

MILLER ET AL. V. BRIDGEPORT BRASS CO.

[14 Blatchf. 282; 3 Ban. & A. 20; 12 O. G. 667.]¹

Circuit Court, D. Connecticut. Aug. 11, 1877.²

PATENTS-LAMPS-REISSUE-CLAIM-SECOND CLAIM-VALIDITY.

- 1. The second claim of the reissued letters patent granted to E. Miller & Co., as assignees of Joshua E. Ambrose, January 11th, 1876, for an "improvement in lamps," (the original patent having been granted October 16th, 1860, and reissued May 20, 1873, and, as so reissued, extended for 7 years from October 16th, 1874,) namely, "The combination, in a lamp burner, of the following elements: first, a deflector; second, a perforated air distributor, which, with the deflector, forms the combustion chamber; third, a wick tube, extending from the fount to the combustion chamber; fourth, a tube or passage to conduct the gas from the fount to said combustion chamber, substantially, as described," is for a different invention from any which was described and claimed in the original patent, and is invalid.
- 2. The combination contained in said second claim contains a lesser number of ingredients than the combination which composed the original invention, and the specification of the original patent did not suggest that a lamp containing the modified combination of the second claim of the reissued patent was feasible and within the scope of the invention, and, therefore, under the rule laid down in Gill v. Wells, 22 Wall. [89 U. S.] 1, said second claim is void.

[This was a bill by Edward Miller & Co. against the Bridgeport Brass Company to restrain the alleged infringement of letters patent No. 30,381, granted to J. E. Ambrose October 16, 1860, and reissued, No. 6,844, January 11, 1876.]

John S. Beach, for plaintiffs.

Charles R. Ingersoll, for defendants.

SHIPMAN, District Judge. This is a bill in equity to restrain the alleged infringement, by the defendants, of reissued letters patent, which were issued on January 11th, 1876, to the plaintiffs, as assignees of Joshua E. Ambrose, for an "improvement in lamps." The original Ambrose patent was dated October 16th, 1860, and was reissued May 20th, 1873, and the patent, as reissued, was extended for seven years from October 16th, 1874. The principal defences are, that the reissue is not for the same invention which was described and claimed in the original patent, and that the patent is void for want of novelty.

In the original patent, the patentee declared the object of his invention to be, to obtain a lamp which will burn, without a chimney, and without danger of explosion, those hydrocarbons which are volatile, and contain an excess of carbon, and stated that "the invention consists in the employment or use of a perforated cap, vapor tube, heaters and deflecting plate, arranged," as described, and in a wick-adjusting mechanism, which last named element is immaterial in this case.

In the specification, the invention was, In substance, described to be the upper part of the body of a lamp, which received at its upper end a cap, C. This cap was of cylindrical form, and might be constructed of perforated sheet iron, the upper end having a perforated plate, c, fitted in it. The wick tube was within the cap or perforated cylinder. Adjoining the wick tube was a tube, F, the lower end of which communicated with the interior of the body of the lamp, the upper end of said tube being covered by the perforated plate, c. On the upper end of the cap, C, was placed a copper, dome-shaped heater, G, slotted at its upper end. A longitudinal bar in the centre of the slot divided it into two parts. The specification proceeded: "The wick tube, E, extends some distance above the perforated plate, c, and, on its upper end, a collar, p, is fitted, said collar having plates, q, projecting from it, slightly inclined from a horizontal plane. Between the inner ends of the plates, q, and the collar, p, there are openings, r. On the outer side of the heater. G, there are vertical ribs, s, at the lower ends

[Drawing of Patent No. 30,381, granted October 16, 1860, to J. E. Ambrose, published from the records of the United States patent office.]



