

ROGERS TYPOGRAPH CO. v. MERGENTHALER LINOTYPE CO.

(Circuit Court of Appeals, Third Circuit. December 3, 1894.)

No. 11.

1. PATENTS—LINOTYPE MACHINE—INFRINGEMENT.

Letters patent Nos. 313,224 and 317,828, issued, respectively, March 3, 1885, and May 12, 1885, to Ottmar Mergenthaler for "improvement 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.

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

This was a bill by the Mergenthaler Linotype Company against the Rogers Typograph Company for an injunction. There was a decree for complainant in the court below, from which decree respondent appeals.

George H. Lothrop and M. B. Philipp, for appellant.  
Frederic H. Betts, for appellee.

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

ACHESON, Circuit Judge. This suit was upon two letters patent of the United States granted to Ottmar Mergenthaler,—No. 313,224, dated March 3, 1885, and No. 317,828, dated May 12, 1885. The inventions relate to a machine for producing printing bars. Each patent describes and shows mechanisms whereby matrices, in any desired association of characters, are assembled in a line, such line of matrices brought into proper relation with a mold of the size required for a line of type of predetermined length, and a cast made in the mold, forming a printing bar bearing in relief the characters impressed in the matrices. The patented mechanisms produce a series of lines of type, which can be arranged into columns, and thus hand composition by individual type is dispensed with.

The specification of the first patent contains the following statement:

"This invention is directed to the rap'd and economical production of letter-press 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."

In the form of machine shown by the earlier patent, the matrices are impressed on the edges of long bars, or connected strips, each bar or strip bearing a complete set of characters; and there are also plain bars intended for use as "spaces." The machine is provided with a set of finger keys, and the operator, by playing upon the keyboard, and successively selecting the desired characters and spaces, is enabled to set up a line of the required length. In the machine of the later patent, a series of disconnected, separate, and independent matrices, each bearing a single character, are stored in holders, and, by the operation of the finger keys and intermediate mechanism, can, one by one, and in any desired order, be released from the holder, and dropped down and carried into the required line.

The claims here involved are the forty-seventh and sixty-third of the first patent (No. 313,224) and the first claim of the second patent (No. 317,828). These claims are in the following words:

"(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 forcing the same into the mold."

"(63) In combination with a mold open on two sides, a series of movable 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."

"(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."

The court below, following the decision of Judge Coxe in the case of *Mergenthaler Linotype Co. v. Press Pub. Co.*, 57 Fed. 502, sustained these claims, and adjudged that the defendant (the appellant here) had infringed the same.

The position advanced by the appellant, and mainly relied on for the reversal of the decree, is that, if these claims are construed with reference to the state of the art and the proceedings in the patent office, the appellant's machine does not infringe. The proofs bear-

ing on that proposition have received our serious consideration. It is certainly true that line bars, such as are commonly used in newspaper headings, were old. Nor was it novel to assemble a line of type or matrices by mechanism actuated by finger keys. Neither was it new mechanically to cast single type successively. The Morgan patent of 1870, which is for a mechanical typesetter, states that, instead of type, dies may be used, and an impression therefrom made on the surface of a soft metal plate. Westcott's patent of 1871 shows and describes a machine in which, by the operation of the proper finger key, a matrix having a single character on its face is caused to close the end of a self-adjustable mold, and a type having the desired single letter is produced. Gally's patent of 1872 shows a series of types or matrices carried by flexible bands of metal, which bands are manipulated by finger keys so as to bring the required characters into line, when they may be impressed on a sheet of yielding material, line by line. But Gally says nothing about casting from a line of assembled matrices, and we fail to discover in his specification anything suggestive of that idea. Describing this part of his invention, he states that it—

"Consists—First, in a mechanism which shall mechanically arrange and rearrange 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."

It is quite plain that all that Gally contemplated or disclosed was the production, by his peculiar method, of stereotype molds or stereotype plates.

