

ing in the defendant's coupler is the result of the raising of the locking block through the interposition of a trainman. These differences between the two devices serve to distinguish the defendant's mechanism from that of the complainant's quite as markedly as complainant's device is distinguished from the old art. If there is a patentable difference between the invention of Lorraine and Aubin and the many devices prior in time to them for accomplishing the same result, there is the same patentable difference between the defendant's coupler and that of complainant. Both are mere improvers. The field was a narrow one for either. There is as much to distinguish Tower from Lorraine and Aubin as there was to distinguish the latter from Janney, Dowling, Ferguson, Wineman, Kling, and others who have traveled over the same field. We therefore conclude, that although an S-shaped knuckle, not centrally pivoted, in combination with a gravity pin which does not normally ride on the tail of the knuckle, performs substantially the same functions as the knuckle and gravity lock of the patent in suit, yet this fact is not enough to justify us in finding infringement of a patent so limited as that of Lorraine and Aubin. Unless complainant is entitled to a considerable range of equivalents, it cannot be said that the elements in the defendant's combination are identical with those in the first claim of the patent in suit. Such a range of equivalents as would bring the defendant's device within the scope of the complainant's first claim would invalidate this claim upon the ground of anticipation. The elements included in the first claim should all be read into each of the other claims here involved. Two of the elements, the D-shaped knuckle centrally pivoted and the gravity pin riding directly on the tail of the knuckle, are not found in the infringing device, limited as we have limited the first claim. The groove, G, and the recess, S, nor the shoulder, S¹, which are elements in some of the other claims, are not found in the infringing device, nor any equivalent for them, within the limited range of equivalents to which complainant is entitled.

We have not deemed it necessary to go into the question raised by the criticisms made upon the reissued patent, nor have we deemed it at all important, in the view we have as to the question of infringement, to consider the effect of the proceedings in the patent office as limiting the claims of the reissued patent. The decree of the circuit court must be affirmed upon the defense of noninfringement. We express no opinion as to the validity of the Tower patent.

CHRISTY et al. v. HYGEIA PNEUMATIC BICYCLE SADDLE CO. et al.

(Circuit Court, D. Maryland. June 13, 1898.)

1. PATENTS—INVENTION—BICYCLE SADDLES.

There is no invention in constructing a bicycle saddle top with vertical walled depressions, adapted to receive two cushions or pads, and hold them firmly in place.

2. SAME—EVIDENCE OF PATENTABILITY—LARGE SALES.

Large sales and increasing popularity cannot be accepted as certain proofs of novelty and invention when the article, as made and sold by

complainant, differs widely in many respects from the article shown in the specifications and covered by the claims.

8. SAME—BICYCLE SADDLES.

The Christy patent, No. 532,444, for a bicycle saddle having a solid top with vertical walled depressions adapted to receive and hold in place two cushions or pads, is void for want of invention.

This is a suit in equity by H. A. Christy & Co. against the Hygeia Pneumatic Bicycle Saddle Company (Walter B. Wentz, receiver) and William J. Sneeringer for alleged infringement of letters patent No. 532,444, issued January 15, 1895, to Henry A. Christy, for a bicycle saddle.

Julian C. Dowell (Benj. Butterworth and Wm. A. Redding, of counsel), for complainants.

Stewart & Stewart, Horace Pettit, and Stinson & Williams, for defendants.

MORRIS, District Judge. The defenses are want of patentable novelty and noninfringement. The claims of the patent are as follows:

“(1) A bicycle saddle having a solid top provided upon its upper surface with recessed or sunken portions at each side of the seat portion, constructed to receive and hold removable pads; said recesses being formed with abrupt marginal walls to prevent the pads from slipping, substantially as described. (2) A bicycle saddle having a solid top provided upon its upper surface with recessed or sunken portions at each side of the seat portion, constructed to receive and hold pads, said recesses being formed with abrupt marginal walls to prevent the pads from slipping, in combination with pads adapted to fit said recesses so as to be removably retained therein, substantially as described. (3) A bicycle saddle having a solid top provided upon its upper surface with recessed or sunken portions at each side of the seat portion constructed to receive and hold removable pads, and having a horn portion shortened or truncated, so that it will not project between the legs of the rider; and also cut away or recessed upon its upper surface centrally of said horn portion, substantially as described.”

