into flour, or their wool into rolls, and still it will not be in public use, within the meaning of the law.

But if the inventor allows his machine to be used by other persons generally, either with or without compensation, or if it is, with his consent, put on sale for such use, then it will be in public use and on public sale, within the meaning of the law.

If, now, we apply the same principles to this case, the analogy will be seen at once. Nicholson wished to experiment on his pavement. He believed it to be a good thing, but he was not sure; and the only mode in which he could test it was to place a specimen of it in a public roadway. He did this at his own expense, and with the consent of the owners of the road. Durability was one of the qualities to be attained. He wanted to know whether his pavement would stand, and whether it would resist decay. Its character for durability could not be ascertained without its being subjected to use for a considerable time. He subjected it to such use, in good faith, for the simple purpose of ascertaining whether it was what he claimed it to be. Did he do any thing more than the inventor of the supposed machine might do, in testing his invention? The public had the incidental use of the pavement, it is true; but was the invention in public use, within the meaning of the statute? We think not. The proprietors of the road alone used the invention, and used it at Nicholson's request, by way of experiment. The only way in which they could use it was by allowing the public to pass over the pavement.

Had the city of Boston, or other parties, used the invention, by laying down the pavement in other streets and places, with Nicholson's consent and allowance, then, indeed, the invention itself would have been in public use, within the meaning of the law; but this was not the case. Nicholson did not sell it, nor allow others to use it or sell it. He did not let it go beyond his control. He did nothing that indicated any intent to do so. He kept it under his own eyes, and never for a moment abandoned the intent to obtain a patent for it.

In this connection, it is proper to make another remark. It is not a public knowledge of his invention that precludes the inventor from obtaining a patent for it, but a public use or sale of it. In England, formerly, as well as under our Patent Act of 1793, if an inventor did not keep his invention secret, if a knowledge of it became public before his application for a patent, he could not obtain one. To be patentable, an invention must not have been known or used before the application; but this has not been the law of this country since the passage of the act of 1836, and it has been very much qualified in Eng-

land. *Lewis v. Marling*, 10 B. & C. 22. Therefore, if it were true that during the whole period in which the pavement was used, the public knew how it was constructed, it would make no difference in the result.

It is sometimes said that an inventor acquires an undue advantage over the public by delaying to take out a patent, inasmuch as he thereby preserves the monopoly to himself for a longer period than is allowed by the policy of the law; but this cannot be said with justice when the delay is occasioned by a *bona fide* effort to bring his invention to perfection, or to ascertain whether it will answer the purpose intended. His monopoly only continues for the allotted period, in any event; and it is the interest of the public, as well as himself, that the invention should be perfect and properly tested, before a patent is granted for it. Any attempt to use it for a profit, and not by way of experiment, for a longer period than two years before the application, would deprive the inventor of his right to a patent.

The next question for consideration is, whether the defendants have infringed the patent of Nicholson. On this question we entertain no doubt. The pavement put down by the defendants in the city of Elizabeth differs in nothing from that described by Nicholson in his patent, except in the form of the strips placed between the rows of blocks, and the nicks or grooves made in the blocks to fit them. In Nicholson's description, they are simply strips of board standing endwise on the foundation. The patent describes the strips as "so arranged as to form spaces of about one inch in thickness between the rows of principal blocks. The auxiliary strip may be about half the height of the principal block; but it must not be permitted to fill up the grooves permanently and entirely, when the pavement is completed, or to perform any part of the pavement." The strips used by the defendants are substantially the same as here described, and perform the same office. The only difference in their construction and application between the blocks is, that they are bevelled, by being made wider at the top than at the bottom,—the extra width of the top part being let into a notch or groove in the blocks. If they perform the additional office, of partially sustaining the

pressure of the blocks and locking them together, they do not any the less perform the office assigned to them in Nicholson's pavement. Their peculiar form and application may constitute an improvement on his pavement, but it includes his.

