

signed, that he had caused the defendant to be discharged from custody,

It is ordered that the petition be dismissed, at the cost of the petitioner.

MERGENTHALER LINOTYPE CO. v. PRESS PUB. CO. et al.

(Circuit Court, S. D. New York. July 21, 1893.)

1. PATENTS FOR INVENTIONS—TYPESETTING MACHINE—INFRINGEMENT.

Letters patent Nos. 313,224 and 317,828, issued, respectively, March 3, 1885, and May 12, 1885, to Ottman Mergenthaler, for "improvements in machines for producing printing bars," consisting in part of a combination of a series of independent matrices representing characters, holders or magazines for said matrices, finger keys representing the respective characters, intermediate mechanism to assemble the matrices, and a casting machine to co-operate with the assembled matrices, are for inventions of unusual merit, and, in view of the prior art, entitled to liberal construction, and are infringed by the Rogers machine, which, while in some respects an improvement, operates on the same principle, contains the same general features, and produces substantially the same results.

2. SAME—FAULT IN ORIGINAL MACHINE.

The fact that the machine, when first produced, failed to justify perfectly, which fault was remedied, and perfect justification produced by improved machines subsequently made, is no reason for denying relief to the original patentee.

In Equity. Action by the Mergenthaler Linotype Company against the Press Publishing Company and others for infringement of letters patent. Decree for plaintiff.

For opinion on motion for preliminary injunction, see 46 Fed. Rep. 114.

Frederic H. Betts, for complainant.

M. B. Philipp, Leonard E. Curtis, and George H. Lothrop, for defendants.

COXE, District Judge. This is an equity action for infringement based upon two letters patent granted to Ottman Mergenthaler for "improvements in machines for producing printing bars." The first of these patents, No. 313,224, is dated March 3, 1885, and the second, No. 317,828, is dated May 12, 1885.

It is insisted by the complainant that the principal invention covered by these patents is fundamental, that it has revolutionized the art of printing and is the first practical advance in the art since the days of Guttenberg. The machine which embodies this invention produces a line of type cast in a solid bar, complete in itself and ready for printing, and, as to its printing face, possessing all the characteristics of a line produced by the hand of the compositor in the old laborious way. The advantages of the new method over the old are so obvious and so numerous that it is unnecessary to attempt their enumeration. They are conceded on all sides; by men of science, and men of labor, by editors, by compositors and by the defendants themselves. A minute and accurate description of the ingenious and complicated machine of the patents would

extend this opinion far beyond appropriate limits. It suffices to say that the operator, by playing upon finger keys, is able to assemble a line of intaglio type as desired. This line is locked in position so as to close the open face of a mold into which type metal is injected. In this way a type bar is cast, of the proper height and length, containing a complete and properly adjusted line of words. The line is then unlocked and the matrices composing it are returned to their original positions. All of these functions are performed automatically. The inventor says regarding the invention of the first patent, No. 313,224, that it—

"Is directed to the rapid and economical production of letterpress printing, and relates to a machine to be driven by power, and controlled by finger keys, adapted to produce printing forms or relief surfaces ready for immediate use, thus avoiding the usual operation of typesetting, and also the more recent plan of preparing by machinery matrices from which to cast the forms. By the use of my machine the operator is enabled to produce with great rapidity printing bars bearing in relief the selected characters in the sequence and arrangement in which they are to be printed. In short, the machine will produce printing forms or surfaces properly justified, and adapted to be used in the same manner and with precisely the same results as the printing forms composed of movable type. My machine embraces two leading groups of mechanism: First, those which form a temporary and changing matrix representing a number of words; and, second, those by which molten or plastic material is delivered to the matrix and discharged therefrom in the form of printing bars."

The claims involved are the forty-seventh and the sixty-third. They are as follows:

"(47) In a machine for producing stereotype bars the combination, substantially as hereinbefore described, of the changeable or convertible matrix, the mold co-operating therewith, and appliances, substantially such as shown, for melting metal and for forcing the same into the mold." "(63) In combination with a mold open on two sides, a series of moveable matrices grouped in line against one side of the mold, a pot or reservoir acting against the opposite side of the mold, and a pump to deliver the molten or plastic material into the mold, as described and shown."

