

Lehnbeuter v. Holthaus, 105 U. S. 94. The presumption of patentability thus arising has not been rebutted here by any evidence.

This last observation is equally applicable to the patent to Thurber & Schaefer, No. 542,452. The novelty of the process of manufacture described and claimed in and by that patent has not been impeached. The blanks out of which the defendant made the Huyler baskets were not provided with the irregular edge required by this patent. Therefore these baskets did not anticipate the invention, and are not within the claims of the patent. The defendant, then, is at liberty to continue the manufacture of those baskets. This patent is for the specific kind of articles, and for the particular process of manufacture, therein mentioned and described. Within its limited scope, I do not see why the patent should not be sustained. There is here no evidence whatever to overthrow the presumption of patentability which the patent itself raises.

There is ample evidence of infringement by the defendant of both the patents in suit. The testimony of the complainant's witnesses, I think, makes out a clear prima facie case of infringement of each of the patents. Upon this branch of the case the defendant offered no evidence. If the defendant's methods or processes were different from those of the patents, it was an easy thing to show the fact. But there is not even a sworn denial of infringement. Let a decree be drawn in favor of the complainant, in accordance with the views expressed in the foregoing opinion.

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NORTH BRITISH RUBBER CO. v. JANDORF et al.

(Circuit Court, S. D. New York. December 29, 1897.)

**1. PATENTS—LIMITATION OF CLAIMS.**

The patent law is not intended to secure a monopoly of all the natural developments of a general principle to the person who happens to make some special construction embodying it a few weeks in advance of others, when it appears that such improvements were certain to be made in a short time.

**2. INFRINGEMENT—BICYCLE TIRES.**

A patent which is clearly for a cushion tire having a tube filled with air or a roll of sponge rubber, merely to support and increase the activity of the tire, is not infringed by a tire having an inner tube completely encircled by an outer sheath to which is attached flanges, which are pressed into recesses formed by the flanges of the rim, so that when the tire is inflated they are securely locked in position and hold the tire firmly in place.

**3. SAME.**

The Bartlett patents, reissue No. 11,216 (original No. 448,793) and original No. 466,532, both for improvements in bicycle tires, if valid at all, are not entitled to a broad construction; and, being limited to the actual invention, *held*, that they were not infringed.

This was a suit in equity by the North British Rubber Company against Jandorf and others for alleged infringement of certain patents for improvement in bicycle tires.

Frederick H. Betts and Edwin H. Brown, for complainant.  
Offield, Towle & Linthicum, for defendants.

TOWNSEND, District Judge. This is a suit charging infringement of claims 1, 2, and 4 of reissue patent No. 11,216, dated December 29, 1891, and claims 1 and 2, being all the claims, of patent No. 466,532, dated January 5, 1892, both of said patents having been issued to William E. Bartlett for improvements in bicycle tires. The defendants are purchasers from the Gormully & Jeffery Manufacturing Company, of Chicago, which has assumed the defense of this action.

Said claims are as follows:

Patent No. 11,216.

"(1) A wheel having a vulcanized India rubber tire of cylindrical form when free, and without joint after vulcanization, and held upon the wheel in a form trough-like in section, and there retained by inwardly inclined flanges upon the wheel.

"(2) A wheel having a rim formed with inwardly inclined flanges, and a vulcanized India rubber tire without joint formed from a cylinder of rubber bent and held upon the wheel in a trough-like form."

"(4) A wheel rim provided with outwardly convergent side flanges, an annular inflatable tube seated in said wheel rim, and a rubber tire of arched form in cross section, and embracing the convex portion of said annular tube, and having its edges inclosed between said flanges and the opposite sides of said annular tube, respectively, substantially as shown and described."

Patent No. 466,532.

"(1) The combination, as herein set forth, of a wheel rim provided with an exterior groove and with convergent side flanges, an annular tube of flexible material seated in the said groove, an annular U-shaped rubber tire surrounding and embracing the convex portion of said tube, with its edges adapted to be seated in the undercut recesses afforded by the said inwardly converging side flanges, and reinforcing ribs for insuring the close confinement of the inclosed edges of the tire in the said recesses by the inflation of the said tube.

"(2) The combination, as and for the purposes herein set forth, of the wheel rim, A, provided with the inwardly converging side flanges, and a<sup>1</sup>, the annular tube, B, and the annular tire, C, constructed with the integral reinforcing ribs, C<sup>1</sup>, and C<sup>2</sup>."

Defendants deny infringement of any of said claims, and deny complainant's right to bring suit on either of these patents at the time of the commencement of the action. They contend that the fourth claim of reissue patent No. 11,216 is invalid because of anticipation, and because the invention claimed therein is not in any way indicated or attempted to be secured in the original patent. They further contend that patent No. 466,532 is anticipated, and does not disclose any invention in addition to that contained in patent No. 11,216.