The other patents in evidence we need not discuss. Those mentioned are the appellant's chief reliance. None of the patents, however, anticipates Mergenthaler, or detracts from the importance of his inventions here in question. We are entirely satisfied that Mergenthaler was the first to combine with mechanism for forming a matrix, composed of a series of dies adapted for transposition or rearrangement, a mold and a casting mechanism. The proofs demonstrate that his inventions embodied in the claims under consideration have effected a great advance in the printer's art. Mechanical typesetting had not proved a practical success. Mergenthaler was the first to produce a practical machine by which ordinary hand composition is superseded. Abandoning the idea of printing from single-letter type, he provided therefor a much cheaper and far better substitute. The use of cast lines of type, as the unit of composition, instead of individual type, is an improvement in the art of unsurpassed value. Not only, then, are the combinations novel, but the result is entirely new and highly beneficial. In our judgment, these inventions are fundamental, coming within the principle of the ruling in *Morley Mach. Co. v. Lancaster*, 129 U. S. 263, 9 Sup. Ct. 299. We

find nothing in the prior art to limit these claims, or to deprive the patentee of the benefit of a liberal construction thereof.

Did anything occur in the patent office, with reference to Mergenthaler's application for patent No. 313,224, requiring the limited construction of these claims upon which the appellant insists? Now, in the first place, it is to be observed that the forty-seventh claim of that patent was neither rejected nor altered. It was allowed just as originally framed. True, the application did contain another claim, numbered 68, which was rejected upon a reference to Gally's patent, and thereupon was erased. This disallowed claim read as follows:

"(68) In a machine for producing printing surfaces, the combination, substantially as described, of a series of finger keys representing the letters or characters, a convertible or changeable matrix controlled by said keys, and a casting mechanism co-operating with said matrix."

It will be perceived, however, that this claim did not mention a mold at all, whereas "the mold co-operating" with the matrix, "and appliances, substantially such as shown, for melting metal and forcing the same into the mold," are express elements of claim 47. We are unable to see that the rejection and abandonment of the proposed claim necessitate or warrant the inference that the mold of claim 47 must be of the precise form described and shown in the patent. The only legitimate effect attributable to this action of the office and the acquiescence of the applicant therein is that the claims of Mergenthaler shall not be so construed as to include Gally's apparatus. These remarks are applicable also to the changes made (upon the reference to Gally) in the sixty-third claim, whereby the mold was limited to one "open on two sides," the words, "a series of movable matrices grouped in line against one side of the mold," were substituted for "a series of metal matrices grouped side by side against the open side of the mold," and the clause, "means substantially as described for supplying the same with molten or plastic material," was changed to "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." In this connection, it must be remembered that the invention of Gally and the inventions of Mergenthaler relate to machines of different kinds. In fact, these two machines differ radically both in construction and purpose. The idea of producing printing bars is entirely foreign to Gally's patent, and he describes no "casting mechanism," in Mergenthaler's sense of the term. Nor is Gally's mold at all analogous to the mold of Mergenthaler. Gally's is a stereotype mold made out of the sheet of soft matrix-forming material.

We cannot assent to the suggestion that Mergenthaler's claim 47 is to be construed as confined to the particular matrix and the extensible mold shown in his patent, because of the language, "the changeable or convertible matrix," and "the mold co-operating therewith." It will be noted that in claim 63 the language is "a

mold." The difference in phraseology is quite unimportant, for in each instance the claim covers the designated thing "substantially as described."

