

have claimed a product, if his description of his invention be true. He says: "Other coloring matter can be made by similar reactions. The product, as well as the method of producing the same, constitutes a part of the invention, which comprises, therefore, the preparation and the coloring matters above mentioned;" but, when he comes to his claim, he limits his invention to the method by which the coloring matters are to be produced, namely, "by the action of nitroso derivatives," etc. Disconnected from what precedes it, there is no hint in the claim that the "violet coloring matters" are a new production, which has been invented or discovered by the patentee; and from this omission to claim the product, as well as the method of making it, the inference is reasonable that he would be satisfied with a patent for the process. Other portions of the specifications may, as was said in *White v. Dunbar*, be resorted to, "for the purpose of better understanding the meaning of the claim; but not for the purpose of changing it and making it different from what it is." The words "manufacture" and "production," as used in the claim, are not the names of things but of acts. The claim indicates the mode and manner of doing certain things, or of making certain combinations, in order to produce certain results, and is for the improved process of obtaining those results, i. e. in manufacturing and producing them. It is not stated that violet coloring matters have never before been produced, or that they could not be produced by other processes than those described in the claim. The claim is for "the improvement in the manufacture of coloring matters," and describes the improvement as "consisting in the production of coloring matters by the action of nitroso derivatives," etc. The improvement, that is, the process, is claimed as new, but not the product. The contention that, in the *Koechlin* patent, the product inheres in the process, and that, therefore, the claim of the one necessarily includes the other, cannot be sustained on principle or authority. The claim is single, and is either for a process or a product; otherwise, if the claim is divisible, one part being for a process, and another part for a product, it would be a double claim, and as such in danger of being held void for ambiguity. The applicant for a patent may separately claim both a process and a product, but cannot properly claim them in one claim. They are the proper subjects of separate and distinct claims. *Merrill v. Yeomans*, 1 Ban. & A. 55, Fed. Cas. No. 9,472; *Goodyear v. Rubber Co.*, 2 Cliff. 371, Fed. Cas. No. 5,583. The decree of the circuit court is affirmed.

H. L. JUDD & CO. v. FOWLER et al.

(Circuit Court of Appeals, Second Circuit. May 29, 1894.)

No. 141.

PATENTS—CONSTRUCTION OF CLAIM—INFRINGEMENT.

In the *Fowler, Lingley & Fowler* patent, No. 466,940, for an improved curtain rod, to be held between opposite sides of casings by pressure of springs, the first claim, for the combination, with the rod, of "a tube hav-

ing one end inclosing and sliding on the rod, and having its opposite end reduced in diameter, a spring inclosed in said tube, and held from longitudinal movement by said reduced end of the tube, and a shell or tip carried by the reduced end of the tube, and adapted to bear against the window casing," is not to be construed as requiring the spring to be held from longitudinal movement in either direction, which would compel the reduction of the end of the tube, which constitutes the invention, to be effected by compression; but the claim is to be read with the statement in the specification, which is co-extensive with the actual invention, that the spring may be prevented from pushing through the end of the tube, not only by compression, but also by turning over the end of the tube, forming an internal flange, or by indenting the end of the tube; and it is infringed by the use of any one of those methods of construction.

Appeal from the Circuit Court of the United States for the Southern District of New York.

This was a suit by Henry A. Fowler, John H. Lingley, and Samuel Fowler against H. L. Judd & Co., a corporation, for infringement of a patent. The circuit court rendered a decree for complainants. Defendant appealed.

On the hearing in the circuit court the following opinion was rendered:

Wheeler, District Judge. This suit is brought upon letters patent No. 466,940, dated January 12, 1892, and granted to the orators Henry A. Fowler and John H. Lingley, as inventors, and to the orator Samuel Fowler, as assignee, for an improvement in curtain rods, to be held between opposing sides of casings by the friction of the ends made to press against the casings by springs. The infringement alleged is of the first claim, which is for: "(1) In a curtain rod, the combination, with a rod of a tube having one end inclosing and sliding on said rod, and having its opposite end reduced in diameter, a spring inclosed in said tube, and held from longitudinal movement by said reduced end of the tube, and a shell or tip carried by the reduced end of the tube, and adapted to bear against the window casing, substantially as described."

The defenses are want of novelty; that the two orators were not inventors, and one John H. Bennett was the inventor, of this improvement; and that the defendant does not infringe.

