

STEVENSON *v.* MAGOWAN AND OTHERS.

*Circuit Court, D. New Jersey.*

July 12, 1887.

1. PATENTS FOR INVENTIONS—VALID ONLY IN PART—USE OF REMAINDER—VULCANIZING APPARATUS.

In the patent issued to Burrill M. Hotchkiss and George M. Allerton, complainant's assignors, May 28, 1871, for an improvement in vulcanizing apparatus, consisting of the application of hydraulic pressure to the moulds in a vulcanizing chamber, the invention claimed was a cylinder and piston outside the vulcanizing chamber, and pipes connecting with a supply of fluid or liquid under pressure, whereby the power exerted to hold the moulds together with a yielding force is independent of the vulcanizing operation. The evidence showed that the patent granted to George E. Hayes, January 14, 1868, and the condition of the art of, vulcanizing rubber prior to this time, anticipated and invalidated all of complainant's patent, except the vulcanizing chamber. The defendants Used machinery substantially covered by complainant's patent, except that they used no vulcanizing chamber. *Held* no infringement.

2. SAME—SUIT FOR INFRINGEMENT—FAILURE TO PLEAD PRIOR USE—EFFECT.

Where notice is not given in the answer of a specified prior use of the invention described in the patent, it cannot be set up as an anticipation of such invention; but, as exhibiting the state of the art, the evidence is competent to aid the court in putting a proper construction on the patent.

*Joshua Pusey*, for complainant.

*F. G. Lowthrop, Jr.*, for defendants.

BRADLEY, J. The bill in this case is filed for an injunction, damages, etc., under a patent issued May 23, 1871, to Burrill M. Hotchkiss and George M. Allerton, for an improvement in vulcanizing apparatus, consisting of the application of hydraulic pressure to the moulds in a vulcanizing chamber, instead of pressure by screws and clamps, or by the steam generated in the chamber; the piston and cylinder producing the pressure being outside of the chamber, and the pressure being regulated by safety-valves, so as not to be greater than necessary. This patent has been assigned to the complainant, and the defendants are charged with infringing it, and set up prior discovery, want of invention, and non-infringement. Under the first head, they refer to two patents of an earlier date than the plaintiff's—one granted to A. B. Woodward, January 16, 1866, reissued May 19, 1868; and the other granted to George E. Hayes, January 14, 1868. Woodward placed his flask and mould in a cylindrical boiler, in connection with a piston, and, by producing steam in the boiler, created a pressure by means of the piston, which compressed the two sections of the flask together, at the same time that the steam vulcanized the rubber in the mould. This clearly does not anticipate the specific device described in the patent of the complainant. Hayes produced pressure by steam in a tank or cylindrical compressor, the top of which, by a telescopic connection with the body (made steam tight by packing,) could be pressed and driven upward, and on the top of this was placed the flask in such

STEVENSON v. MAGOWAN and others.

a manner as to receive the pressure by means of a ram connected with the flask by a clamp or otherwise;

and the same heat which generated steam in the compressor was communicated to the flask above, and created steam from the water in the plaster of the moulds, and also vulcanized the rubber. The patent describes the operation thus:

“As the heat increases, the pressure of steam inside the compressor, through which the heat has first to pass, will constantly be greater than it will in the space above in which the flasks are placed, where steam can only form from water contained in the plaster moulds. From this description, it will be seen that the difference of pressure is brought to bear upon the flasks to close them, and effectually fill the moulds, and that an early, powerful, closing pressure is induced upon the flasks, while the rubber is at a temperature much below the vulcanizing point, and more plastic than when highly heated; also that the steam escaping from the plaster moulds, as well as any that may leak from the compressor at the higher temperature in the operation, will exert a counteracting effect upon the compressor, to prevent undue strain on the moulds, as the temperature is raised to the vulcanizing point.”

