

Case No. 16,794. UNITED STATES STEAM-GAUGE CO. v. AMERICAN STEAM-GAUGE CO.

[1 Ban. & A. 30; Holmes, 309; 5 O. G. 208.]¹

Circuit Court, D. Massachusetts.

Jan., 1874.

PATENTS—LIMITATION OF CLAIMS—PRIOR STATE OF THE ART—STEAM-GAUGES.

1. In the construction of the first, third, and fifth claims of the reissued patent for a registering steam-gauge, granted to complainant, assignee of Elijah Clarke, March 5, 1872, *held* that, in view of the state of the art at the date of the invention, these claims must be limited to the combination of the particular elements which the patentee has described, or their substitutes, known at that time.
2. So limited, the claims are not infringed by the steam-gauge, for which letters-patent were granted to T. C. Hargrave, March 19, 1872.

[Bill in equity to restrain alleged infringement of letters-patent [No. 101,583], for an improved steam-gauge, originally granted Elijah Clarke April 15, 1870, reissued to the complainant March 5, 1872 [No. 4,775]; and for an account. The alleged infringement consisted in the manufacture and sale, by the defendant, of steam-gauges, constructed, substantially according to a patent granted one T. C. Hargrave for improvement in registering steam-gauges, March 19, 1872. The principal questions in the case were, as to the proper construction of the claims of the reissue, and as to infringement.]²

Thomas W. Clarke, for complainant.

George L. Roberts and Reuben L. Roberts, for defendant

SHEPLEY, District Judge. Complainant is the assignee of letters-patent originally issued to Elijah Clarke, on the 15th of April, 1870, reissued to the complainant on the 5th of March, 1872, for a registering steam-gauge. It is claimed that defendant has infringed the first, third, and fifth claims of complainant's patent.

As, in the opinion of the court, none of the evidence introduced by the defendant on the question of novelty affects the validity of complainant's patent, or throws any reasonable doubt upon the question as to Clarke's being the original and first inventor of what is described in his patent, the prior patents in evidence in the case will be examined principally in view of the light they throw upon the state of the art, as affecting the construction of those claims in the patent which are in issue, bearing upon the question of infringement. They are the following:

1. In a registering steam-gauge, the combination of the following instrumentalities: viz., first, a registering-wheel; second, suitable mechanism for revolving the same in one direction, and for preventing its return; and third, suitable means for adjustment, so that the gauge will be operative as a register only at the prescribed limit of steam pressure, all constructed and operating substantially as set forth.

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3. In a registering steam-gauge, the combination of the registering-wheel, I, the index-finger, P, the lever, F, the link, K, the pawl, H, and detent, J, for the purpose of denoting by the same impulse, at the same time, the number of excesses, and the maximum excess, of steam pressure, all constructed and operating substantially as set forth.

5. In a registering steam-gauge, the combination of the set-screw, b, with the lever, F, for the purpose of the adjustment of the gauge to the zero of the prescribed limit of steam pressure, substantially as set forth.

The first claim of the patent cannot be construed broadly, as embracing the three described instrumentalities in the combination without reference to their construction or mode of operation, as three corresponding instrumentalities are found in combination in the steam-gauge described in the English patent of John Clarke, sealed on the eleventh day of December, 1860. The patent of John Clarke, and the complainant's patent for the invention of Elijah Clarke, each contain, in the organization of a steam-gauge, first, a ratchet, which effects registration of excesses of prescribed pressure; second, a lever, carrying a pawl operating to revolve the ratchet-wheel in one direction, and a detent operating to prevent its retrograde movement; and, third, suitable means of adjustment, so that the gauge will be operative as a register only at the prescribed limit of steam pressure. The first claim of the complainant's patent must therefore be construed in accordance with the literal meaning of the words used in the claim itself, as embracing this combination of those three instrumentalities in the organization of a steam-gauge, when constructed and operating substantially as set forth in the complainant's specification; and it is by reason of the differences in construction and operation that this claim of the patent is sustained, and sustained with the limitation to such described mode of construction and operation. The construction and mode of operation of these instrumentalities combined in the organization of defendant's gauge, manufactured under the Hargrave patent, differ as much from the corresponding combination of instrumentalities in the Elijah Clarke organization, as the latter combination differs from that in the English patent to John Clarke. There is, therefore, no infringement of the first claim.

It is not contended, and cannot be, with any show of reason, that the combination of mechanical elements enumerated in the third claim of the reissued letters-patent in suit is to be found in defendant's gauge. Complainant contends that the third claim embraces any mechanism in a steam-gauge, so organized as to denote at the same time and by the same impulse the number of excesses, and the maximum excess, of steam pressure.

In view of the state of the art, at the date of the invention of Elijah Clarke, this claim must also receive a more limited construction, and be confined to substantially the same instrumentalities as are enumerated in the third claim. Gauges indicating the maximum pressure were old and in common use, as well as gauges like that shown in the specification of the English patent to John Clarke.

In the specification of the letters-patent to David P. Davis, dated July 2, 1867, and of the English patent to Norton and Bailey, dated Jan. 7, 1868, mechanism is described combined with the ordinary mechanism of a pressure-gauge, by which a marking device is actuated by the weighing device, and makes a mark upon a sheet of paper, which is

moved forward at the same time by clockwork. The pressure of the steam is recorded by the position of this mark upon the sheet of paper. Parallel lines are traced upon the sheet of paper, and these are intersected by other parallel lines, which last correspond with the movement of the clock-work, so that in a given unit of time the paper is moved a distance equal to the distance between the cross-lines. A record is permanently, made upon the paper by the pencil or other marking device, so that upon comparison of the line, traced by the pencil with the two systems of parallel lines upon the paper, there is registered and indicated the actual pressure of steam at any and every given time, and, of course, necessarily the highest and lowest pressure, and when and how often the pressure has exceeded or fallen below any assumed point of pressure. In these last-named two organizations, it is true that there was the added instrumentality of a coiled spring, or a weight to move the paper. Yet these gauges both contained mechanism for denoting, by the same impulse,—that is, by the expansive force of the steam acting upon the spring or weighing device,—at the same time, the number of excesses, and the maximum excess, of steam pressure.

The evidence in the record disproves any infringement of the fifth claim. Treating the complainant's patent as good and valid, with the construction here given to the claims which secure to the patentee the right to the combination of the instrumentalities in the organization of a pressure-gauge which he has described, and secures him against infringement by any mere formal alterations or substitution of ingredients, well-known as substitutes at the date of his invention for any of the ingredients of his combination, yet a ease of infringement is not made out against the defendant by the use of the Hargrave gauge. To show wherein the instrumentalities in this organization differ in construction and mode of operation from those in the combination in the Elijah Clarke gauge, so far as the combination in that gauge is new, would require more space than can well be devoted to this branch of the subject, as the views I have already expressed on the construction of the claims will show clearly to parties and counsel, that, entertaining these opinions in relation to the construction of the claims, I could come to no other conclusion than that the defendant does not infringe; and the differences in the two organizations could not be readily made intelligible to others by any mere verbal description unaided by models or drawings.

Bill dismissed.

¹ [Reported by Hubert A. Banning, Esq., and Henry Arden, Esq., and Jabez S. Holmes, Esq., and here compiled and reprinted by permission. The syllabus and opinion are from 1 Ban. & A. 30, and the statement is from Holmes, 309.]

² [From Holmes, 309.]