

is made by the projections struck up from the disk coming in contact with the star wheels. The disk is revolved by a toothed wheel which engages with downwardly projecting teeth arranged around the outer edge of the disk. There are no feed rolls like those shown in the patent. The disk is held in position and guided with precision by means of a pin which engages with a central hole in the disk; there are no side guides as shown in the patent. The disk is held down by a rod hinged at the outer end and latched to the pin at its inner end. This rod can be unlatched, turned up and the note disk removed. It has no rotary motion of its own, but it is provided with a number of loose antifriction rollers which enable the disk to revolve easily. These rollers are not geared to the toothed wheel, have no motion of their own and are not feed rollers in any sense. Their presence does not advance the disk the fraction of an inch. The upper feed roll of the patent is certainly absent. There is no substitute whatever for the rectangular rack of the patent, but the hinged rod is suggested as an equivalent. This contention cannot be maintained. The argument to prove infringement is most ingenious, but it is based upon the erroneous assumption that the patentee preceded all other makers of automatic musical instruments and hit upon a combination so fundamentally novel as to subject to tribute all those who subsequently entered the field. What he did in fact do was very far from this. The bill is dismissed.

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MORRIN v. LAWLER.

SAME et al. v. EDISON ELECTRIC ILLUMINATING CO. OF BROOKLYN.

(Circuit Court, E. D. New York. October 6, 1898.)

Nos. 1, 2, and 3.

1. PATENTS—ANTICIPATION.

When a machine created pursuant to the specifications of a patent has reached in its domain the greatest distinction for useful operation, while others who have sought the same ends have failed substantially, and when the rights are of great pecuniary value, and have enlisted large financial undertakings, a court of equity should not be diligent to discover nice resemblances to former inventions.

2. SAME—IMPROVEMENTS IN STEAM GENERATORS.

The Morrin & Scott patent, No. 309,727, and the Morrin patent, No. 463,307, for certain improvements in steam generators, construed, and held valid, not anticipated, and infringed as to claim 2 of the former and claims 1 and 2 of the latter.

3. SAME—SECTIONAL CASINGS FOR STEAM GENERATORS.

The Morrin patent, No. 463,308, for improvements in sectional casings for steam generators, held valid, not anticipated, and infringed.

These were suits in equity for the infringement of three patents owned by the complainant Thomas F. Morrin relating to improvements in steam generators.

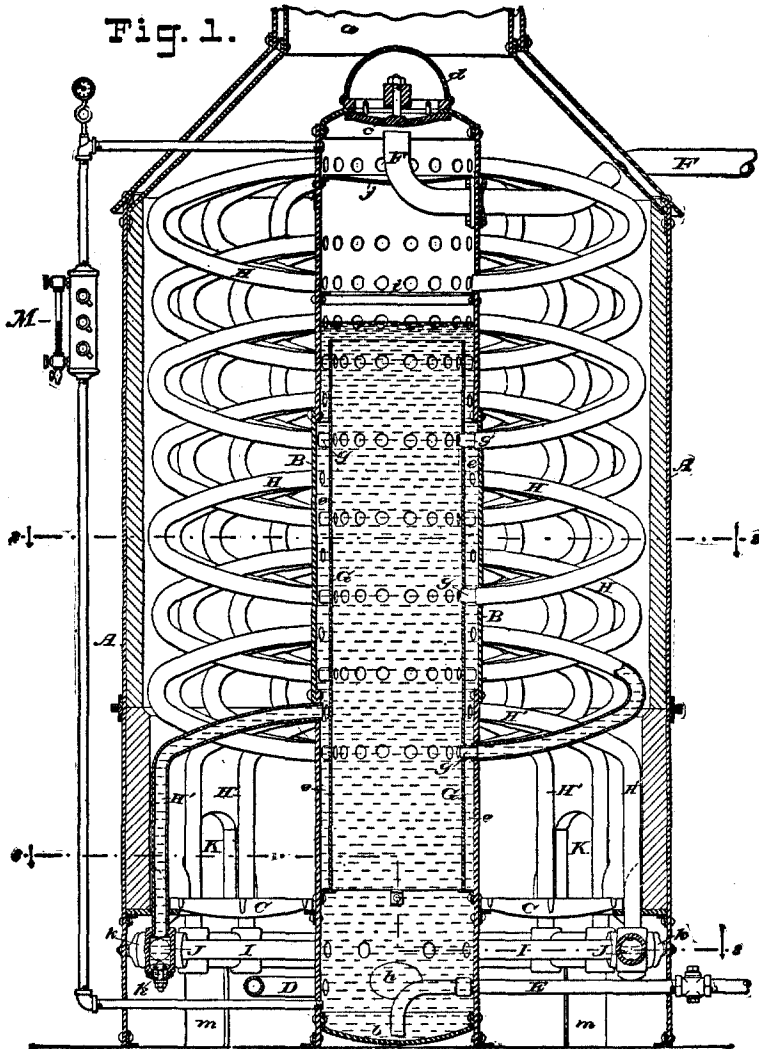
Briesen & Knauth, Arthur von Briesen, and Daniel O'Connell, for complainants.

