

sheep, yet the precise language used does not permit of this construction. The word "noils" includes noils of camel's hair. Such noils are not waste. Therefore the language, "all other wastes," does not cover camel's hair. The decision of the board of general appraisers is affirmed.

LONG et al. v. POPE MANUF'G CO.¹

(Circuit Court of Appeals, First Circuit. July 14, 1896.)

No. 172.

1. PATENTS—INTERPRETATION OF CLAIMS—FUNCTIONS NOT MENTIONED.

The fact that the inventor claims only certain functions for his invention will not prevent him from reaping the advantage of any other function within the claims as properly construed, available without a modification of the machine which involves the use of further inventive faculty, whether known to him and omitted from the specifications without fraud, or not known to him.

2. SAME—ENUMERATED FUNCTIONS.

But so much of the mere form given in the specification, drawings, and claim as is necessary to the accomplishment of all the functions expressly enumerated is essential, and must be retained. A function afterwards discovered cannot be used to broaden the claim, and is available only when the patent, construed in the light of the circumstances existing when it was applied for, is broad enough to cover it.

3. SAME.

It would establish a dangerous precedent to give to a mere paper patent, which has lain dormant for years, a breadth not contemplated on its face, by reason of some new function discovered long after its issue, and after that function had been availed of in practice by others.

4. SAME—ROAD VEHICLES.

The Long patent, No. 281,091, for an improved steering head for road vehicles, construed, and held not infringed. 70 Fed. 855, affirmed.

Appeal from the Circuit Court of the United States for the District of Massachusetts.

This was a suit in equity by George A. Long and others against the Pope Manufacturing Company for alleged infringement of letters patent No. 281,091, issued July 10, 1883, to George A. Long, for an improved steering head for road vehicles. The circuit court held that there was no infringement, and dismissed the bill. 70 Fed. 855. The complainants appeal.

Jas. E. Maynadier, for appellants.

Wm. A. Redding and Edmund Wetmore, for appellee.

Before COLT and PUTNAM, Circuit Judges, and NELSON, District Judge.

PUTNAM, Circuit Judge. This patent was taken out in 1882, and, so far as it comes in issue here, it has not been put into prac-

¹ Rehearing denied August 17, 1896.

tical use. Therefore, in determining the inventor's conception of the functions of the claim in issue, of the condition of the art, and of the improvement which he gave to the public, our safest resource, after so long a lapse of time, is the patent itself. For these purposes the patent is very meager. It fails to state the inventor's conception of the state of the art, the particular advance which he understood himself to have accomplished, or the parts of his device, or its functions, except incidentally, and in a crude and incomplete manner. If, therefore, judicial tribunals misapprehend the scope of the invention, the cause will lie in the want of a full and frank disclosure on the face of the patent of what it was; and as this is the fault of the inventor, or, in law, attributable to him, he must accept the result as one of his own making.

The claim in issue is as follows:

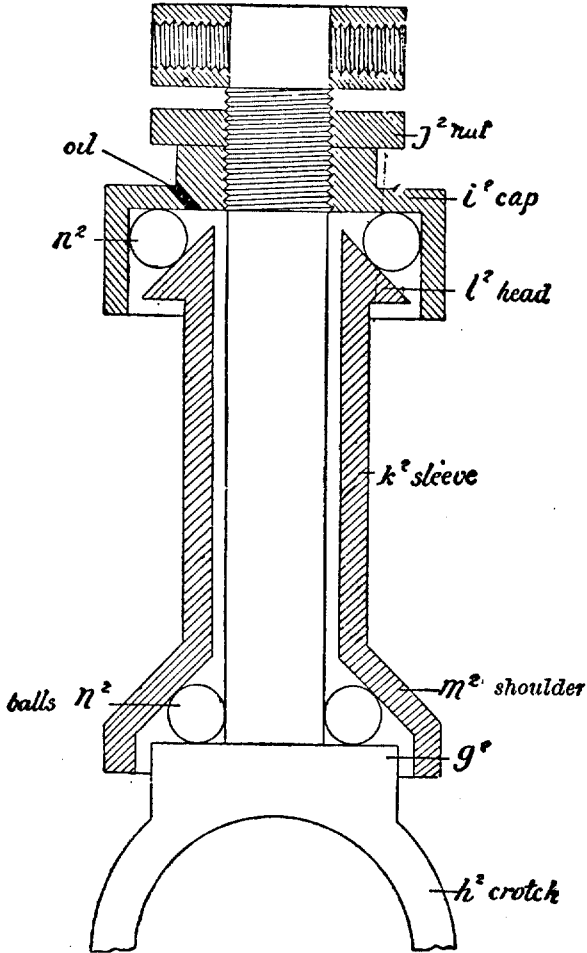
"(5) The improved steering head for road-vehicles, consisting of shoulder, g², cap, l², check nut, j², sleeve, k², and balls, n², in combination with the stem of the crotch, h², substantially as described."