The application for the original patent, No. 448,793, of which No. 11,216 is the reissue, was filed November 18, 1890. The invention there described was a wheel with flanges on the rim, converging inwardly, and a cushion tire, consisting of a flat endless band of India rubber broader than the space between the base of the wheel rim, adapted to be secured within the converging flanges by bending the edges together and placing them there, the elastic force of the rubber being sufficient to hold the edges of the band firmly against the flanges of the wheel, and the pressure upon that part of the band which at any time touched the ground while in motion increasing the pressure against the flanges at that point, and thus holding the tire all the more securely.

All of Bartlett's original claims were at first rejected in the patent office. In a letter to the office he then defined his position as follows:

"The leading feature of this invention is that the India rubber tire forms an arch which is prevented from flattening under pressure of the load simply by the support afforded it by a trough-like felly, against the sides of which the arch abuts. The sectional form of the tire is rectangular, and that of the felly is trough-like, with inwardly inclined sides. The tire is sprung into place as is shown in Fig. 5. It will be seen that the pressure of the load of the wheel gives rise to an outward thrust exerted by the edges of the tire against the side, or inwardly inclined edges, of the trough-like felly. This is an essential feature."

Figs. 7 and 8 of the original drawings show means for supporting this tire, one by a roll of sponge rubber, and one by a tube to be filled with compressed air. It was stated in the patent that such supports might be used, and that in such case the rubber band might be made thinner.

In the history of the art of rubber bicycle tires three distinct types have successively been developed, known, respectively, as the "solid," "cushion," and "pneumatic" tire. The narrow surface of the solid tire slightly relieved the shocks encountered in practical use. The cushion tire was hollowed out in its center, and for this reason afforded a much more elastic support to the rider. The advantages derived from each of these constructions were due to the resiliency of the rubber tire itself. The pneumatic tire, although it is constructed, in part at least, of rubber, and although it presents to a marked degree the feature of resiliency, depends therefor not upon the resiliency of rubber, but upon the resiliency of the air with which it is inflated. In fact, the ordinary external covering of rubber and cloth is practically devoid of resiliency, and the elasticity of the rubber is only incidentally made available in connection with the capacity of the rubber to retain the highly-compressed air, which air by its activity furnishes the highest degree of resiliency. It is important to bear in mind this well-recognized distinction, because it lies at the foundation of the issues herein involved.

This patent was clearly for a cushion tire, the tube filled with air or a roll of sponge rubber being intended merely to support and increase the activity of said rubber cushion tire, which was the principal feature. In his English patent, No. 16,348, for substantially the same invention, the provisional specification of which was filed October 14, 1890, and the complete specification filed July 13, 1891, and allowed August 15, 1891, there is no mention of any such supports for the rubber band or tire, and no indication of them in the drawings. The application for the reissue was filed October 22, 1891. The application for No. 466,532 was filed September 26, 1891. So far as the rim of the wheel and the flanges and the shape of the rubber tire are concerned, the drawings do not differ substantially from those in the original application, the drawings of the rubber tire in No. 466,532 being perhaps slightly thinner than in the other drawings. The inflatable tube, however, as shown in these drawings of the reissue, completely fills the space between the rubber tire and the trough of the wheel, and touches, or very nearly touches, the whole of the inner edge of the rubber tire, as it did not in the orig-

inal patent. In patent No. 466,532 the flanges are a little more convergent than in the former tire, which enables ribs or reinforcers to be added to the rubber tire, so that the edges of the rubber tire would seem to be held a little more firmly, and the inflatable tube everywhere touches the rubber tire. Defendants' wheel has a shallow flattened rim, thus differing from complainant's wheel, in which the trough of the wheel is comparatively deep. The rim of defendants' wheel is provided with lateral flanges, which converge inwardly and downwardly towards the axis of the wheel, thus forming two narrow recesses. The tire consists of an inner tube completely encircled and inclosed by the outer sheath. Attached to this outer sheath are two beads or flanges, which are pressed into the recesses formed by the flanges of the rim and fill substantially the whole of these recesses. When the tube is deflated, these beads or flanges of the outer sheath may be taken out one by one, but they cannot be taken out by pulling both together; and when the tube is inflated, and the space over them covered, they are securely locked in position, and the outer sheath covering the tube, being filled, is held and locked firmly in place. By the inflation of the tube, the tire, taken as a whole, is also contracted longitudinally, so as to bind the wheel more tightly. I am satisfied that the invention which complainant insists is secured by the reissue, No. 11,216, is not described or indicated in the original patent, No. 448,793.