The defendant has pleaded, put in evidence, and relied upon various structures, brackets, rods, and fixtures made before, and patents for such things issued before, the date of this invention; but none of these things show a curtain rod or analogous structure held in place by the mere pressure of springs outwardly from the ends of the rods against opposite parallel casings; and although, in some or all of them, each of all the parts of the combination of this claim is found, in none of them are all of these parts in the same combination found, and neither any nor all of them appear to anticipate this claim.

The orators Fowler and Lingley, and one Carroll W. Dodge, as joint inventors, on July 12, 1889, made an application for a patent for a curtain rod, which contained this claim: "(1) In a curtain rod, the combination of a rod or bar upon which the curtain is supported, a flaring shell forming a tip, a tubular sleeve, with one end of said sleeve inclosing the smaller end of said shell or tip, and forming a tight fit, whereby said shell and tube form practically a single piece, the opposite end of said tube being reduced in thickness, and inclosing and sliding upon the rod, so the curtain held upon said rod will slide freely over the tube, a shank preferably formed integrally with said shell or tip, and concentric with the tube, and a spiral spring held on said shank with its bore slightly less than the diameter of the shank, and with its end bearing against the inclosed end of the rod, substantially as described,"—on which a patent was granted February 16, 1892, after the patent in suit, and is owned by the orators. The specification stated that the tips could be made of solid pieces of metal, and the elastic blocks attached thereto, but that they considered it better to construct them, as represented in the drawings, of sheet metal, stamped into the desired form, with the rubber blocks

inserted in the open ends. The construction of stamped tips to go into the end of the tube, and support the ends of the spring, was not practicable, and solid tips were too heavy and expensive. These difficulties appear to have been stated by Fowler and Lingley to Bennett, who was a manufacturer of the articles for the owners of the patent, and the tip was made to go over the end of the tube, so it could be stamped out of sheet metal, and the outer end of the tube was reduced in diameter to hold the spring. Bennett appears to have made useful suggestions about these changes to overcome the difficulties, but he did not apply for a patent, nor claim the invention against them, and seems to have done what he did as an artisan, rather than as an inventor; and the presumption that Fowler and Lingley were the inventors of this improvement, arising from the grant of the patent to them and their assignee, is not overcome by the proof of what he did about it. It is argued that somehow the pendency of the application of Fowler, Lingley, and Dodge deprived Fowler and Lingley of the right to claim the improvements of this patent against Bennett, or account for his failure to apply for a patent for these improvements himself. But they owed him no duty, and he had no rights in the matter unless he was an inventor. Whether he was or not has been considered in view of all the circumstances. The patent in suit was expressly made subject to the prior application of Fowler, Lingley, and Dodge, then pending, and, of course, covers only improvements upon the invention described in it. For such improvements the patent seems to be valid.

The defendant has proceeded somewhat upon the claim of Bennett that he, and not Fowler and Lingley, was the inventor of this improvement, which, as now considered, fails. Besides this, the defendant has changed the form of the tube by turning in the outer end to keep the spring from being forced through it, instead of reducing its diameter by a taper, and bent out the end of the wire of the spring, or crooked the spring itself, to engage with the tube, and keep the spring from falling out in putting up or taking down the structure. The tube reduced in diameter of this claim of the patent is said in argument to be a tube reduced in every diameter producing a true taper, which will, by its reduction in that manner, hold the spring from longitudinal movement, from which the tube and spring of the defendant so differ as not to infringe. This claim originally was for: "(1) In a curtain rod, the combination of a sliding tube, having its outer end reduced in diameter, as described, a spring with its outer diameter less than the internal diameter of said sliding tube, but slightly greater than the internal diameter of the reduced section of said tube, by which said spring is held within said tube, substantially as described." This claim was rejected as incomplete, with a suggestion that it be amended to include the rod, tubes, spring, and caps. The specification was thereupon amended by inserting: "The ends of the tubes are sufficiently contracted in diameter to prevent the end of the rod from being pushed through the end of the tube, and crowding the disks out of the tip as the spring is being compressed by the sliding motion of the tube on the rod, in the operation of applying the curtain rod to the window casing. The compression of the tube is thus made to serve a double purpose,—in holding the spring from falling out of the tube when the tube is removed from the rod, and also in preventing the end of the spring from being pushed through the end of the tube and against the disk as the spring is compressed against the end of the rod. This latter purpose can obviously be secured by turning over the end of the tube, thereby contracting the opening, and forming an internal flange, by which the end of the spring will be held from contact with the disk, or the end of the tube which is held in the tip can be indented, so as to reduce its internal diameter, and hold the outer end of the spring from longitudinal movement while it is being compressed." And the claim was made to be as it now is.

