

as the boxes are made open, so that the air circulates with freedom throughout,—inside as well as outside. And then, when made and put upon the market in car loads, as they are, who is to know, and how are the purchasers to find out, whether the lumber in the boxes has the lesser or more compact side turned in or out? The evidence shows that neither purchasers nor manufacturers think of this matter, or pay any attention to it, and that by far the best lumber for boxes is quarter-sawed lumber (that is, lumber sawed at right angles, or approximately so, with the layers of growth); that it is stronger, and less liable to warp, as we all know from common experience. Veneering, which is cut parallel, approximately, with the rings of growth, the evidence shows, is most subject to warping of any lumber, but with good nailing of thin sides to half-inch or five-eighths inch ends a very good and cheap box can be made from it. If a patent could be maintained upon a box made from veneering, after the claims of the patent in suit, there is no reason that could be given why one could not be maintained for a box made of common lumber sawed from the sides of a log, because the tendency to spring in a certain direction, the edges always away from the heart of a log, which is firmest, is just as certain and inevitable as so-called "readjusted lumber" is to warp in a contrary direction. As the evidence shows, there is always some quarter-sawed lumber coming from every log, as a result of the common method of sawing, where the log is squared by taking slabs and boards from four sides, and then sawing the remaining block into boards. But, just as soon as you get either way from the heart of the log, the boards, unless confined in place by piling, will warp, by the middle of the board bulging towards what was the heart of the tree, and the edges in the contrary direction. It is quite evident to the court, from the testimony, that there is no substantial merit in either of the claims of the patent, either upon the score of invention or that of utility. The decree of the circuit court is affirmed, with costs.

HICKORY WHEEL CO. v. FRAZIER et al.

(Circuit Court, N. D. Illinois, N. D. June 27, 1898.)

1. PATENTS FOR INVENTION—PATENTABILITY—SULKIES.

Letters patent No. 498,113, issued March 21, 1893, for an improvement in sulkies, consisting in reducing the size of the wheels and equipping them with rubber tires, are void for want of invention.

2. SAME—ANTICIPATION.

Letters patent No. 498,709, issued May 20, 1893, for an improvement in sulkies, consisting in providing the seat and body of a large-wheel sulky with the wheels of a small-wheel sulky, are void for anticipation.

This was a suit by the Hickory Wheel Company against Walter S. Frazier and others to enjoin an alleged infringement of two patents issued to Sterling Elliott for improvements in sulkies, and assigned to the complainant.

Offield, Towle & Linthicum, for complainant.

Bond, Adams, Pickard & Jackson, for defendants.

GROSSCUP, District Judge. The bill is filed to restrain infringement of letters patent No. 498,113, issued March 21, 1893, and No. 498,709, issued May 30, 1893, both relating to improvements in sulkies. The alleged invention consists in taking the ordinary trotting sulky, and cutting down its wheels to a size where their diameter is less than the distance between the shafts and the ground, and providing such wheels with elastic tires. Claim 1 of patent No. 498,113 is as follows:

"The combination in a trotting sulky of a frame, shafts, or pole and seat, and wheels less in diameter than the distance between the shafts and the ground, and provided with elastic tires, substantially as described."

It is shown without question that, prior to this patent, trotting sulkies had been occasionally provided with small wheels. It is admitted also that, prior to this patent, the use of the elastic and pneumatic tires had been fully developed in connection with bicycles. Indeed, in bicycle manufacture solid rubber tires were in general use in 1888, cushion tires in 1889, and pneumatic tires in 1891. The cushion and pneumatic tires were used on bicycles long before the patent under consideration, and were as familiar to the public as steel tires on wagons. The advantage of employing pneumatic tires on vehicles other than bicycles must have been obvious, and was in fact pointed out. This was done by Thomas Dunne in a patent dated June, 28, 1892, and by Robert William Thompson as early as 1845. The Dunlop patent of 1891, under which the well-known Dunlop bicycle tire has been so largely manufactured, expressly stated that his hollow, air-inflated, India-rubber tire could be well used on the wheels of bicycles and other vehicles. The so-called invention of the patent under consideration confessedly resides in applying to this old form of little wheels this prior, well-known elastic tire. It consists simply of putting upon a sulky the wheels of a bicycle. It has not the merit, however small, of being the first suggestion of such a possibility, as the foregoing references to the earlier patents prove. The result is effective, but cannot, in my judgment, be monopolized; for, in view of the prior art, it presents no patentable invention.

Patent No. 498,709 is a combination in a sulky of the seat, shafts, and axle, having axle spindles, combined with wheels, and wheel supports depending from said axle spindles, substantially as described. The purpose is to provide the seat and body of a large-wheel sulky with the wheels of a small-wheel sulky, much as the body of a carriage is in winter transferred to runners. There is no claim upon the mechanical details. I am of the opinion that the combination is sufficiently anticipated in the prior art,—especially in the Whipple,—and therefore hold the patent invalid.

ELECTRIC CAR CO. et al. v. NASSAU ELECTRIC R. CO.

(Circuit Court, E. D. New York. August 24, 1898.)

PATENTS—INFRINGEMENT—CONTROLLING SWITCH FOR ELECTRIC MOTORS.

The Condict patent, No. 393,323, for a controlling switch for electric motors, is infringed by a device which only differs from that described in that, when a change is made from series to multiple, instead of the resistance being cut in "at the time of changing the connections," and cut out "as soon as the new connection is made," it is cut in at the latter time and cut out subsequently.

Motion for Preliminary Injunction.

Betts, Betts, Sheffield & Betts, for complainants.

Harding & Harding, for defendant.

LACOMBE, Circuit Judge. This patent (Condict, No. 393,323, November 20, 1888, switch or controller for electric motors) was before the United States circuit court in the district of Connecticut, and was sustained as to the claims here in controversy in the case of Same Complainants v. Hartford & West Hartford R. Co., 87 Fed. 733. Reference may be had to the opinion in that case for a description of the invention and a discussion of the patent and the scope of the claims. The only question to be decided on the papers presented here is whether defendant's devices (there are four varieties of them) infringe the claims as construed in the earlier case. The additional patent introduced by defendant here was before Judge Townsend on motion for rehearing, and belongs to a different, although a cognate, art. The invention patented is a device for regulating or controlling the current delivered to an electric motor from the supply wire by combining the motors, their coils, and two or more resistances, in such different relations to each other that the intensity of the current received at the point of operation may be reduced or increased, and thus the motor may be run slowly or fast, and changed from one rate of speed to another, without jerks or sudden changes of speed, and without sparking. Among the changes of relation so made is one in the connection of the motors from series to parallel, and vice versa, necessitating an open circuit, with consequent danger from sparking, and great strain and stress from abrupt shifting of connection. "To overcome these objections," says the specification, "I have constructed my switch so that, at the time of changing the connections, I insert resistances more or less great. * * * I also so arrange the switch that the resistances are all cut out of circuit as soon as the new motor connection is made." A subsidiary invention, as found in the West Hartford Case, is the "cutting in or out of one or more of the resistances, and thereby providing an additional means of regulation where slight variations in the speed or power of the motors is required." The main invention is covered by one group of claims, Nos. 27, 28, 29, and 31; the subsidiary invention by another group, Nos. 20, 21, and 22. For a further description of the inventions, Judge Townsend's opinion may be referred to. Defendant's several devices are numbered, successively, 1, 2, 3, and 4, and it is conceded that No. 3 infringes both groups of claims, upon Judge Townsend's construction of them. It