There is nothing in the specification, claims, or drawings of the original patent indicating that the patentee proposed to use the rubber tube or the roll of rubber sponge as a means of holding the cushion tire in place. If there was anything in the original application to indicate such a function, it was found only in the two claims which were rejected by the patent office and were canceled. It is unnecessary to decide whether there is any invention in the original patent, No. 448,793, or the reissue, No. 11,216, or in the claims of the second patent, No. 466,532, because, under the state of the art as shown in this case, said patents cannot have the broad scope claimed for them, and when restricted to Bartlett's actual prior invention, if any, they are not infringed. Defendants' device seems much more like the structures of the former Jeffery patents than that of the Bartlett patents, and I think defendants' construction much more likely to have been suggested by examination of the Jeffery patents than of the Bartlett patents. In order to hold defendants' construction to be an infringement upon complainant's patents, it would be necessary to hold that complainant had invented and patented the principle of attaching a pneumatic tire to a wheel by providing beads, flanges, or attachments to the outer sheath, fitted into recesses in the rim of the wheel, and locked fast there by inflating the pneumatic tube. This he has not done, and there is no indication that he had any such idea in his mind at the time of any of his applications for the patents in question, nor is there any suggestion therein of any method by which such a result might be accomplished. It is agreed that pneumatic tires were used to only a slight extent in the fall of 1890, were but little known before that, and did not come into considerable practical use until later. In

every new manufacture many improvements are naturally suggested and made from time to time as a matter of course. The patent law is not intended to secure a monopoly of all the natural developments of a general principle to the one who happens to make some special construction embodying it a few weeks in advance of others, when it appears that such improvements were certain to be made in a short time. Before the filing of the application for complainant's patent No. 466,532, dated September 26, 1891, and before the filing of his application for reissue patent No. 11,216, dated December 26, 1891, there were filed in the patent offices of England and of the United States the following applications, showing devices for attaching a pneumatic tire, consisting of a rubber tire surrounded by an outer sheath, to a rim by means of attachments made fast to the outer sheath and locked by inflation of the pneumatic tube.

In patent No. 454,115, application filed March 26, 1891, to Thomas B. Jeffery, hooks attached to an outer sheath were made to fit into recesses formed by bending the flanges of the rim of the wheel outwardly and around. In patent No. 466,565, application filed June 11, 1891, to T. B. Jeffery, the tire was also fastened by hooks attached to the outer sheath. Jeffery patent No. 466,789, application filed July 27, 1891, has beads or spurs projecting from the outer sheath, which fit into recesses formed by bending over inwardly the flanges of the wheel, so as to interlock when the tube is inflated. In patent to William Golding, No. 493,160, application filed October 6, 1891, and patented in England, December 8, 1890, the edges of the rim of the wheel are bent around and brought within a short distance of each other, leaving the exterior of the wheel nearly flat, with recesses below the flanges, and lateral projections on the tire are forced into these recesses and the tire inflated. In Wilson's British patent No. 12,974, of 1890, provisional specification filed August 19, 1890, complete specification filed May 19, 1891, appear all the forms of the patents sued on, and in addition a pneumatic tube, most of which is outside the rim of the wheel, nearly surrounded by an outer sheath having flanges locked in recesses formed by bending in the flanges of the rim of the wheel. In Kesterton's English patent, provisional specification filed September 27, 1890, complete specification filed June 23, 1891, there is a tube charged with air and a jacket surrounding the tube with ribs or flanges pressed into the trough or recess formed by bringing the flanges of the rim around and near together. I do not think the devices in any of these applications are sufficiently like complainant's construction to raise a presumption that they were suggested by it, even though the applicants may be presumed to have obtained any information of it. When so many applications covering the same general principles are in these two patent offices at the same time, it furnishes persuasive evidence that in the then state of the art the discovery that tires might be so fastened would not be of such a character that one who has formulated it a few days or weeks in advance of others (as Bartlett did not) should be allowed to levy tribute for 17 years upon the millions using tires of this kind. It should also be noted that solid tires of a construction similar to defendants', the flanges

of the wheel being bent over so as to lock in attachments to the tire, had been patented and were well known before the alleged invention of Bartlett.

Complainant has pressed upon the attention of the court the decision in the supreme court of judicature, court of appeal, Great Britain, in the case of the North British Rubber Company and another against the Gormully & Jeffery Manufacturing Company, that case being a contest on the English patent No. 16,783, of 1890, before referred to, between the real parties in the present case. The high character of that court commands the most careful and respectful consideration of its opinion. I am unable, however, on the evidence before me, to agree with the conclusions there reached. The court says:

"It is established beyond question that the patentee, Mr. Bartlett, by the invention which he patented in July, 1891, took an entirely new departure from anything which had gone before as regards both the method and the means for affixing a pneumatic rubber tire to a circular wheel. That Mr. Bartlett's invention is the good subject-matter of a patent and of great utility cannot be doubted, and, indeed, this is not really in contest before us."