The claim is to be read with reference to the specification. When so read, the description of a tube as reduced in diameter, holding an inclosed spring from longitudinal movement by its reduced end, will as well, although not so aptly, include the tube of this amendment as that of the other form. If this were not so, the changes of form of the end of the tube and of the mode of engaging the spring in the defendant's structure do not alter their mode of operation, and seem to be immaterial. They do the same thing, in substan-

tially the same way, as the corresponding parts of the patented invention, the substance of which the defendant appears to have taken. The defendant, therefore, appears to infringe.

Let a decree be entered for the orator.

Arthur v. Briesen, for appellant.

Stewart Chapin (D. H. Driscoll, on brief), for appellees.

Before WALLACE, LACOMBE and SHIPMAN, Circuit Judges.

SHIPMAN, Circuit Judge. This appeal calls in question the correctness of a decree of the circuit court for the southern district of New York, which sustained the validity of letters patent No. 466,940, dated January 12, 1892, and issued to the complainants Fowler and Lingley as inventors, and to the complainant Samuel Fowler as assignee, for an improvement in curtain rods, and which also adjudged that the defendant had infringed the first claim of the patent. On July 12, 1889, the inventors, Fowler and Lingley, and Carroll W. Dodge, applied for letters patent for an improved curtain rod, which, numbered 468,987, was issued on February 16, 1892. This patent is for a tube sliding telescopically over the end of a curtain rod, the tube carrying at one end a tip or head to receive an elastic disk which bears against the window casing, and having a spring inclosed within the tube, one end of the spring bearing against the end of the rod. The tension of the spring forces the tube away from the end of the rod, and thus enables the elastic disk to be held firmly against the casing. Previous devices of this sort were either fastened to the woodwork, or the ends of the rod were made to press against the casing by a screw thread. The novelty of the invention consisted in holding the rod in place solely by the outward push of a spring. The patentees began to manufacture curtain-rod tips of this sort in June, 1889, and ceased the manufacture during the next month. The device was defective because the pressure of the spring was exerted directly against the head, and pushed it out of the tube, unless it was solid and soldered into the tube,—a construction which made the manufacture too expensive. Fowler and Lingley, the two inventors named in the patent in suit, thereupon sought for, and invented, an improvement which should obviate the defect, and applied, on May 8, 1890, for a patent therefor, which was issued as No. 466,940, and was, by its terms, made subordinate to the Fowler, Lingley, and Dodge application then pending in the patent office.

As the decision of the case depends entirely upon the construction to be given to the first claim, and as the construction depends upon an examination of the claim in connection with the specification, and with the history of the application in its progress through the patent office, it is important to quote the specification with substantial completeness. The material portion is as follows:

"B is a rod forming the central section of our improved rod, and can be of metal or other material, as wood, or of wood covered with metal, or it can consist of a piece of tubing. Upon each end of the central rod, B, we place the telescopic sliding tubes, C, C, with their inner ends ground or turned down to an edge in order to allow the rings or the hem of a curtain to slide freely

over them. The outer ends of the sliding tubes, C, C, are compressed or reduced in diameter by compression or upsetting. On the reduced outer ends of the sliding tubes, C, C, are placed the tips, D, D, which are either tubular in form, as represented in Fig. 4, or flaring or bell-mouthed, as represented in Fig. 3, the special form of the tip itself being immaterial. Within the tip, D, and resting upon the ends of the sliding tubes, C, are the disks, E, and upon the disks, E, are placed the rubber disks, F, F. Springs, G, G, are inclosed within the sliding tubes, C, the outer diameter of the springs being larger than the internal diameter of the sliding tubes, C, at their reduced ends, C', C'. The springs are large enough to require considerable pressure to cause them to enter the ends, C', C', and they are held in place by the pressure of the springs against the inner surface of the sliding sleeves at their reduced ends, C', C', and kept from falling out of the tubes when they are removed from the ends of the rod, B. The opposite ends of the springs, G, G, rest against the ends of the rods, B, and as the entire length of the curtain rod, with the ends as applied, is longer than the space between the sides of the casing, so that, when it is applied to the casing, the springs, G, G, are compressed, their tension exerts a pressure against the sides of the casing, which serves to hold the rod firmly in position. (The ends, C', C', are sufficiently contracted in diameter to prevent the spring, G, from being pushed through the end of the tube, C, and crowding the disks, E and F, out of the tip, D, as the spring, G, is being compressed by the sliding motion of the tube, C, on the rod, B, in the operation of applying the curtain rod to the window casing. The compression of the tube, C, is thus made to serve a double purpose,—in holding the spring, G, from falling out of the tube, C, when the tube is removed from the rod, B, and also in preventing the end of the spring from being pushed through the end of the tube, and against the disk, E, as the spring is compressed against the end of the rod, B. This latter purpose can obviously be secured by turning over the end of the tube, C, thereby contracting the opening, and forming an internal flange, by which the end of the spring will be held from contact with the disk, E, or the end of the tube, C, which is held in the tip, D, can be indented so as to reduce its internal diameter, and hold the outer end of the spring from longitudinal movement when it is being compressed.)"