Less than two months after the application for this patent was filed the second patent, No. 317,828, was applied for. The machine of the second patent is an obvious improvement upon that of the first and for this reason it was the machine that found favor with the public. I cannot doubt, however, that the machine of the first patent was operative and able to do the work described by the patentee. The machine of the second patent, though operating upon the same general principle as the first, differs in several important details, the most radical change being the substitution of independent matrices for the connected matrices of the first patent. In the former the matrices were arranged one above the other on the edge of a long bar, in the latter each is independent of every other, and all are stored in appropriate holders from which they are released by the finger keys. If, for instance, the operator desires to form the word "and," he touches the keys bearing, respectively, the letters a-n-d, and corresponding matrices are immediately discharged and carried in proper order to a common assembling point. Regarding the machine of this patent the inventor says:

"My invention relates to a machine in which a series of loose independent matrices or dies each containing one or more characters, and a series of blank dies for spacing purposes, are combined with finger keys and intermediate connecting and driving mechanism in such manner that when power is applied to the machine and the preferred finger keys actuated the matrices will be assembled or composed in line. A mold of suitable form is arranged to be operated in connection with the assembled dies and with means for supplying molten metal or its equivalent, whereby a printing bar may be formed in the mold against the assembled matrices, so as to bear on its edge in relief the characters represented by said matrices."

The first claim only is involved. It is as follows:

"(1) In a machine for producing printing bars, the combination of a series of independent matrices each representing a single character or two or more characters to appear together, holders or magazines for said matrices, a series of finger keys representing the respective characters, intermediate mechanism, substantially as described, to assemble the matrices in line, and a casting mechanism, substantially as described, to co-operate with the assembled matrices."

A broad construction was given this claim when the patent was considered by this court upon a motion for a preliminary injunction. 46 Fed. Rep. 114.

The defenses are the usual ones—lack of novelty and invention and noninfringement.

The two patents will hereafter be considered together as they relate to the same fundamental invention.

The inventor says in the description of No. 313,224:

"I also believe myself to be the first to combine with a changeable or convertible matrix—that is to say, a matrix composed of a series of dies or individual matrices adapted for transposition or rearrangement, a mold and a casting mechanism."

In No. 317,828, he says:

"I believe myself to be the first to combine with independent disconnected matrices each bearing a single character, finger keys, intermediate mechanism for placing the designated matrices in line, and a casting mechanism which co-operates with the line of assembled matrices in such manner as to take a single cast from the entire line; and it is to be distinctly understood that my invention covers such combination in any form the equivalent of that herein detailed."

It is thought that these assertions are well founded—that he was the first to do both of these things. His patents are, therefore, entitled to a liberal construction. Machines operated by finger-keys, the object of which was "to cast, dress, and set up type in a continuous line for solid matter or book or newspaper work, the line being afterwards divided off, justified, and set up in column, as usual," were old. So were machines "by means of which types or dies for printing can be set up in rows in the requisite succession by means of pivoted keys, and on which provision is made for instantly and simultaneously redistributing all the characters to their proper places by a slight movement of the distributing frame." So were machines designed "mechanically to arrange an alphabet or alphabets of dies which dies shall form impressions in the material for a mold corresponding with the composition of matter desired in a stereotype, and, second, in the same or similar mechanism with a substitution of female dies, and other appliances,

changes, and attachments made necessary by such substitution of dies, and the work to be done, as shall enable the operator to produce directly the stereotype instead of the mold." These three machines—those of Wescott, Morgans and Gally—are the nearest approximation to the Mergenthaler machine to be found in the prior art. By means of them single type were cast automatically, impressions from intaglio type were made in soft metal and stereotype molds or plates of soft material were produced. Neither singly nor combined could they do the work of the Mergenthaler machine. The skilled artisan would study them in vain for any suggestion of a "linotype." The idea is not there. The patents, then, are not anticipated. The court has no doubt that it involved invention to construct the patented machine. No one who has seen this wonderful machine, which, in operation seems almost human, can doubt the truth of this proposition. The defendants, evidently, do not doubt it for their main effort is to secure a construction of the claims so narrow that their machine will escape infringement. As already seen the court is of the opinion that nothing in the prior art requires a narrow construction of the claims. Complainant is entitled to liberal treatment at the hands of a court of equity and to a construction broad enough to hold as infringers all who produce "a linotype" by similar or equivalent combinations.

