

If the claim in question can be regarded as containing invention at all, it must be limited to the particular forms of construction of the pipe box described; and, that done, infringement is not proved.

The decree below, in each case, should be affirmed, and it is so ordered.

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STIRRAT et al. v. EXCELSIOR MANUF'G CO.  
(Circuit Court of Appeals, Eighth Circuit. May 7, 1894.)

No. 341.

PATENTS—LIMITATION OF CLAIMS—WATER-HEATING DEVICE FOR STOVES.

The Stirrat patent, No. 357,874, for a water-heating device for stoves, in view of the prior state of the art and the modification of the claims in the patent office, must be strictly limited to the construction described, which includes, as an essential element of the combination claimed, a hollow, long center plate or a top plate of a stove having a chamber therein, through which the water to be heated is caused to pass; and hence does not cover a device containing a solid, long center plate with a water box bolted thereto. 60 Fed. 607, affirmed.

Appeal from the Circuit Court of the United States for the Eastern District of Missouri.

A. C. Fowler, for appellants.  
Paul Bakewell, for appellee.

Before CALDWELL and SANBORN, Circuit Judges.

SANBORN, Circuit Judge, delivered the opinion of the court.

This was a suit for the infringement of letters patent No. 357,874, for a water-heating device for stoves and ranges, issued to the appellants Robert J. Stirrat and Robert G. Stirrat, February 15, 1887. The defense was that there was no patentable novelty in complainants' device, and that the appellee, the Excelsior Manufacturing Company, a corporation, did not infringe. The circuit court dismissed the bill on the latter ground. 60 Fed. 607.

The device of the appellants consists of the combination of the hollow, long center plate of a stove or range, with a supply pipe, which leads from the lower part of a water tank, through the wall of a stove or range, thence in front of the fire back, and is then inserted in the under side of the long center plate, near the end furthest from the source of supply, and an eduction pipe which leads to the hot-water tank and is screwed into the long center plate at the end opposite to that at which the supply pipe is inserted. The device of the appellee consists of the combination, with the solid, long center plate of a stove, of a water box, slotted lugs and bolts or screws by which it may be fastened to the long center, and a supply pipe and an eduction pipe arranged and inserted in the water box in substantially the same way in which the appellants arrange and insert the like pipes in their hollow, long

center plate. The device of the appellee is described in letters patent No. 358,123, to O'Keefe and Filley, dated February 22, 1887. In operation, the cold water is led through the supply pipe in front of the fire back, and thence, in appellants' device, through the hollow, long center, and, in the appellee's device, through the water box fastened on the under side of the long center, to the hot-water tank.

The claims and specifications of every patent must be read and construed in the light of a full knowledge of the state of the art when the patent was issued. A patent to the original inventor of a machine which first performs a useful function protects him against all machines that perform the same function by equivalent mechanical devices, but a patent to one who has simply made a slight improvement on a device that performed the same function before as after the improvement, is protected only against those who use the very improvement he describes and claims, or mere colorable evasions of it.

If Robert J. Stirrat, the inventor of the device of appellants, had been the first to discover and to reduce to practical operation a combination of pipes or water boxes or both, to be used in stoves or ranges for the purpose of heating water and tempering the heat of the long center plates or tops of stoves or ranges, and had broadly claimed for his invention the protection of the patent laws, the appellee's device would clearly have been an infringement upon his patent. On the other hand, it is not less certain that, if devices of this character had long been in use before his invention, if the machine used by the appellee, or devices so analogous to it that it required no invention to conform them to that of the appellee, had long been known and used for this purpose, and if this invention of Stirrat was nothing more than a slight improvement of well-known devices in features of construction specifically pointed out in the specifications and claims of his patent, then the appellee ought not to be charged as an infringer here. In other words, the question of infringement or noninfringement in this case must be determined by the limitations placed upon this patent by the state of the art when it was issued, and the specifications and claims of the inventor himself. *McCormick v. Talcott*, 20 How. 402, 405.