The principle of this patent approaches very closely that of the one in suit. Here we have, in the language of the latter, a cylinder, and ram or piston connected with the vulcanizing apparatus, and supplied with an elastic fluid, so that the cylinder and ram or piston will apply to the moulds the necessary pressure. The fluid employed is steam, it is true, but the patent claims any fluid. Also it is not introduced into the cylinder by a pipe and pump, but is generated in the cylinder itself by the application of heat. Does that make any patentable difference? The operation and effect upon the ram or piston, and thence upon the flask and moulds, are precisely the same as that produced by the fluid pumped into the cylinder in the complainant's machine; and the elasticity of the steam in the cylinder with the counterbalancing effect of the steam generated in the vulcanizing chamber, as means of adjustment to the expansion and contraction of the article in the moulds, are probably superior to those of the “escape or pressure safety-valves” in the apparatus of the complainant. Except that the steam is not pumped into the cylinder through a pipe, and is not independent of the vulcanizing heat, it is difficult to see any difference in principle between the two methods. These differences, however, may be sufficient to prevent the Hayes patent from being an anticipation of the complainant's.

But, besides this prior patent, the defendants have shown the state of the art to be such at the time when the plaintiff's patent was applied for (March, 1871,) as to preclude any extension of it, by construction, beyond its precise terms. It is shown by the testimony of George C. Gill that, as far back as 1863, R. Hoe & Co., of New York, constructed for Poppenhausen & Koenig, at College Point, Long Island, a hydraulic pump, and press for pressing rubber combs, backs of brushes, and such hard-rubber goods. This apparatus was exactly the counterpart of the machine described in the plaintiff's patent, except that

STEVENSON v. MAGOWAN and others.

it had no inclosed vulcanizing chamber, and does not seem to have an accumulator. It is thus described by the witness:

“The construction of the pump are two pumps placed on the cover of a cistern or tank, as you may term it. The plungers of the pumps are operated by a working beam, above the pumps, said beam connected to a crank shaft,

on which are pulleys that operate the pump. The press consists of a top, a platen, cylinder with ram, and bottom. The top is elevated above the platen by four rods or columns of sufficient strength to resist the pressure of about 250 tons. On the platen and on under-side of top are two steam-heating tables. The press is operated by water, pumped into the cylinder of the press, which raises the ram and platen, giving the pressure required. On the pump is a safety-valve, which would exhaust the water after the pressure had been given.”

Again:

“The safety-valve is placed midway between the two pumps, on the cover of the cistern or tank, and connected to both pumps; safety-valve having a valve lever, and ball weight, which was registered at five tons per square-inch pressure, to relieve the pressure of water, and prevent damage to pump or pumps.”

A photograph of this pumping apparatus and press was exhibited at the hearing. The whole fixture is substantially like that used by the defendants, except that the defendants use an accumulator. But if the rest was public property at the time of the issuing of the complainants' patent, the addition of an accumulator could not have been the subject of a patent. It is such a common appendage to a hydraulic pump, so frequently used in connection with it, that its adoption would have been no invention. As notice was not given, in the answer, of this structure at College Point, as a prior use of the invention described in the patent, it cannot be set up as an anticipation of such invention; but, as exhibiting the state of the art, the evidence is competent to aid the the court in putting a proper construction upon the patent. If any fair construction can be given to it which will not make it cover and include this College Point machinery, erected and used so many years before the patent was applied for, such construction ought to be adopted. An examination of the patent shows that this can be done. As before stated, the pump and press at College Point has no vulcanizing chamber. The top and platen, between which the rubber is pressed in the moulds and vulcanized, are entirely uninclosed. The patent speaks of a vulcanizing chamber throughout the specification, and suggests no other arrangement. The claim keeps up the same idea, supposing the hydraulic press to be attached to a vulcanizing chamber. It is as follows:

“We claim as our invention a cylinder and piston outside the vulcanizing chamber, and pipes connecting with a supply of fluid or liquid under pressure, substantially as specified, whereby the power exerted to hold the moulds together with a yielding force is independent of the vulcanizing operation.”

Thus it is seen that the vulcanizing chamber is, in terms, made a part of the combination embraced in the claim; and the state of the art, to which we have referred, shows that it was a material part; and that without it—that is, unless the claim had been confined to cases in which a vulcanizing chamber was used—it would not have been a valid one.

STEVENSON v. MAGOWAN and others.

Giving to the patent this construction, the defendants do not infringe it; for, as before said, they do not use the vulcanizing chamber, but vulcanize their belts between unclosed platens.

The bill must therefore be dismissed, with costs.