It is objected, that the blocks of the Elizabeth pavement have not parallel sides, as prescribed in Nicholson's patent, by reason of the notch or groove in the side, into which the strips are fitted; but this notch or groove does not take from the blocks their general conformity to the requisition of the patent. They are parallel-sided blocks, with a groove made in the lower part to receive the edges of the strips. The parallel-sided blocks described in Nicholson's patent were probably intended to distinguish them from such blocks as those described in Stead's patent, which were hexagonal and triangular in form; or those in Wood's patent, which were of a pyramidal shape, the opposite sides being at an angle with each other. As contradistinguished from these, both the Nicholson blocks and those used by the appellants are properly denominated blocks with parallel sides.

The next subject for consideration is the form and principles of the decree rendered by the court below. The bill prayed a decree for damages and profits; but, as it was filed before the passage of the act of July 8, 1870, which first authorized courts of equity to allow damages in addition to profits, the court below correctly held that a decree for profits alone could be rendered. It is unnecessary here to enter into the general question of profits recoverable in equity by a patentee. The subject, as a whole, is surrounded with many difficulties, which the courts have not yet succeeded in overcoming. But one thing may be affirmed with reasonable confidence, that, if an infringer of a patent has realized no profit from the use of the invention, he cannot be called upon to respond for profits; the patentee, in such case, is left to his remedy for damages. It is also clear that a patentee is entitled to recover the profits that have been actually realized from the use of his invention, although, from other causes, the general business of the defendant, in which the invention is employed, may not have resulted in profits,—as where it is shown that the use of his invention produced a definite saving in the process of a manufacture. *Mowry v. Whit-*

ney, 14 Wall. 434; *Cawood Patent*, 94 U. S. 695. On the contrary, though the defendant's general business be ever so profitable, if the use of the invention has not contributed to the profits, none can be recovered. The same result would seem to follow where it is impossible to show the profitable effect of using the invention upon the business results of the party infringing. It may be added, that, where no profits are shown to have accrued, a court of equity cannot give a decree for profits, by way of damages, or as a punishment for the infringement. *Livingston v. Woodworth*, 15 How. 559. But when the entire profit of a business or undertaking results from the use of the invention, the patentee will be entitled to recover the entire profits, if he elects that remedy. And in such a case, the defendant will not be allowed to diminish the show of profits by putting in unconscionable claims for personal services or other inequitable deductions. *Rubber Company v. Goodyear*, 9 Wall. 788. These general propositions will hardly admit of dispute; and they will furnish us some guide in deciding the questions raised in this case.

Only the defendants have appealed; and the errors assigned by them on this branch of the case are the following:—

1st, "The court erred in decreeing that the complainants do recover of the defendants, the city of Elizabeth and George W. Tubbs, the sums set forth in the decree, because the master did not find that said defendants had made any profits, which failure to find was not excepted to by complainants, and because no proof was offered by complainants of any profits whatever made by said defendants."

2d, "The court erred in finding that the profits received by the defendants were the fruits of the use of the devices described and claimed in the first and second claims of the Nicholson patent,—there being no proof of any advantage derived by the defendants from such use of the Nicholson devices,—or was incident to the use of the devices of the Brocklebank & Trainer patent. The failure to specifically show such profits makes the recovery nominal."

3d, "The court erred in decreeing the whole amount of profits made by the New Jersey Wood-Paving Company in the construction of the pavements referred to in the master's

report. Whereas, if any profits ought to have been decreed, they should have been confined to the amount of the license for a royalty which the complainants had been accustomed to receive, and were bound by the terms of their title to accept, from any party constructing such pavement in New Jersey."

We will consider these assignments in order.

The first seems to be well taken. The party who made the profit by the construction of the pavement in question was the New Jersey Wood-Paving Company. The city of Elizabeth made no profit at all. It paid the same for putting down the pavement in question that it was paying to the defendant in error for putting down the Nicholson pavement proper; namely, \$4.50 per square yard. It made itself liable to damages, undoubtedly, for using the patented pavement of Nicholson; but damages are not sought, or, at least, are not recoverable, in this suit. Profits only, as such, can be recovered therein. The very first evidence which the appellees offered before the master was, the contracts made between the city and the other defendants for the construction of the pavement; and these contracts show the fact that the city was to pay the price named, and that any benefit to be derived from the construction of the pavement was to be enjoyed by the contractors.