What, then, was the state of the art? As early as 1875 two horizontal pipes, placed against the fire back of a stove, the one above the other, and connected together in the form of an ox bow, so that the cold water should be led into the stove through the lower pipe, and back, when heated, through the upper pipe, to the receptacle for hot water, were in common use. In letters patent to Wood, No. 115,800, June 6, 1871, and to Weldon, No. 227,334, May 4, 1880, a water back for a stove or range with a partition therein extending nearly the length of the box to divide the cold water from the hot, and an arrangement for passing the pipe from each side through the wall of the stove or range, are shown. In letters patent No. 258,098, to William Miller, May 16, 1882, a fire box lined on each side with a water back having a hollow extension that supports the panel or long center of the stove or range con-

taining the fire box is shown. In the specifications to that patent Mr. Miller says:

"I am aware it is not new to support the long centers or top plates of ranges or similar cooking apparatus by a coil of water pipes extending from the front to the rear of the furnace, communicating with the water back proper and boiler of the range or stove. Furthermore, I am aware it is not new to support these long centers by means of water chambers extending completely across from the front to the rear of ranges, etc., as such devices are seen in several patents."

Letters patent No. 277,009, to Newton Cooper and Thomas E. Conwell, May 8, 1883, show the long center of a stove, with water passages in it, connected by pipes with a water reservoir. They also show water passages in other parts of the top of the stove, and describe an arrangement for connecting these with the interior of a hollow fire back, so that the water may pass through the latter and the passages in the top of the stove to and from the reservoir. In the specifications these patentees say:

"We are aware that water pipes have been placed contiguous to the under side of stove tops and to the rear sides of stove fire backs, but not entering the body of either, and we do not claim the same. In our invention the water comes directly into the body of both the top and fire back."

Thus it appears that there was no novelty in suspending pipes in front of the fire backs of stoves or ranges for the purpose of heating water; that there was no novelty in making the fire backs of stoves hollow, and heating the water therein; none in providing the long centers or tops of stoves with water passages, through which the water might circulate to and from the reservoir; none in connecting the hollow fire back with the passages in the top of the stove, so that the water might circulate from the reservoir through the stove top and the fire back, and thence to the reservoir; none in placing water pipes contiguous to the under sides of long centers of stoves; and none in connecting such contiguous pipes with the hollow fire backs or water backs proper of stoves, so that the water would circulate through the water backs and the contiguous pipes. Vide Miller, No. 258,098, *supra*. The appellee seems to have simply turned over the old device described by Miller and placed the pipe on the fire back, and bolted the water back to the long center. Was this invention, and, if so, was it Stirrat's?

In his original application, filed October 23, 1883, Stirrat says: "My improvement consists in forming a water passage in the long center or centers connected with the water tank by suitable pipes," and his only claim was "the long center of a stove or range, formed with a water passage therein, communicating with induction and eduction pipes." This claim was immediately rejected by the commissioner of patents, with the statement that the patent to Cooper and Conwell, *supra*, proved that it was old to construct a long center of a stove to form a water back; that the patents to Weldon, No. 227,334, May 4, 1880, *supra*, and to Wood, No. 115,800, June 6, 1871, *supra*, proved that it was old to construct a water back with a partition and to pass the pipes therefrom through the side of the stove; and that Stirrat's claim contemplated simply the substitution of

the construction shown by the last-named patents for that of Cooper and Conwell, which did not involve invention. The references made by the commissioner were conclusive proof that Stirrat had not made the invention he supposed he had, and he abandoned it. But the ingenuity and perseverance of his counsel, after repeatedly amending his application, extracted from the commissioner the patent in suit in February, 1887. This patent has three claims, which read as follows:

"(1) The combination, with the removable top plate of a cooking stove having a chamber therein, of an exit pipe, leading from said chamber at one end of the plate, and an inlet pipe, running parallel to the exit pipe, extending to the other end of the plate, and communicating with the chamber, substantially as described. (2) The combination, with the removable top plate of a cooking stove having a chamber therein, of an exit pipe leading from said chamber at one end of the plate, and an inlet pipe, communicating with the chamber at the other end of the plate, and extending downward horizontally and upward beneath the plate, and then parallel to the exit pipe, substantially as described. (3) The combination, with a cooking stove or range, of a hollow, long center plate, supply pipe, F, formed with horizontal section F', and vertical sections F'', F''', and the eduction pipe, G, substantially as described."

In the specifications, Stirrat says, among other things:

"My invention relates to those water-heating devices in which the water to be heated is caused to pass through the long center and a water back. My improvement consists in features of construction hereinafter described and pointed out in the claims. \* \* \* The long center, C, is cast with a projection having a water passage through it almost from end to end, as shown at C. The under side of the long center is tapped at C', and the section F'' of the water pipe screwed therein. \* \* \* It will be seen that the construction I have shown provides a combined long center and water back."