The utility of his United States patent was certainly strongly contested in this court, and the evidence does not seem to be in any way contradictory. It was here testified that the tire was easy to remove, tough, and had great wearing qualities. There was no evidence that it afforded the advantages of pneumatic tires. There was no evidence as to how extensively it was used in England. The sales in this country appear to have been made by the Remington Arms Company, who made a contract with the complainant, dated October 21, 1893, by which they were given an exclusive license under the Bartlett patents to the close of 1894, with a right to an extension for three years more upon the same terms, the Remington Arms Company agreeing to pay license fees, prior to the expiration of 1894, on 3,000 pairs of tires. The Remington Arms Company sold during the year 1894 683 pairs of tires, and refused to renew the contract, if required to take any stipulated number. It was renewed for 1895 without any such stipulation, and during said year the Remington Arms Company sold 150 pairs of tires. They were afterwards sued for the royalty on the balance of the 3,000 not sold in 1894, and judgment was obtained against them. During the year 1896 the Remington Arms Company sold about 15,000 bicycles, and are likely to increase that amount in 1897, but they have sold no Bartlett tires. I find no evidence of any other sales of Bartlett tires. Having examined the English patent on which the decision in North British Rubber Co. v. Gormully & Jeffery Manufacturing Company was based, I fail to find in it any statement of invention broad enough to cover defendants' construction. The complete statement of the provisional specification is as follows:

"This invention relates to tires which consist of a flat endless band of India rubber wider than the dovetailed groove into which it is inserted, so that it assumes an arched form when in place. I introduce between the arched outside tire and the circular bottom of the metal rim a tube constructed of cloth and India rubber provided with a branch for filling it with compressed air. By this arrangement the outer band tire may be reduced in thickness, and, while assist-

ing in sustaining the pressure (from weight) on the outer band, the lateral pressure of the inside air tube will press its edges tightly against the dovetailed flanges of the metal rim, and thus be effective in holding it more firmly against the flanges of the metal rim at the momentarily bearing part of the tire. It will be obvious that one advantage of this arrangement is that successive outside bands or tires can be renewed from time to time without the necessity of wasting the tubular air chamber between it and the metal rim, and thus greater economy will be attainable. It will be generally most convenient to have the filling tube of the tubular air chamber projecting from the surface of the tubular air chamber resting on the metal rim, in which a hole is bored through which to pass the filling-tube."

The only change in the wording of the complete specification as finally accepted is the substitution of "thus be effective in holding it more firmly" instead of "assists in holding it more firmly." Apparently the only use of the air tube in holding the rubber tire against the dovetail flanges of the rim, as understood by the inventor, is at that part of the tire which is at the instant upon the ground; the idea of this inventor being that the pressure by the tire upon the ground will press in the outer rim of the air tube, and thus cause the air tube at that point to press laterally against the rubber tire, and hold the tire more firmly at the point of contact with the earth. The statement of invention made to the patent office, above referred to, conveys the same idea. I cannot think that the broad invention now claimed was then in the mind of the inventor.

Mr. Betts in his able memorandum, in which the arguments for the complainant are briefly and strongly stated, says:

"Doubtless, as is so often the case, the attorney and perhaps the applicant failed to appreciate the exact nature and true merit of the invention. He had perhaps builded better than he knew. It was this ignorance of his which constituted and caused his mistake."

It is well settled that a patentee is not to be deprived of the benefit of his invention because he may have failed to state or recognize all the beneficial uses to which it may be put. I do not understand, however, that one can be said to have made an invention of which he is not himself aware.

On a careful consideration of the whole evidence, including that as to the time of Bartlett's invention, I am satisfied that he never made the invention as now argued, and I am also satisfied that defendants' construction is not covered by the claims of the Bartlett patents. It is unnecessary to decide whether the exclusive license held by the Remington Arms Company at the commencement of this suit divested complainant of the right to bring it. Let the complaint be dismissed.

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FORD et al. v. BANCROFT et al.

(Circuit Court, D. Massachusetts. February 19, 1898.)

No. 531.

1. PATENTS—OPERATIVENESS—CONSTRUCTION OF CLAIMS—INFRINGEMENT.

The Morris patent, No. 401,050, for a machine for inserting diagonal strips in fabrics, while perhaps not inoperative in the strict sense of the patent law, yet in fact never operated as one driven by power, rapidly and with positive results. *Held*, therefore, that it is not entitled to a broad range of equivalents,