This general statement of opinion as to the scope of the patents eliminates from the discussion many of the minor criticisms urged by the defendants. The proposition upon which they appear to lay the greatest stress is that neither patent describes or claims an operative machine because neither is capable of "perfect justification," viz.: making lines of exactly the same length. Their contention proceeds upon the untenable proposition that the machine which produced the "linotype" was valueless because it did not produce an absolutely perfect "linotype." Such a proposition, if sustained, would condemn to obscurity some of the greatest works of human genius. A great poem may be marred because the meter halts at times, but it is a great poem still. Even the masterpiece of Rubens was improved by the touch of his pupil, Van Dyck. It is true that the first specimens produced by the Mergenthaler machine are wanting in "perfect justification." They did show, however, that a great advance had been made in the art of printing even though the words were not spaced apart so as to be mathematically uniform at the extreme ends. The defect was one that was at once suggested by printers, and the patentee and others immediately set to work to remedy it. This was not a difficult task and was soon accomplished. As was said by the public printer in writing of the invention as early as May, 1884:

"Even in this short time during which I have been familiar with the matter, the progress made has been wonderful, and in my judgment, but little remains, and that merely mechanical, to make the invention perfect."

Concede that the machine when first produced was not perfect and that to Schuckers belongs the credit of producing the spacers

which made it perfect. Cui bono? It would certainly be a novel doctrine to deny to an inventor the fruits of a broad invention because the machine which first embodied it was rudimentary in character and failed to do as good work as improved machines made subsequently. None of the great inventions could survive such a test. Ten years after the invention of Howe, the machine first made by him would hardly have satisfied the least exacting sewing woman. The Dodds and Stephenson locomotive would, only a short time after its construction, have been discarded as behind the age even by the savages of Tasmania. The telephone of Bell is not the perfected telephone of commerce; the Morse telegraph is looked upon to-day as an interesting antique. And yet, it would be an unheard-of proposition to withhold from these illustrious men the credit they deserve because their machines were crude at first and were improved afterwards. The lines in the copy produced by the first Mergenthaler machine were liable to vary by one sixty-fourth of an inch. This was not perfect and printers complained. The defect was remedied by substituting expansible space bars for the old-fashioned unadjustable space bars so that the line of matrices could be pressed out to the end with perfect accuracy and lines of type cast therefrom of exactly the same length. When the third Mergenthaler patent, which claims expansible spacers, was under consideration on the motion for a preliminary injunction the defendants insisted that it required no invention to introduce these spacers, that their use would have been suggested to the skilled mechanic by several references to the prior art. Now, on the other hand, it is argued that the invention begins and ends with the space bars. These space bars are, unquestionably, an important adjunct to the combination. They round out the invention and make it perfect. It may also be conceded that they are ingenious devices requiring invention to produce, and that the credit for them belongs to Schuckers and not to Mergenthaler; but to assert that the former is the pioneer inventor and the latter an unsuccessful bungler seems to the court very far from the truth. Mergenthaler produced the "linotype," Schuckers—if he made the spacers—improved it, but Schuckers was no more its originator than a proof-reader is the author of a book whose errors of spelling and punctuation he has corrected.

Do the defendants infringe? The introduction of the expansible space bars and the natural evolution of the art have produced some obvious changes in the construction of "linotype" machines. The defendants contend that because they have introduced these changes and made improvements they do not infringe. It is plain that if the claims are to be limited to the precise apparatus described and shown the defendants do not infringe. It is equally clear that they do infringe if the claims are liberally construed. For reasons already stated complainant is entitled to the latter construction.

The defendants use the so-called Rogers machine which was first introduced to the public in 1890. One of the expert witnesses for the complainant describes it as follows:

"The Rogers machine is a mechanism for producing the same character of type bar as the Mergenthaler machine, and intended for identically the same use and constructed to reach the same ends. In the machine there are a series of female or intaglio type, each one cut into the side of a bar, and these bars are strung upon rods, which all incline from the point where the matrix bars are stored downward to the point where the matrix bars are to be assembled. By pressing on finger keys these matrix bars can be caused individually to leave the position where they are stored, and can run down upon the incline rod, and it will be seen that the bars are assembled in any desired order in that part of the machine which is adjacent to the casting mold. After the bars, with the requisite matrices upon them, have been assembled in line, the mold, can be made to co-operate with the bar in such a way that the bars close one of the faces of the mold, and so that, when molten metal is cast into the mold, the resulting casting will have on that face adjacent to the bars male characters formed thereon, by reason of the molten metal having been retained in the mold by the matrix bars, which closed one of its faces, and which presented to the metal the intaglio type or matrices arranged in the desired order. A melting pot is shown in which the molten metal is held, and where it is kept fluid, and a pump is represented as in this pot for the purpose of injecting the metal from the reservoir into the mold."

