

INNIS *v.* OIL CITY BOILER WORKS.

Circuit Court, W. D. Pennsylvania.

February 28, 1890.

1. PATENTS FOR INVENTIONS—PRIOR STATE OF THE ART—STEAM-ENGINES.

Letters patent No. 230,943, for an improvement in steam-engines, granted to William J. Innis, August 10, 1880, considered with reference to the prior state of the art, and construed, and *held* not to be infringed by the defendant's engine.

2. SAME—EXTENT OF CLAIM—EXHAUST CHAMBER FOR STEAM-ENGINES.

Where, in a patent for an improvement in steam-engines, each of the claims specifies as one of the elements an "exhaust chamber," the designation is a term of limitation, importing a compartment for holding spent steam, and a construction of the claims which would take in a live steam passage-way is inadmissible.

In Equity.

James C. Boyce and W. Bakewell, for complainant.

Geo. H. Christy and John K. Hallock, for respondent.

Before McKENNAN and ACHESON, JJ.

ACHESON, J. This suit is brought for the alleged infringement of letters patent No. 230,943, for an improvement in steam-engines, granted to William J. Innis, August 10, 1880. The declared object of the invention is to construct "the cylinder, steam-chest or valve chamber, and exhaust chamber of a steam-engine" in a better, stronger, more compact, and cheaper manner than has hitherto been done, and to effect a free discharge of all condensed water from the cylinder. The specification further sets forth that as generally constructed the cylinders of steam-engines are first cast separately, and must be planed and finished to receive the steam-chest, which must be likewise finished, "as also the exhaust chamber;" and these are then secured together by bolts and nuts, which is expensive, and leaves the joints liable to leak. It is then stated that, to obviate these difficulties, the patentee casts the cylinder, (A,) the steam-chest or valve chamber, (B,) and the exhaust chamber, (C,) all in

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one piece; and secures compactness and strength by having the steam-chest or valve chamber and the exhaust chamber in the base which supports the cylinder; and that, by suitable cores in the casting, unnecessary weight is avoided, and an air-jacket is provided for the sides of the steam-chest or valve chamber. Fig. 1 of the drawings, which is a longitudinal section of the casting, shows a prolongation, (lettered F,) which the specification states is “an extension of the exhaust chamber to accomodate a greater length of heater pipes than could be placed in the chamber, C.” The patent has six claims, of which we quote two as specimens of all.

“(1) The combination of cylinder, A, piston-valve chamber, B, and exhaust chamber, C, arranged substantially as shown, and produced at one operation of casting. (3) As a new article of manufacture, a cylinder, valve chamber, exhaust chamber, air-jacket, supports, flanges, and suitable ports in one piece, constructed and arranged substantially as shown and described.”

The air-jacket also enters into the fourth and fifth claims, but the ‘exhaust chamber,’ is named as an element in every one of the six claims. Several distinct defenses are set up, but, in the view we take of the case, it is only necessary for us to consider the denial of infringement.

The casting for the defendant’s engine embodies in one piece a cylinder and piston-valve chamber, arranged substantially as shown in the plaintiff’s patent, and also a port or longitudinal passage-way, for the flow of live steam from the boiler to the piston-valve chamber, located below the valve chamber, and in the same relative position as the plaintiff’s chamber, C; and the defendant’s engine has an exhaust chamber in another and distinct casting, which is bolted to the outside of the cylinder casting. Now, it is plain that the defendant does not use any of the combinations of the patent in suit, unless his live steam passage-way is the equivalent of the plaintiff’s exhaust chamber, C. But the defendant’s passage-way does not perform the function of a chamber in any proper sense of that term. In fact, it is a simple conduit for the transmission of steam under full pressure. It is wide of the mark to say that the defendant’s live steam passage-way might be employed as an exhaust port, when in fact it never has been used for that purpose, and no such use is contemplated. Moreover, the evidence shows that it is too small for practical use as an exhaust chamber for holding heating-pipes. Again, “exhaust chamber” is a specific term. The name imports a compartment for holding spent steam. The specification of the patent unmistakably evinces that the purpose of the exhaust chamber, C, is for heating, by means of exhaust steam therein, feed water, by passing it through pipes placed in the chamber. The patent contains no intimation that chamber C performs any other function, and it would be an unwarrantable expansion of the claims to construe the term “exhaust chamber” as covering a live steam passage-way. The conclusion that the designation “exhaust chamber” is a term of limitation is supported by the decision in *Bridge v. Brown*,

6 Fish. Pat. Cas. 236, where—the invention consisting of an apparatus for making extracts from tanbark by the utilisation of exhaust steam, and one of the elements of the claim was

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the “exhaust pipe, D,” for conducting the exhaust steam to a box where the work was done—it was held that a pipe connecting directly with the boiler was not the equivalent of the “exhaust pipe, D.” In further confirmation of the correctness of our conclusion, it may be here stated that the defendant’s proofs establish the construction and use of an engine—the Davis engine—prior to the date of the plaintiff’s invention, in which the cylinder, piston-valve chamber, and a live steam passage-way were cast in one piece; the three mentioned parts having the same relative positions as the same parts in the defendant’s engine. And the plaintiff’s expert, Mr. Porter, admits that, in respect to these matters, the defendant’s engine more nearly resembles the Davis engine than it does the plaintiff’s. This evidence was objected to for want of the prescribed statutory notice. But it was not offered to defeat the plaintiff’s patent by proving anticipation, but to show the prior state of the art, and we think was admissible under the authorities. *Brown v. Piper*, 91 U. S. 37; *Dunbar v. Myers*, 94 U. S. 187; *Slawson v. Railroad Co.*, 107 U. S. 649, 2 Sup. Ct. Rep. 663. Now, the effect of this proof is to preclude a construction of the claims of the patent which would take in the defendant’s live steam passage-way, and to require that the term “exhaust chamber” shall be accepted in its natural and more literal signification. As we have already seen, the exhaust chamber is an element in every claim of the patent, and it must be received in the same sense in all. The result, therefore, is that no infringement has been shown, and the bill of complaint must be dismissed. Let a decree be drawn dismissing the bill, with costs.