It is insisted that the defendants, by answering jointly, admitting that they were jointly co-operating in laying the pavement, precluded themselves from making this defence. We do not think so. That admission is not inconsistent with the actual facts of the case, to wit, that this co-operation consisted of a contract for having the pavement made, on one side, and a contract to make it, on the other; and is by no means conclusive as to which party realized profit from the transactions. The complainants themselves, by their own evidence, showed that the contractors and not the city realized it.

The appellant, Tubbs, is in the same predicament with the city. Several of the contracts were made in his name, it is true; but they were made in behalf of the New Jersey Wood-Paving Company, for whose use and benefit the contracts were made and completed. Tubbs only received a salary for his superintendence.

The next assignment of error, based on the hypothesis that the profits received by the defendants were not the fruits of the use of Nicholson's invention, appears to us destitute of foundation. This matter is so fully and ably presented in the opinion of the Circuit Court as to require but little discussion from us. The Nicholson pavement was a complete thing, consisting of a certain combination of elements. The defendants used it as such, — the whole of it. If they superadded the addition made to it by Brocklebank & Trainer, they failed to show that such addition contributed to the profits realized. The burden of proof was on them to do this. The evidence, if it shows any thing, tends to prove that the addition diminished the profits instead of increasing them; but it could not have had much influence either way, inasmuch as the evidence shows that the profit made on this pavement was about the same as that made on the pavement of Nicholson, without the improvement. The appellants, however, obtained an allowance of nearly \$14,000 for the royalty paid by them for the use of the Brocklebank & Trainer patent. This allowance went so far in diminution of the profits recovered.

Equally without foundation is the position taken by the appellants, that other pavements, approaching in resemblance to that of Nicholson, were open to the public, and that the specific difference between those pavements and Nicholson's was small, and that, therefore, the Nicholson patent was entitled to only a small portion of the profits realized. Nicholson's pavement, as before said, was a complete combination in itself, differing from every other pavement. The parts were so correlated to each other, from bottom to top, that it required them all, put together as he put them, to make the complete whole, and to produce the desired result. The foundation impervious to moisture, the blocks arranged in rows, the narrow strips between them for the purposes designated, the filling over those strips, cemented together, as shown by the patent, — all were required. Thus combined and arranged, they made a new thing, like a new chemical compound. It was this thing, and not another, that the people wanted and required. It was this that the appellants used, and, by using, made their profit, and prevented the appellee from making it. It is not the case

of a profit derived from the construction of an old pavement together with a superadded profit derived from adding thereto an improvement made by Nicholson, but of an entire profit derived from the construction of his pavement as an entirety. A separation of distinct profit derived from Brocklebank & Trainer's improvement, if any such profit was made, might have been shown; but, as before stated, the appellants failed to show that any such distinct profit was realized.

We have looked over the various items claimed by the appellants by way of reduction of profits, and disallowed by the master and by the court below, and we are satisfied with the result which they reached. The gross profits of the work over actual expenses for material and labor were conceded to be \$123,610.78. The total deductions claimed before the master amounted to \$139,875.63, which would have been considerably more than sufficient to absorb the whole profits. The master and the court allowed deductions to the amount of \$48,618.62, which reduced the profits to \$74,992.16, for which amount the decree was rendered. The deductions overruled and disallowed amounted to \$91,257.85. Of these, \$31,111.92 was a profit of twenty per cent, which the appellants claimed they had a right to add to the actual cost of lumber and other materials and labor. It is only necessary to state the claim to show its preposterousness. Other items were one of \$7,000 for salaries, and another of \$3,000 for rent, for a period of time that occurred after the work was completed. Another item was one of \$2,675.09 for the cost of a dock which the parties built on their own land; and another of \$25,000, paid for an interest in the Brocklebank & Trainer patent. As the appellants still hold these properties, we cannot well conceive what the purchase of them has to do in this account. They also claim \$15,241.33 for that amount abated from the assessments of some of their stockholders who owned lands along the streets paved. As this was a gratuity which they made to themselves, they cannot claim a deduction for it here. The last item was \$6,572.75, claimed to have been profits made upon other work, which were allowed to be included in these contracts. As this is not explained in any satisfactory way, we think the master did right in rejecting it.

