

Case No. 6,167. HARTSHORN V. SHOREY ET AL.

[2 Ban. & A. 233;¹ 9 O. G. 595.]

Circuit Court, D. Massachusetts.

Feb. 17, 1876.

PATENT—INFRINGEMENT—SPRING FIXTURES FOR SHADES.

Upon the construction given by the court to the claim of complainant's patent for improvement in spring fixtures for shades, in the case of *Hartshorn v. Almy* [Case No. 6,166], the defendants adjudged to infringe said patent.

[Bill by Stewart Hartshorn against John Shorey and others for infringement of a patent.]

S. D. Law, for complainant.

A. K. P. Joy, for defendants.

SHEPLEY, Circuit Judge. This bill is for an alleged infringement of letters patent, reissue No. 2,756, dated August 27, 1867, granted to Stewart Hartshorn for improvement in spring fixtures for shades. These are the same letters patent which were the subject-matter of litigation in *Hartshorn v. Almy* [Case No. 6,166], and *Hartshorn v. Tripp* [Id. 6,168].

Defendants rely upon two grounds of defense: First, that the alleged invention of Hartshorn was not new and patentable at the date of his original letters patent Second, that the devices made use of by the defendants are no infringement of the plaintiff's invention.

To sustain the defense of want of novelty, the defendants rely upon evidence of the prior existence of what is well known as the "coach fixture," in which a cord is used to lift the pawl and disengage it from the ratchet when it is desirable to allow the curtain to roll up under the action of the spring. This defense is fully met and answered in the two cases above cited, to which it is only necessary to refer to dispose of this branch of the defense.

The fixture manufactured by the defendants has a spindle which rests in the bracket and is extended for a short distance into one end of the curtain-roller, which end revolves around that portion of the fixed spindle which is projected into the roller, while the other end of the roller is provided with a journal, upon which it revolves freely in the supporting bracket This spindle is provided with a cam-shaped recess, on one side of it, within the roller, and a chamber of sufficient size to receive a small sphere or buckshot in such a position as to be directly over the recess in the spindle when the roller is revolved. The small ball or buckshot is introduced into this chamber. One edge of the recess in the spindle is so constructed that when the ball falls into the recess it will be forced against the side of the chamber, and operate as a detent to stop the revolution of the roller when it is turning one way. The other edge of the recess is so formed that when the roller is

turned in the opposite direction the ball is thrown up into the chamber, where, when the roller is rapidly revolved, the ball is held by centrifugal force.

It will be seen, by a comparison of this contrivance with the one described in the Hartshorn patent, that it effects the same result by means of the ball operating as a detent, as is effected in the Hartshorn contrivance by the pawl and ratchet. In Hartshorn's, the pawl has a tendency to fall by gravitation into the notches made in the periphery of the hub, or, when affixed below the hub, in one of the modes described in the patent, it is actuated by a spring which tends to engage it in the notch. The ball operates as a detent, catch, or pawl, to engage with the notch or ratchet whenever the rotation of the roller, and the upward movement of the curtain under the influence of the spring, are checked by the manipulation of the curtain or shade itself. In Hartshorn's, when the roller is revolved rapidly, the ratchet has not time to fall by gravitation into the notch while the ratchet-notch is passing under the toe of the pawl. In Shorey's, while the roller is being rapidly revolved, the ball is kept by centrifugal force from engaging as a detent between the side of the chamber in the roller and the edge of the recess in the spindle.

The construction of the claim in the Hartshorn patent was fully given in the case of *Hartshorn v. Almy* [supra]. It was there shown to embrace, in combination with a spring-roller, such an arrangement of pawl and ratchet, with the varying speed of the revolution of the roller mutually acting with each other through the manipulation of the roller, that the pawl would engage with the ratchet by checking the rotation of the roller and the upward movement of the curtain by the simple manipulation of the shade, merely varying the speed of the rotation of the roller. It is equally within the scope of this invention, whether the force which determines the fact of the engagement or non-engagement of the pawl or detent with the notch or ratchet be that of a spring, or force of gravity, or centrifugal force.

Improvements may be made in the spring or the roller, the shade, or the form of the pawl or detent, and these improvements may be patentable; but so long as the combination embraces, as in the case of the device of these defendants, every element of Hartshorn's invention, operating substantially in the same manner to produce the same result, it must be treated as an infringement. Decree for complainant, for injunction and account.

{For other cases involving this patent, see note to *Hartshorn v. Almy*, Case No. 6,166.}

¹ {Reported by Hubert A. Banning, Esq., and Henry Arden, Esq., and here reprinted by permission.}