Upon the whole case, in view of the primary character and great importance of Mergenthaler's inventions, we are of the opinion that his claims here involved are to be interpreted liberally, and the range of equivalents covered thereby correspondingly extended. Having reached that conclusion, we need say little upon the question of infringement. Undoubtedly, there are differences between the machines shown by the Mergenthaler patents and the defendant's machine. Thus, while the mold described in the patents is expansible and contractile, the defendant's mold is rigid and immovable; and the matrices of the defendant's machine are supplemented by expansible space bars, in lieu of the nonexpansible space bars of Mergenthaler. Yet, notwithstanding these changes and some others, the defendant really has copied the substance of the inventions in different forms. In principle the two machines are alike, and they accomplish the same result. The defendant's machine is a machine for producing printing bars, and it has all the elements of the above-recited three claims of the Mergenthaler patents, or the equivalents thereof, combined in substantially the same way, and for the same purpose. We do not overlook the fact that Mergenthaler's original machine, constructed in accordance with the description of his patents, did not have the means for the perfect justification of the lines. It could not always be depended on to produce lines conformable to the standard length with greater accuracy than 1-64 of an inch. Nevertheless, that machine did practical work. It was an operative machine, and demonstrated to the world the practicability and utility of the invention. It matters little that there was a lack of mathematical accuracy with respect to justification, and certainly the defect affords no defense here. The subsequent introduction of expansible space bars to take the place of the nonexpansible space bars of the patents undoubtedly was an improvement; but who is entitled to the credit of it, and whether it was a patentable improvement, are questions not involved in this case.

The circuit court was right in holding that the three above-recited claims of the patents in suit are valid, and that the defendant below had infringed the same; and, accordingly, the decree of the court is affirmed.

In a suit by the Rogers Typographic Company against the Mergenthaler Linotype Company, involving patent No. 474,306, granted May 3, 1892, to Jacobs W. Schuckers, for a similar improvement in type-making and justifying mechanisms, a preliminary injunction was denied. 58 Fed. 693.

## MARK et al. v. HOME INS. CO.

(Circuit Court of Appeals, Second Circuit. December 3, 1894.)

No. 7.

**MARINE INSURANCE—TERMS OF RISK.**

A policy of marine insurance covered the vessel, a tugboat, while in the waters of New York harbor and sundry other inland waters "as far south as Norfolk, Va." Some time after the issue of the policy, the insured requested an extension of the risk to cover the boat while working in Charleston harbor, she being then at Norfolk, but refused to pay an additional premium. A rider was then attached to the policy, without payment of further premium, permitting the boat to use the port and harbor of Charleston, "but not to cover on trips either way between Norfolk and Charleston." The boat having been lost, after sailing from Norfolk to Charleston, but whether or not within the waters of Chesapeake Bay being uncertain, *held*, that under the language of the rider, attached to the policy, the insurer was not liable for a loss occurring on a voyage from Norfolk to Charleston, even within the limits of the waters covered by the policy as originally written. 52 Fed. 170, affirmed.

Appeal from the District Court of the United States for the Southern District of New York.

This was a libel by George Mark and F. A. Fales, owners of the tugboat D. L. Flanagan, against the Home Insurance Company, to recover upon a policy of marine insurance. The district court rendered a decree for the defendant. Libelants appeal.

Robert D. Benedict, for appellants.

Samuel Park, for appellee.

Before WALLACE, LACOMBE, and SHIPMAN, Circuit Judges.

LACOMBE, Circuit Judge. The libelants seek to recover under a policy of insurance, issued by respondent, for the loss of their tug D. L. Flanagan, destroyed by fire about 3:30 a. m., June 15, 1890. It is in dispute upon the testimony whether the Flanagan took fire while still within the waters of Chesapeake Bay, or after she had passed Cape Henry, on her way out to sea. It is conceded, however, that the catastrophe happened after she had sailed from Norfolk, Va., on a voyage to Charleston, S. C. The policy of insurance is dated January 7, 1890, and is for one year from January 3, noon, 1890, to January 3, noon, 1891. It covers the D. L. Flanagan, her engines, boilers, tackle, stores, etc., "to be used mainly for general towing purposes, privileged to use and navigate the port, bays, and harbor of New York, East river, and North or Hudson rivers, waters of New Jersey, Long Island Sound and shores, and as far as New Bedford, and all inland waters as far south as Norfolk, Va., and all waters adjacent, connecting or tributary to any of the above waters, and tow vessels to and from sea, and search for vessels at sea, according to the custom of the port of New York." If it be assumed that the fire broke out while the Flanagan was still on the waters of the Chesapeake, before she had passed Cape Henry, and