of which

there are projections, t. These projections, t, serve as hearings for a heater, H, which is similar to G, in form. The ribs and projections, t, admit of a space, u, being between the two heaters, and the upper end of the heater, H, is slotted, as shown at v, and has a plate, w, extending upward for each end of it, and inclined at an angle of about 45°. The tube, F, admits of all vapor generated in the body, A, of the lamp, escaping up into the heater, G, and to the flame, the perforated plate, e, preventing the ignition of the vapor below the orifice of the tube. The plates, q, of the collar, p, and the openings, r, cause a draught to ascend directly upward to the flame, and air is also deflected directly against the inner sides of the heater, G, and becomes intensely heated, so as to supply the flame with warm oxygen. The bar, o, in the slot, n, of heater, G, serves to divide the flame, and prevents it from ascending up through the slot, n, before the carbon is consumed. Between the two heaters, G, H, oxygen passes and becomes highly rarified, and unites with the carbon in the flame, insuring perfect combustion. The plates, w, at the ends of the slot, v, of heater, H, serve to spread the flame and diminish its height, thereby keeping the flame at the point where the heat is most intense. The flame at the slot, n, in heater, G, is merely a gas-generating flame, the illuminating flame having its base at the slot, v, of heater H. By this arrangement the flame is supplied with sufficient oxygen, without a chimney, to support proper combustion and produce a brilliant illuminating flame, and the vapor which passes up through tube, F, is consumed without danger of being ignited below the orifice of said tube." The patentee, after stating that he was aware that domeshaped heaters had been previously used, and, also, that perforated caps had been used in connection with said heaters, and disclaiming said parts when separately considered, claimed as his invention, "1st, the arrangement of the heaters, G, H, with a space between them communicating directly with the external air, in connection with the collar, p, and plates, q, q, fitted on the top of the wick tube, E, and the perforated cap, C, substantially as and for the purpose set forth; 2d, in combination with the parts aforesaid, the vapor tube, F, placed within the cap, C, and adjoining or contiguous to the wick tube, as and for the purpose specified."

This lamp was not a success, as a lamp which would burn without a chimney, and did not go into general use, but it contained valuable features. The tube, F, conducted the gas from the fount to a point near the end of the wick tube, so that the gas was conveyed to the flame and was consumed, and thus the danger of explosion was materially diminished. In addition, the upper part of the perforated cap, C, was a minutely perforated plate, or disk which extended transversely over the entire top of the cap, below the flame, (forming the floor of what is styled, in the reissued patent, the combustion chamber,) and prevented the return of lighted gas to the lamp fount below, or the ignition of gas within the cap, C, upon the principle of Sir Humphrey Davy's safety lamp. Thus, the combination of the tube and the perforated plate prevented danger of explosion. The perforated plate also performed the office of a distributer of air into the space where the wick was lighted and to the flame.

Lamps having these characteristics, in connection with the other well known parts of volatile oil lamps,-a wick tube, a dome-shaped chamber, which serves to direct the air to the flame, and is generally called a deflector, and a chimney, were subsequently manufactured by the owners of the patent, and went into general use. The patent was reissued for the second time, in 1876. The specification of the reissue declares that the invention consists, secondly, "in combining, in a lamp burner, a deflector, a perforated air distributer, with the deflector, forming the combustion chamber, a wick tube extending from the fount to the combustion chamber, an adjusting device to regulate the elevation of the wick, and a tube to conduct the gas from the fount to the chamber above the air distributer." The descriptive portion of the reissued specification does not substantially differ from the language of the descriptive portion of the original specification. In the new specification prominence is given to the perforated plate e, which is called "a perforated air distributer, which, with the deflector, forms the combustion chamber." The second claim, which is the only one which is alleged to have been infringed, is as follows: "2. The combination, in a lamp-burner of the following elements: first, a deflector; second, a perforated air distributer, which, with the deflector, forms the combustion chamber; third, a wick tube, extending from the fount to the combustion chamber; fourth, a tube, or passage, to conduct the gas from the fount to said combustion chamber, substantially as described." The lamps made by both plaintiffs and defendants contain the heater, G, without the ribs or projections or longitudinal bar; in other words, an ordinary deflector, the perforated plate, the vapor tube, and a wick tube; and are in great demand by the public. The utility of the lamp consists in its safety. A tube which conducted the vapor from the fount to the flame was used, in its simplest form, in the lamp of William Pratt, patented in 1857. In this lamp the flame was not to be protected from the external air. The wick tubes were the long diverging tubes now in common use.