The Rogers machine is smaller, cheaper and simpler than the machine of the patent. It is probably fair to say that it is an improvement, but it is manifest that it operates upon the same principle and contains the same general features as the Mergenthaler machine. It produces the same line of type from the same material for the same purposes and in substantially the same way. It has the changeable or convertible matrix, the mold co-operating therewith and appliances for melting metal and forcing it into the mold. It has also a mold open on two sides, a series of movable matrices grouped in line against one side of the mold, a melting pot against the opposite side of the mold and a pump to force the molten material into the mold. It also has a series of independent matrices, each containing one or more characters, a series of blank spacers, combined with finger keys, a mold and means for supplying molten metal whereby a printing bar may be formed against the assembled matrices. In short, the defendants' machine has all the elements of the three claims in controversy, or their equivalents, and accomplishes all the results of the combinations of the claims in identical or similar manner.

The differences pointed out by the defendants have not been overlooked. There is no doubt that they exist, but for the reasons stated they are not thought to be material. Mergenthaler has made an invention of unusual merit and is entitled to reap the reward.

It follows that the complainants are entitled to a decree for an injunction and an accounting.

THE HAYTIAN REPUBLIC.

UNITED STATES v. THE HAYTIAN REPUBLIC.

(District Court, D. Oregon. August 8, 1893.)

No. 3,403.

1. ADMIRALTY PLEADING—EXCEPTIONS TO LIBEL—WAIVER OF OBJECTIONS.

Where, after the argument of exceptions to a libel, a brief is filed, in which, for the first time, the point is made that the facts set up in the exceptions cannot be thus raised, but are available only by answer, the court will consider the questions presented upon the assumption made by both parties in the argument, that such facts were properly presented, without determining the technical question of pleading.

2. ADMIRALTY PRACTICE — BREACH OF REVENUE LAWS — BUT ONE LIBEL FOR SEVERAL OFFENSES.

The United States is entitled to but one decree of forfeiture against a vessel for several past violations of the revenue laws, and where a vessel has been once libeled for several such violations, and released on bond, she is not thereafter subject to a second seizure for alleged violations committed during the same period as those for which she has already been seized. *The Langdon Cheves*, 2 Mason, 59, distinguished.

3. SAME—AMENDMENT OF LIBEL—DISCOVERY OF NEW OFFENSES.

The United States, upon finding evidence of violations of the revenue laws committed by a vessel during the same period as those for which she has already been libeled, may avail themselves of such discovery by amending the libel.

4. SAME—ILLEGAL RELEASE BOND—NEW LIBEL.

Where a vessel libeled for violation of the revenue laws is released upon a bond of doubtful legality, the United States cannot maintain a second libel for other violations of the revenue laws, committed during the same period as those for which the first libel was filed, without dismissing the first proceeding.

5. SAME—RELEASE BOND—VALIDITY.

A release bond for a vessel seized for violation of the revenue laws, which contains no condition, and is for double the value of the vessel as if drawn under Rev. St. § 941, is valid, under section 938, as an obligation to pay at least the value of the vessel, since the condition is contained in the statute.

6. SAME—CRIMES—LANDING CHINESE LABORERS.

In a libel by the United States against a vessel for breach of the revenue laws, an allegation that her master attempted to land Chinese laborers at a port of the United States does not charge a crime.

7. SAME—MATTER PLEADED IN ABATEMENT—PRIOR SEIZURE IN ANOTHER DISTRICT.

A seizure of a vessel for violations of the revenue laws, and her release on bond, may be pleaded in abatement of a subsequent libel in another district for similar offenses committed during the same period as those for which the first libel was filed.

In Admiralty. Libel by the United States against the steamer Haytian Republic for breach of the revenue laws. Heard on claimant's exceptions to the libel. Exceptions sustained.

John M. Gearin, Sp. Asst. U. S. Atty.

C. A. Dolph, W. H. Gorham, and O. F. Paxton, for claimant.

BELLINGER, District Judge. On May 28, 1893, the steamship Haytian Republic was seized at Seattle, in the district of Washing-