The only references to this claim in the specification are a drawing showing the parts, and the following:

"My improvement in the steering post consists of the shoulder, g², above the crotch, h², cap, l², at the upper end, secured by check nut, j², sleeve, k², with head, l², and shoulder, m², and the balls, n², the arrangement being such that the cap, l², and check nut, j², may be set down readily from time to time whenever the parts may wear slack; and in practice the cap, l², will fit over head, l², and the flange of shoulder, m², will fit over the shoulder of the crotch so tightly as to exclude the dust, and thus insure the most lasting and easy-working contrivance."

It will be observed that the head, l², over which the substantial controversy in this case arises, is not expressly named in the claim in issue. The same must be said with reference to the particular locations of the balls, n², on which the complainants rely as establishing the most important function which they claim for their patented device. In this particular both stand on the same footing, and the complainants must accept the head, l², as an element in the combination, if they claim the locations of the balls, n², as an element. They cannot take the one and reject the other. It may be that a strict comparison of the claim in issue with the specification, and a stringent application of the requirements of the law with reference to the construction of claims, would defeat the claim for want of a proper enumeration of the elements which necessarily enter into it, but we are not required to determine any question of that character. The claim enumerates expressly sleeve, k², followed by the words "substantially as described." The description of the sleeve, k², as shown in the drawing, made a part of the specification, may be construed to carry with it the head, l², and also the shoulder, m², which likewise is not specified in the claim. We therefore accept as valid the claim in issue, and give to it, and make a part of it, these elements, which are enumerated in the specification and shown in the drawing, although not expressly stated in the claim.

An enlarged reproduction of the steering post shows thus:



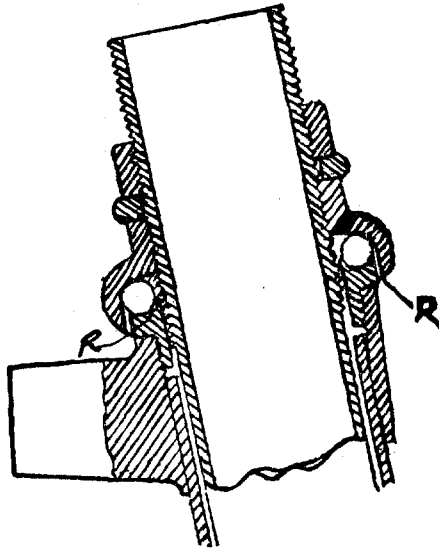
It will be seen that the only functions expressly claimed are convenience in setting down the check nut, and exclusion of dust. But, by settled rules, this fact does not prevent the inventor from reaping the advantage of any other function within the claim, as properly construed, available without a modification of the machine which involves the use of further inventive faculty, although known to him, and omitted in the specifications without fraud, or not known to him. *Reece Buttonhole Mach. Co. v. Globe Buttonhole Mach. Co.*, decided by this court, and reported in 10 C. C. A. 194, 61 Fed. 958, 966. An additional function is thus stated by the complainants:

"The Long steering head differs in principle from the prior art; for the balls which take the weight in all prior steering heads are on opposite sides of the

stem, with the result that in steering the initial movement of the stem is on an axis which passes diagonally through the stem, while in the Long head it is on an axis which passes on one side of the stem."

The complainants' propositions relative to the alleged "dust-shedding" function do not impress us.

The only differences in the respondent's machine are shown in the following drawing of the head of respondent's steering post:



The only particular in which this is alleged to differ substantially from complainants' device is in the exterior slope of complainants' head, 1², which, as shown in the patent, is a straight hypotenuse, while in respondent's head it is curved, and shows a lip or groove. We are satisfied that the function now claimed, and which we have described, is a useful one, and that, in view of it, the device shows an advance in the state of the art. Indeed, the circumstances under which the respondent is availing itself of it confess this. The only question, therefore, is whether the substitution of the curved surface, with a groove or lip, or with both, avoids the claim, so that there is no infringement. The addition of the lip and groove, or either of them, cannot avail the respondent, within the well-known rule that infringement is not usually avoided by adding new elements to those enumerated in the claim. We have therefore left for consideration only the curvilinear line substituted for the straight one. That this mere change of form does not of itself determine the question was settled in *Winans v. Denmead*, 15 How. 330. There the patent covered an improved car for the transportation of coal. It showed no form but that of an inverted cone, and for aught that appeared the inventor had in his mind no other whatever. Yet the court held that a car having a pyramidal form infringed. Such a form was within the function which the inventor

had conceived when he applied for the patent, and this was plain on the face of the application. The court said, at page 343, as follows:

"Where form and substance are inseparable, it is enough to look at the form only. Where they are separable,—where the whole substance of the invention may be copied in a different form,—it is the duty of courts and juries to look through the form for the substance of the invention; for that which entitled the inventor to his patent, and which the patent was designed to secure. Where that is found, there is an infringement; and it is not a defense, that it is embodied in a form not described, and in terms claimed by the patentee."