We are entirely satisfied with the disposition made of these various items, and with the correctness of the decree, so far as the statement of the account is concerned.

But the appellants assign a third error. They insist that the appellee, as assignor of the Nicholson patent for the State of New Jersey (which was the ground of its title), was entitled to recover only thirty-one cents per square yard in any event,—being limited to that charge for the use of the patent by the terms of the assignment; sixteen cents of which was to be paid to the proprietors, and fifteen to be retained by the appellee.

This matter is quite satisfactorily disposed of in the opinion of the court below. The stipulation was between third parties, and the appellants have no concern in it. It only applied, by its terms, to cases where, by reason of the decisions of the courts, or otherwise, it should be found impracticable for the appellees to obtain contracts for laying the pavement in any town or city, or where the work of constructing pavements should be required by law to be let under public lettings, open to general competition. The object was to secure as extensive a use of the pavement as possible, as thereby the emoluments of the proprietors would be increased. But the assignment gave to the appellee the exclusive right in the patent for the State of New Jersey. It did not prohibit the appellee from constructing the pavements itself, if it could obtain contracts for doing so, and making thereby any profit it could. There was no obstacle to its doing this in the city of Elizabeth. On the contrary, it did obtain from the city large contracts, and would have obtained more if the appellants had not interfered. There is nothing in this state of things which entitles the latter, after making large profits from the use of the invention, to refuse to respond therefor. It is not for them to say that the hands of the appellee are tied by its contract with its grantor. This would be to take advantage of their own wrong. Whatever bearing the stipulation in the assignment may have on the measure of damages, in an action at law, it affords no defence to the appellants when called upon to account for the profits which they have wrongfully made by pirating the invention.

We think there is no error in the decree of the Circuit Court, except in making the city of Elizabeth and George W. Tubbs

accountable for the profits. As to them a decree for injunction only to prevent them from constructing the pavement during the term of the patent, should have been rendered; which, of course, cannot now be made. As to the New Jersey Wood-Paving Company, the decree was in all respects correct. A decree for costs in the court below should be awarded against all the defendants.

The decree of the Circuit Court, therefore, must be reversed with costs, and the cause remanded to said court with instructions to enter a decree in conformity with this opinion; and it is

So ordered.

ALLIS *v.* INSURANCE COMPANY.

1. Where it can be seen that no harm resulted to the appellant, this court will not reverse a decree on account of an immaterial departure from the technical rules of proceeding.
2. The statute of Minnesota declares that, in the foreclosure of a mortgage by a proceeding in court, the debtor, after the confirmation of the sale, shall be allowed twelve months in which to redeem, by paying the amount bid at the sale, with interest. Where, in a foreclosure suit, a decree, passed by a court of the United States sitting in that State, ordered the master, on making the sale, to deliver to the purchaser a certificate that, unless the mortgaged premises were, within twelve months after the sale, redeemed, by payment of the sum bid, with interest, he would be entitled to a deed, and should be let into possession upon producing the master's deed and a certified copy of the order of the court confirming the report of the sale, — *Held*, that the decree gave substantial effect to the equity of redemption secured by the statute.

APPEAL from the Circuit Court of the United States for the District of Minnesota.

The facts are stated in the opinion of the court.

Mr. H. J. Horn for the appellant.

Mr. L. S. Dixon, contra.

MR. JUSTICE MILLER delivered the opinion of the court.

This is an appeal from a decree of the Circuit Court for the District of Minnesota, ordering a sale of land in a proceeding to foreclose a mortgage. The appellant, who was defendant