Frank B. Lawrence and Edwin H. Brown, for defendants.

THOMAS, District Judge. On 23d December, 1884, there were issued to the complainant, Thomas F. Morrin, and his co-inventor, Walter W. Scott, letters patent of the United States numbered 309,727, for certain improvements in steam generators, of which, by assignment bearing date January 28, 1888, said Morrin became the sole owner. Such letters are marked "Exhibit 2." On 17th November, 1891, there were issued to said Morrin letters patent numbered 463,307, for certain improvements in steam generators, and these letters are marked "Exhibit 4." On 17th November, 1891, there were issued to said Morrin letters patent numbered 463,308, for certain improvements in sectional casings for steam generators, and these letters are marked "Exhibit 5." For some time previous to the year 1895, said Morrin, in the city of Brooklyn, N. Y., under the name of the "Clonbrock Steam-Boiler Works," constructed what was known as the "Climax Boiler," purporting to make the same pursuant to said patents, or some of them; but on 22d January, 1895, Morrin executed to the Clonbrock Steam-Boiler Company, a corporation, an agreement licensing said company to manufacture and sell boilers made pursuant to said letters patent. The agreement was executed in behalf of said company by Thomas J. Lawler, a defendant, who was a stockholder in, and a director, vice president, and general manager of, such company, and contained certain stipulations to be kept by said company, among which was the following: "The party of the second part expressly admits the validity of the several letters patent enumerated in this agreement, and agrees not to contest the same." Lawler's official relation to the company continued until the early part of the year 1896, when he was not re-elected as a director, whereupon he retired from official connection with the company, but continued to hold 450 of the 2,000 shares of stock issued by it. Previous to this time, both before and after the formation of the company, Lawler had been not only a trusted and confidential manager in the manufacture and marketing of Climax boilers, and the general conduct of the business relating thereto, but also had complete knowledge of the business, in its details and ramifications, and was in many instances known to persons who had purchased and were using the Climax boiler, or knew of it and its manufacturers directly or by reputation. Previous to Lawler's disconnection from official connection with the company, there is evidence of hostility on his part inconsistent with a loyal representation of its interests, which appears in an attempted association of persons to manufacture boilers similar to, or identical with, the Climax boilers, and compass the financial embarrassment of the said company. Following Lawler's actual disconnection with the company, he employed some of its skilled workmen, and, under the name of the "Columbian Steam-Boiler Works," undertook the manufacture of boilers that in all essential particulars were duplications of the Climax boiler, and in May, 1896, actually began the construction of such a boiler for the defendant the Edison Electric Illuminating Company of Brooklyn; and during such year Lawler completed, and the Edison Company accepted, such boiler, notwithstanding a notice to each of them that the boiler was an infringement of Climax boilers, four of which boilers, bearing the patent stamp of the complainant,

had been purchased by and were in use by such Edison Company before the erection of the boiler by Lawler. It results from what has been stated that the parties defendant in these actions, if they be infringers, became such with every opportunity of knowing the facts that support or impair the complainant's claim. It should be added that the boiler for the Edison Company is claimed to have been erected pursuant to letters patent No. 562,993, for certain new and useful improvements in boilers and steam-generators, and design patent No. 25,982, for a new and original design for a boiler tube,

EXHIBIT 2.



both of which letters were granted to William H. Weightman,—the first on the 30th day of June, 1896, and the second on the 1st day of September, 1896. The defendants contend (1) that the boiler constructed by them is not an infringement of the machine covered by the letters patent issued to or owned by Morrin; (2) that all constructions, infringement of which is claimed by Morrin, had been anticipated at the date of issuing the several letters patent to him, or to him and Scott, purporting to cover such construction; (3) that the defendants were authorized to construct the boiler under the letters patent issued to Weightman.

The first question to be considered is the right granted to Morrin & Scott, and to Morrin alone, claimed to have been infringed, and the state of the art relating to his alleged inventions at the time of his applications for letters. Exhibit 2 (No. 309,727), by the second claim of the specifications, covered—

“A steam generator provided with tiers or horizontal series of radial, double-branched tubes, H, both branches of which enter the generator cylinder, one above the other, and the upper branches of one series constructed to enter said generator cylinder above the point or line where the lower branches of the next tier above enter it, substantially as set forth.”