On the other hand, in *Reece Buttonhole Mach. Co. v. Globe Buttonhole Mach. Co.*, 10 C. C. A. 194, 61 Fed. 958, already cited, we referred, at page 197, 10 C. C. A., and page 963, 61 Fed., to "the rules of interpretation found in the decisions of the courts, and in text-books, which appertain solely to inventions plainly and essentially narrow"; and at page 197, 10 C. C. A., and page 961, 61 Fed., we also stated another rule, as follows:

"On the other hand, it is true that words and phrases which might have been omitted, on the presumption that they relate to nonessentials, may be introduced in such direct and positive manner as to leave the courts no option except to regard them as affecting the objects and limitations of the instrument in question."

We are therefore to apply the foregoing rules to the case at bar. If the functions of the invention were solely those stated in the specification, the claim must clearly have a narrow range, while, if the other function now suggested is permitted to aid in controlling its construction, it is entitled to a broad one. It is plain, nevertheless, on all rules, that so much of the mere form given in the specification, drawings, and claim is essential, and must be retained, as is necessary in order to accomplish all the functions expressly enumerated therein. This last proposition is only an application of the well-known rule that patents, like other instruments, are to be construed by what appears on their face, "in the light of all the circumstances and of the apparent purposes of the parties to them." *Reece Buttonhole Mach. Co. v. Globe Buttonhole Mach. Co.*, *ubi supra*, at page 194, C. C. A., and page 958, 61 Fed. Of course, as usual with other instruments, this applies only when construction is needed, and not when the patent is clear on its face. It is only the circumstances existing at the time the patent is applied for which are to be taken into consideration in its construction. A function afterwards discovered cannot be used to broaden it; and such a function is available to the patentee only when the patent, construed in the light of the circumstances existing when it is applied for, is broad enough to embrace it. In the case at bar there is nothing to show that the function now claimed for the invention was in the mind of either the inventor or of the patent office when the patent issued. Therefore it cannot be said that, if the patent be narrow on its face, it should be broadened out by construction to cover this new function. That claim 5 is thus narrow is clear. There is nothing in the patent to suggest that it is to be construed beyond what the drawing itself exhibits. In this particular, *Weir v. Morden*, 125 U. S. 98, 106, 107, 8 Sup. Ct. 869, where

a narrow construction was given to a patent, is very much akin. There appear on the face of the specification some things which have especial force in calling for a narrow and precise construction. For example, the check nut, j^2 , is made an express element in the combination. This would hardly be the case if a broadly new function, like that now claimed, was to be covered by it. Moreover, the function particularly described in the specification is that of setting down the set screw "readily from time to time whenever the parts may wear slack." Indeed, this may be said to be the only function expressly stated; the other, that of excluding the dust, being apparently mentioned only incidentally. For this availability of the set screw, the straight hypothenuse is essential; giving the ball two bearings only, and allowing it to be pressed down from time to time as the parts wear loose. In the respondent's device the ball has a bearing at the base, so that the function thus expressly relied on could have no special or peculiar application. A construction of the claim in controversy which would, under any circumstances, exclude this special function, is, as we have said, not admissible. If this invention had been put in early use, and so continued with a long public acquiescence, it might, perhaps, have safely received therefrom a practical construction more favorable to the complainants. But, in view of the rapidity with which mechanical improvements advance in this age, it would establish a very dangerous precedent to give to a mere paper patent, which has lain dormant for years, a breadth not contemplated on its face, by reason of some new function discovered long after its issue, and after that function had been availed of in practice by others. There appear in this case some elements which perhaps would render it not inequitable to permit that result here; but the precedent, if established, would, on the whole, operate more to entrap honest manufacturers than to advance the useful arts. The decree of the circuit court is affirmed, with the costs of this court for the appellee.

BEACH v. INMAN et al.

Circuit Court, N. D. New York. September 12, 1896.)

No. 6,417.

1. PATENTS—INFRINGEMENT—PAPER-BOX MACHINE.

The first three claims of the Beach reissue, No. 11,167, for a machine for attaching stays to the corners of paper or strawboard boxes, being broad ones, which have been sustained by the circuit court of appeals (18 C. C. A. 165, 71 Fed. 420), must be declared infringed by a machine in which the only differences are of form, and not of substance, and the changes accomplish no new function or result.

2. SAME—PRIOR ADJUDICATIONS.

When a patentee has obtained a final decree after years of arduous litigation, sustaining the broad claims of his patent, such decree should protect him against all intruders who seek to use the actual invention by making changes of form to avoid the wording of the claims. After such a decision, the claims and specifications are not to be scanned with a hostile eye.