Now, it must be borne in mind that the patent to Cooper and Conwell, *supra*, exhibited a hollow long center, a water passage through other parts of the top of the stove, and a combination of a water back with the hollow stove top, so that the water could pass from the reservoir through a part of the top of the stove and the water back, and thence be returned to the reservoir through another part of the stove top. The improvement in the construction shown in this patent over that of Cooper and Conwell, if any, is the combination of the water back with the hollow long center, instead of combining it with any other part of the top of the stove. It is unnecessary to consider here whether or not there was any patentable novelty in this improvement. If there was, it is difficult to see how it could extend to the device of the appellee, or how there could have been any novelty in the latter. The evils to be remedied by these devices were that, when too large a portion of the fire back of a stove was covered by water pipes or by a water back, the oven beneath would not heat evenly, and that the long center plate would warp and burn out, unless it was protected by water passing through it, or by a water pipe or box contiguous to it. The prior patents to which we have referred show that the device of keeping the long center cool by placing a water pipe or a water box directly beneath and contiguous to it was old and well known. If the two legs of the old ox-bow pipe prevented the oven from heating quickly and evenly, it must have been obvious

to any mechanic skilled in the art that, if they were raised a few inches, so that the lower one only would rest on the fire back, this evil would be remedied. It was an old and well-known device to place water boxes or contiguous pipes beneath the long center of stoves to temper their heat. (Letters patent No. 258,098 to Miller, and No. 277,009 to Cooper and Conwell, *supra*.) To make the upper leg of the ox bow in the form of a water box, and fasten it detachably to the long center when it had been raised from the fire back, was but to adopt this old device for cooling the center plate. The only change required to conform the old ox bow to the device of appellee was to raise it a few inches in the stove, to make the upper leg in the form of a water box, and bolt it to the long center plate. The only change required to conform the old device described in the patent to Miller as a coil of pipes supporting the long center, and communicating with the water back to that of the appellee, was to turn that device over, and to attach the water back to the long center, and let the coil of pipe rest on the fire back. There was certainly no invention—no discovery—in making these changes. They are so simple, and so obviously effective to remedy the evils complained of, that they must have occurred to any mechanic familiar with such devices who sought to remedy them. If, therefore, the claims of this patent warranted a construction broad enough to cover the device of the appellee, we should have no hesitation in holding it void for want of novelty. *Atlantic Works v. Brady*, 107 U. S. 192, 199, 2 Sup. Ct. 225; *Vinton v. Hamilton*, 104 U. S. 485, 491; *Slawson v. Railroad Co.*, 107 U. S. 649, 653, 2 Sup. Ct. 663; *King v. Gallun*, 109 U. S. 99, 3 Sup. Ct. 85; *Double-Pointed Tack Co. v. Two Rivers Manuf'g Co.*, 109 U. S. 117, 3 Sup. Ct. 105; *Estey v. Burdett*, 109 U. S. 633, 3 Sup. Ct. 531; *Bussey v. Manufacturing Co.*, 110 U. S. 131, 4 Sup. Ct. 38; *Phillips v. City of Detroit*, 111 U. S. 604, 4 Sup. Ct. 580; *Morris v. McMillin*, 112 U. S. 244, 5 Sup. Ct. 218; *Hollister v. Manufacturing Co.*, 113 U. S. 59, 5 Sup. Ct. 717; *Ellbert v. Gaslight Co.*, 50 Fed. 205, 211.

But, in our opinion, the claims of this patent do not warrant any such construction. The claim of a specific combination or device in a patent is a renunciation of every claim to any other combinations or devices for performing the same functions that are apparent from the face of the patent, and are not colorable evasions of the combination or device claimed. The statute requires the inventor to "particularly point out and distinctly claim the part, improvement or combination which he claims as his discovery." Rev. St. § 4888. When, under this statute, the inventor has done this, he has thereby disclaimed and dedicated to the public all other improvements and combinations apparent from his specifications and claims that are not evasions of the device and combination he claims as his own. The claims of his patent limit his exclusive privileges, and his specifications may be referred to to explain and to restrict, but never to expand, them. When the claims and specifications of this patent are read in view of the state of the art to which we have adverted, and fairly construed in accordance with these established rules, no attempt to claim