The complainant contends that claims 1 and 2 are infringed. Claim 3 is not in controversy, for the reason that in the defendants' saddle it is conceded that the horn is not truncated or shortened up so as not to project between the legs of the rider as called for by claim 3. Claim 1 is for the saddle plate made with sunken recesses on each side of the center line of the seat, the recesses being formed with abrupt marginal walls to receive and hold removable pads, and prevent the pads from slipping. Claim 2 is for the same device in combination with pads adapted to fit the recesses so as to be removably retained therein. As the defendants' saddle has the removable pads fitted into the recesses, if it infringes either it infringes both claims, and, so far as this case is concerned, claims 1 and 2 may be considered as identical. The Christy saddle, as manufactured by the complainant and known to the trade, is quite different in some of its features from the saddle described in the specification and the drawings of the patent, so that the question to be decided in this suit turns, not upon the similarity of the defendants' saddle to that made by the complainant, but upon the validity of the claims of the patent in suit and the infringement of those claims as explained by the specification. The prior patents put in evidence

show that there was nothing new in any of the objects which Christy has in mind to accomplish. Christy states that his object was to lessen the discomfort and injury which bicycle riders suffer from the pressure of the saddle upon the perinæum, and from the rubbing of the legs against the horn. In Hicks' patent for a cushion seat designed particularly for bicycles,—No. 487,367, October 11, 1892,—he states that his object is to obtain a cushion seat that will adjust itself to the shape of the rider, and at the same time prevent injurious pressure against the perinæum. This he tried to accomplish by an inflatable cushion with a covering of any suitable material secured in any desired manner to a base of some inelastic material, preferably of wood, the cushion to be formed with a fissure extending from the front rearward to any desired extent. He says:

"This fissure prevents upward pressure on the perinæum when a person sits thereupon. This fissure may be formed by securing a portion of the top of the cushion intermediate the sides down firmly upon the lower portion thereof, allowing the cushion to be inflated at each side thereof. The fissure may extend only part way toward the rear of the cushion, * * * or it may pass to the rearward limit of the cushion, dividing it into two separate air chambers. * * * Such a form relieves the perinæum. * * *"

We thus have in the Hicks device an inelastic base upon which are secured two cushions to support the ischial tuberosities of the rider, and separated along the center line of the seat by a vacant space which relieves the perinæum from all pressure. This is precisely what is accomplished by the two separated cushions or pads with the space between them shown in the Christy saddle as manufactured by the complainant. In the English patent to Henson—No. 19,840 of 1893—the same object is declared to be the purpose of the bicycle saddle there described, in which there is cut out from the framework of the saddle the portion between the points where the ischial tuberosities are to rest, or a depression is formed in the frame there, so as to leave a vacant space with nothing to press against the perinæum. It is apparent, therefore, that the claim of Christy was rightly restricted to the mechanical device by which a saddle having two separated cushions or pads, with a space between them, might be constructed; his invention, as claimed by him in his patent, being solely for the sunken depressions in the solid saddle top so formed as to receive the cushions or pads, and prevent the pads slipping. It is conceded that if cushions or pads similar to those shown in the defendants' saddle are fastened to the top of a saddle without depressions, there is no infringement. The validity of the patent then depends upon whether, in view of the state of the art, it required invention to construct a saddle top with vertical walled depressions adapted to receive the two cushions and hold them in place. It is certainly a case in which all that is new in the mode of construction is not very distinguishable from mere mechanical improvement, and if it can be shown that the idea of the mode of construction was not new, then, I think, nothing remains but mechanical skill. It being conceded that all that the complainant can make claim to is the depressions to receive the pads, it is important to see if that idea, in connection with the seat of a metal-top saddle, was new. It is a matter of observation that a depression,

more or less deep, made in a seat in order to receive a cushion, is common and old; and in the English patent in evidence, No. 12,854 of 1889, to Henry Edward Newton, he describes an equestrian saddle to be made of thin sheet steel or iron in which "two cup-like depressions are stamped, one depression being on each side of the central axis of the blank." "These depressions are subsequently filled up with India rubber, gutta percha, padding, or any other suitable elastic substance, so as to render the seat comfortable and elastic to the rider." And his claim 2 is for "the cup-like depressions, F, F, as described, as illustrated in the drawing for the purposes herein set forth." This, it seems to me, is the substance of the complainants' specification and claim, viz. in a metal-top saddle a depression on each side of the axial line, made to receive padding, intended to make the seat elastic to the pressure of the tuberosities of the ischii. Here we have the same problem of a rigid metal seat to be made elastic at the same two points of contact with the rider's body, and the same device to accomplish it, viz. depressed spots in the metal, to be filled with pads.