Air distributers had long been known in lamps of the Ambrose class, but I am of the opinion that the minutely perforated transverse plate, c, extending across the lower part of the chamber below the flame, thus forming a perforated floor, and performing 311 forming the double office of preventing the lighted gas from communicating with the gas in the lamp fount, and also of distributing air to the combustion chamber, had not been anticipated in the defendants' exhibits. But it is not necessary to determine whether either the tube or the air distributer was novel in itself, as the combination only is claimed, and I am satisfied that the combination of the vapor tube to conduct the gas from the fount to the combustion chamber, and the perforated plate constructed as in the Ambrose patent, and performing its double office, with a wick tube, and with either the heater or deflector of Ambrose, or the ordinary deflector, was unknown prior to the date of the patent.

The important question in the case is, whether the lamp which is described and claimed in the second claim of the reissue, is the same invention, which was described and claimed in the specification of the original patent. The principles upon which the decision of this question rests, are stated in Gill v. Wells, 22 Wall. [89 U. S.] 1, and in Stevens v. Pritehard [Case No. 13,407]. In, the former case, the court, after declaring the rule to be, that, where a patentee who has invented a new and useful combination of several ingredients, also claims to have invented new and useful combinations of fewer numbers of the ingredients, the Inventor is entitled to a patent for the several combinations, and may give a description of the several combinations in one specification, and may secure the benefit of each of the inventions by separate claims, and that if, by inadvertence, he should fail to claim one of the described combinations, may surrender the original patent and obtain a reissue for any combinations which were omitted in the claims of the original patent, proceed to say: "Very different rules, however, apply in a case where the only invention described in the original patent is the one which includes all the ingredients of the machine, provided there is no suggestion, indication or intimation that any other invention, of any kind, has been made. Such a patentee as the one last mentioned may subsequently discover that he can accomplish a new and useful result by a combination embracing less than the whole number of the ingredients included in the prior patented combination, but he cannot secure the right and privilege of a patentee in the combination of the smaller number of the ingredients, by a surrender of his first patent and a reissue of the same, which shall include the second combination as well as the first, because, the reissued patent, in that event, would not be for the same invention as the surrendered original."

The original patent states the object of the invention to be a lamp which would burn without a chimney, and the entire mechanism is directed to accomplish that object. It consisted, generally, of a wick tube, with collar and plates, perforated cap for the conveyance of air, the vapor tube, and two peculiarly constructed heaters, the lower one G, provided with ribs and projections, which served as bearings upon which the upper heater, H, was placed. The two heaters are related to each other, and the entire arrangement of the two, with their various parts, is particularly described, in the specification, to be designed to supply the flame with sufficient oxygen to support proper combustion without a chimney. The invention, so far as the heaters were concerned, consisted in their joint use. The lamp of the second reissued claim is without the complex arrangement of heaters. It contains one deflector, and is the ordinary lamp, with a chimney, for burning volatile hydrocarbons, plus the vapor tube and the perforated plate.

The specification of the original patent suggested no invention save the one contained in the entire combination. A combination of the vapor tube and the perforated plate, either with one heater, or with the other well known ingredients of a lamp, was not indicated as a distinct part of the invention. The second claim of the reissued patent describes an article materially different from the article which was originally patented. The claim contains a combination of a lesser number of ingredients than the combination which composed the original invention. One of the heaters, and all of the caps except the perforated plate, have disappeared. The deflector of this claim is not the heater, G, of the original specification, because no single deflector was therein described, except in its relation to, and as connected with, the upper heater. The two heaters are described as to be used together, and as necessarily related to each other. The whole scope and object of the invention was to produce a lamp by the combined use of the two heaters.

Had the patentee, in his original specification, suggested that a lamp containing the modified combination of the second claim of the reissue was feasible and within the scope of his invention, or that the combination of the vapor tube and the air distributer with the other well known parts of a lamp, would accomplish a beneficial result, the claim of the reissue would not have been in violation of the rule of law which has been quoted. But, upon the face of the two patents, I am of opinion that the claim of the reissued patent is for a different invention from any combination which is indicated or suggested in the original specification as capable of embodiment, so as to compose either an organized structure, or a distinct part of an organized structure.

A decree should be entered dismissing the bill.

[The case was taken on appeal to the supreme court, where the decree of the circuit court was affirmed. 104 U. S. 350.]

¹ [Reported by Hon. Samuel Blatchford. Circuit Judge, reprinted in 3 Ban. & A. 20, and here republished by permission.]

² [Affirmed in 104 U. S. 350.]

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