the invention of such a combination as that of the appellee will be found, but a plain disclaimer of any such invention. In each of the three claims of the patent the inventor specifies and claims "a hollow, long center plate," or "the removable top plate of a cooking stove having a chamber therein," as one of the elements of his combination. In his specifications he declares that his invention "relates to those water-heating devices in which the water to be heated is caused to pass through the long center." In the device of the appellee there is no hollow long center, nor is it one of those heating devices in which the water to be heated is caused to pass through the long center. We think these claims and specifications (especially in view of the state of the art) constitute a fair disclaimer and dedication to the public of all right on the part of Stirrat to protection against any such device as that used by the appellee, and hence that the latter was guilty of no infringement in its use. *Keystone Bridge Co. v. Phoenix Iron Co.*, 95 U. S. 274, 278; *Miller v. Brass Co.*, 104 U. S. 350, 352; *McClain v. Ortmyer*, 141 U. S. 419, 424, 12 Sup. Ct. 76; *Dobson v. Cubley*, 149 U. S. 117, 121, 13 Sup. Ct. 796; *Heine Safety Boiler Co. v. Anheuser-Busch Brewing Ass'n*, 43 Fed. 786, 789; *Maddock v. Coxon*, 45 Fed. 578.

The brief and argument of counsel for appellants in this case are instructive and exhaustive. Every authority and suggestion that could be advantageously urged in their behalf seem to have been presented. Perhaps the strongest statement of their claim is that the only difference between the device shown in the patent and that used by the appellee is that in the former the hollow long center plate is made in one piece, while in the latter it is made in two pieces,—a solid long center plate and a water box bolted to it,—and that this simple change in construction cannot be pleaded to avoid infringement. This position would be unanswerable if Stirrat was a pioneer here, and if he had not expressly restricted his claims to a combination the essential element of which was the hollow long center. But the state of the art to which we have adverted was such when he made his invention that there was no patentable novelty in a combination of a water box bolted to the long center with the supply and eduction pipes used by the appellee, and this fact, and the specific limitations he imposed upon himself in his claims, have forced us to the conclusion that his patent was properly restricted by the court below to the special feature of construction he described and claimed, viz. the hollow long center through which the water was caused to pass in combination with the connecting pipes. The decree below must accordingly be affirmed, with costs, and it is so ordered.

**OVERMAN v. WARWICK CYCLE MANUF'G CO.**

(Circuit Court of Appeals, First Circuit. April 17, 1894.)

No. 71.

Appeal from the Circuit Court of the United States for the District of Massachusetts.

This was a suit by Albert H. Overman against the Warwick Cycle Manufacturing Company to restrain the infringement of letters patent No. 331,001, granted to the complainant for a saddle for velocipedes. The bill was dismissed with costs (54 Fed. 496), and complainant now appeals.

Chamberlin, White & Mills and Edward S. White, for appellant.  
John L. S. Roberts, for appellee.

Before COLT and PUTNAM, Circuit Judges, and NELSON, District Judge.

**PER CURIAM.** The characteristic feature of the Overman patented saddle is its adaptability for removal and replacement at pleasure. This is the essence of the invention, and constitutes the improvement over prior saddles. The defendant's saddle embodies a form of construction in which this feature is absent. This is the ground upon which the court below held that the defendant's saddle did not infringe the Overman patent. We think the court below was right, and we can add nothing to the reason so clearly stated in its opinion. Decree affirmed.

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**THE DAGO.****UNITED STATES v. THE DAGO.**

(Circuit Court of Appeals, Fourth Circuit. May 22, 1894.)

No. 67.

**BILL OF HEALTH—PORT OF DEPARTURE.**

A merchant ship bound for the United States must (27 Stat. 449) procure a bill of health "from the consul or other consular officer of the United States at the port of departure." *Held*, that "the port of departure" is not the last port at which the ship stops while bound for the United States, but the port from which she cleared.

Appeal from the District Court of the United States for the District of Maryland.

This was a libel by the United States against the British steamship Dago to enforce a forfeiture. The district court dismissed the libel, and libellant appeals.

John T. Ensor, for the United States.  
J. Wilson Leakin, for appellee.