Exhibit 4 (No. 463,307), by its first claim, provides for a—

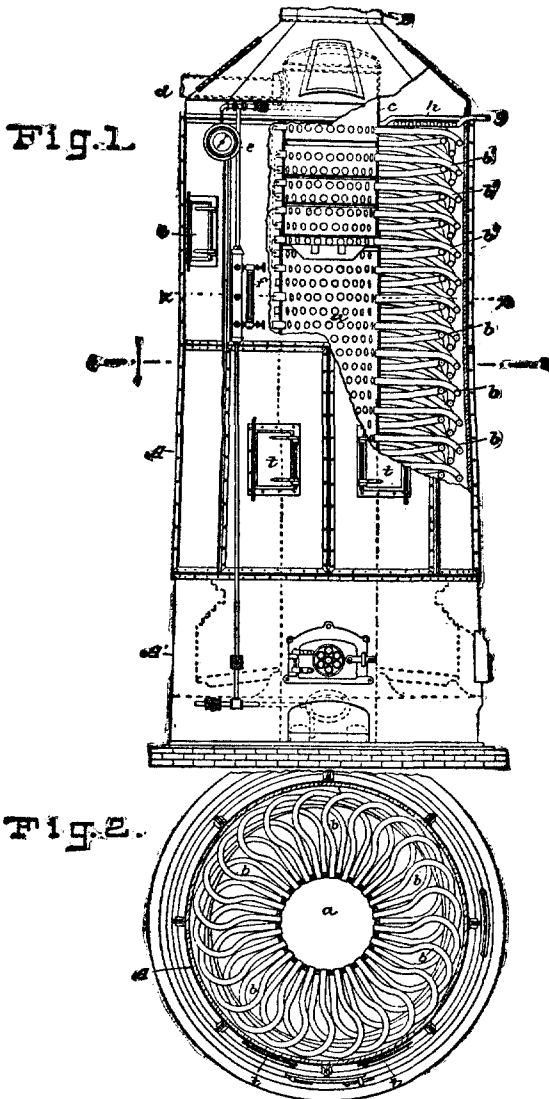
“Steam generator having an upright generator cylinder, provided with tiers of double-branched, radial, obliquely arranged generating tubes, both branches of which are secured in the shell of said generator cylinder, and extend therein to an equal extent, said tubes being arranged about the entire periphery of the cylinder and overlapping one another, as set forth.”

The particular form of these tubes is covered by the second claim of Exhibit 4 (No. 463,307), which is as follows:

“A steam generator having an upright generator cylinder, provided with tiers of generating tubes, b, of loop-like form, said loop having a pear-shaped outline when seen in plan, and each loop having at one side a lobe formed by the short out-curve at b<sup>x</sup> and the short in-curve at b<sup>xx</sup>, the planes of the loops in the tubes being set obliquely to the axis of the generator cylinder, substantially as set forth.”

There are several characteristics of this improved steam generator: (1) The radial tubes are to be heated by an annular grate surrounding an upright generating cylinder. (2) The tubes are arranged so that the upper branches of one tier overlap, and enter the cylinder above the lower branches of the next tier above. See Exhibit 2. (3) The tubes are set obliquely to the axis of the generator cylinder. See Exhibits 2 and 4. (4) The tubes extend to an equal extent in the generator cylinder. See Exhibit 4, claim 1, modifying Exhibit 2, wherein provision was made for two cylinders, each receiving one end of the tube. (5) The tubes are of ogee form, described in claim 2 of Exhibit 4. The boilers constructed by the complainant, known as the “Climax Boiler,” and the boiler constructed by the defendants, possess all these features, and such features give utility to such boilers. For the purpose of showing anticipation, the defendants, upon the argument, limited their contention to the patents now to be discussed, save in the matter of the casing of the boiler.

## EXHIBIT 4.



The Hazleton boiler is described in letters patent No. 247,910. The letters cover—

“The combination, with an upright cylindrical boiler, having a series of radiating tubes, closed at their outer ends, and arranged in successive planes, one above the other, the tubes and spaces of the several series alternating with each other, of a series of vertical tubes, set in the spaces between the

outer ends of said radiating tubes, and extending from near the water line to the bottom of the central boiler, and communicating therewith at their ends through horizontal pipes."

These radiating tubes are in the specification said to have the following purpose:

"A maximum fire surface is obtained in a given space, and great economies in fuel are thereby made possible."

Hence the office of the tubes was to furnish greater heating surface. It appears from the evidence of Mr. Kennedy, the president of the company owning the Hazleton patent, that, after erecting one boiler with the circulating tubes, they became filled with mud, developed leaks, and were abandoned.

It is convenient in this order to examine the patent for which letters (No. 171,017) were issued to Heaton in 1875, for a new and useful improvement in upright tubular boilers. The claim makes no reference to tubes collaterally applied to the boiler, but the description provides:

"E are a set of upright tubes placed at a little distance from the lower part of the shell of the boiler, H, and the upper and lower ends of which are bent inward, pass through, and are secured in holes in the shell of the said boiler, H, so that the water in the boiler may circulate freely through the said tubes. With this construction, the products of combustion, as they pass up around the boiler, H, also pass around the tubes, E, so that the water may be in contact with a very large heating surface, and may thus generate steam very rapidly."