It is urged that there are in the complainant's device the additional elements that the depressions are made with abrupt walls to prevent the pads from slipping, and that the pads are removable, both of which features are asserted to be important and useful improvements. But with the cup-like depressions to hold the pads, already shown by Newton's patent, it does not appear that it required invention to make the depressions sufficiently abrupt to prevent the filling from slipping. In his specification Christy states:

"In my improved saddle I have only a truncated horn; * * * and I also prefer that this truncated horn portion, instead of being convex upon its upper surface, as in the old construction, should be cut away or concave centrally thereof, thereby giving room for the portions of the person which are so easily injured. I also preferably make the rear of the saddle wider than ordinarily constructed, so as to sustain the fleshy portions of the buttocks as well as the pelvis, and provide upon each side of the seat portion a sunken portion or recess constructed to receive and hold pads or cushions which may be removably fitted therein for the comfort and ease of the rider."

In the drawings the pads are shown lying in the depressions, and not extending above the plane of the metal top of the saddle. In the Christy saddle, as manufactured, the horn is not truncated, it is not cut away or made concave on its upper surface, and the saddle is not made wide, and does not support the fleshy portion of the buttocks at all. As manufactured, the Christy saddle presents nothing to the body of the rider but the two small pads on which the two ischii rest, sustaining the whole of the rider's weight. Instead of the concavity, the truncated horn being cut out to relieve pressure on the perinæum, there is substituted on the saddle as manufactured an open space the whole length of the saddle from front to rear between the two cushions, which space, from the cushions being considerably separated, and being built up quite high above the plane of the metal saddle, is both wide and deep. Merit is claimed for the saddle because the cushions are removable, but as manufactured they are held in the recesses by catches of twisted wire. Any cushion which is affixed to a solid base may be removed if the fasten-

ings are released. Great advantage is also claimed because the abrupt walls of the sunken recesses prevent the cushions from slipping. But if it was not new, as is shown by the English patent to Newton, to make recesses in a metal saddle to receive cushions, it can hardly be said to require invention, when the cushions as used are liable to slip, to make the recesses sufficiently abrupt to prevent slipping. The strongest and most persuasive argument which the complainant urges in favor of the patentability of the Christy saddle is based upon the testimony showing the rapidly increasing sales, and its decided popularity, since it has become known upon the market. But the saddle manufactured differs so widely from the saddle shown in the specifications and drawings that it is not easy to determine just what features make it acceptable to the trade and to those who use it. It would appear that some of the features of the saddle as manufactured which are not shown in the saddle as patented possess more novelty and utility than those described in the patent. It may well be that the advantages of the manufactured saddle result from the fact that the saddle plate is reduced in size until it is nothing more than a support for the two pads, and has no bearing at all for the fleshy portion of the buttocks so that the rider's weight rests exclusively upon the two ischii of the pelvis, and also from the fact that the interval between the cushions or pads leaves an open space from front to back similar to that shown in the Hicks patent, through which there can be a current of air, and because of which there can be no pressure upon the perinæum. It seems quite probable that it may be these unpatented features, not shown in the specifications or drawings, which have given the Christy saddle the acceptance which it has obtained, rather than any advantage of construction arising from the fact that the pads are set in depressions, and are detachable. It may also be that with the enormously increased use of bicycles experience may have taught particular riders that upon long runs it is less injurious to use one kind of a saddle than another, although not so agreeable at first. The fact of comparative utility when the acceptance of the improved device may just as well be attributed to features not claimed in the patent is an unsafe guide in determining the existence of patentable invention. Upon the whole case, considering the prior state of the art, I have been forced to the conclusion that it did not require invention to form the recesses on the surface of a solid-top saddle with abrupt marginal walls to receive the pads and keep them from slipping.

UNION SWITCH & SIGNAL CO. et al. v. PHILADELPHIA & R. R. CO., et al.

(Circuit Court, E. D. Pennsylvania. May 26, 1898.)

1. PATENTS—PRIOR USE—RAILWAY SIGNALING.

The Westinghouse patent, No. 270,867, for improvements in electric circuits for railway signaling, is void because it was in practical and public use for more than two years before the patent was applied for, and because a complete description of it was previously published in the "Railroad Gazette," a trade paper having a general circulation among railroad people and those connected with railroads.