The part of the specification inclosed in parentheses was introduced by amendment.

The first claim is as follows:

"(1) In a curtain rod, the combination, with a rod, B, of a tube, C, having one end inclosing and sliding on said rod, and having its opposite end reduced in diameter, a spring inclosed in said tube, and held from longitudinal movement by said reduced end of the tube, and a shell or tip carried by the reduced end of the tube, and adapted to bear against the window casing, substantially as described."

The invention consisted in reducing in diameter the outer ends of the sliding tubes, whereby they received the force of the outward thrust of the springs, which were thus prevented from being pushed through the ends of the tube, and, as the tips no longer needed solidity to withstand the pressure of the springs, they were placed over the reduced outer ends of the tubes. The compression of the tube, in addition to its preventing the end of the spring from being pushed through the end of the tube, also kept the spring in position by friction, and thus prevented it from falling out when the tube was removed from the rod. In order to accomplish the first and main object of the improvement, the specification states three ways in which the ends can be reduced in diameter: First, by compressing them; secondly, by turning over the end, thereby forming an internal flange which will hold the end of the spring

away from the disk; or, thirdly, by indenting the end of the tube. The defendant's expert says that in its curtain-rod tips "the outer end of the tube is turned inward slightly at its extreme end, and has ears bent in from a point or short distance back from the end. These in-turned ears form a stop to prevent the end of the spring from being pushed through the outer end of the tube," and that "the result is that a spring of uniform diameter simply abuts against the stops formed by these in-turned ears, and is not held from longitudinal movement by the reduced end of the tube." It is further said that the reduced ends do not hold or retain the springs, but that they are kept from falling out by being bent or bowed outwardly, so as to bear against the interior of the tube and create friction with it, and consequently that the defendant's reduced ends perform only one function of the patented method of construction. A further distinction is said to exist between the two structures, in that whereas, in the complainants' patent, the reduced outer ends of the tubes form a neck or seat for receiving the tip, in the construction of the defendant's articles the tip goes over the reduced end, and is forced upon that portion of the exterior of the outer end of the tube which is not reduced in diameter.

The attempt to avoid infringement rests mainly, if not entirely, upon such a construction of the first claim as to limit it to one mode of reducing the end of the tube, viz. by compression, and to exclude the modes named in the amended specification,—“by turning over the end of the tube,” or by indentation. The theory of the defendant is that the claim, as finally allowed by the patent office, was so reduced in scope as to limit it to that feature of construction which would prevent the spring from longitudinal movement in either direction. The original application contained three claims which were properly rejected as “incomplete and vague.” The amendment included in parentheses was then made, and three new claims were written, the first of which is as follows:

“In a curtain rod, the combination with a rod, B, of a sliding tube, C, having its outer end reduced to hold an inclosed spring from longitudinal movement, a spring held in said sliding tube, and a tip carried by said sliding tube, and adapted to bear against the window casing, substantially as described.”

The second and third claims referred to particular features of the device, and are not important in this case. The first and second claims were rejected “on the patent to La Dow, in connection with patent to Smyth, both of record.” The patent to Charles La Dow—No. 297,136, dated April 22, 1884—was for a suspensory rod, which consisted of a rod provided at one end with a socket button, and at the opposite end with a nut upon the screw-threaded end of the rod. The frictional contact with the opposing surfaces of the window casings was effected by the rotation of the screw-threaded rod. The patent to James B. Smyth—No. 192,663, dated July 13, 1877—was for an improvement in a rotating window-shade roller, so that the roller could be made longer or shorter. The only part of the device which seems to have any relation to the patented device of the patent in suit is that the axle of a pulley wheel at the end of

the roller is held against the bearing, which is attached to the casing, and by which the roller is supported, by the tension of a spiral spring, and thus the roller is prevented from being detached from its bearings. The roller is not held between the two casings by frictional contact. These two references seem to have little connection with the invention of the patent. But the real imperfection of the claim was that it did not clearly and with precision express how the various parts co-operated with each other. Thus, by "a sliding tube reduced to hold an inclosed spring from longitudinal movement," the draughtsman obviously meant that the reduced end was the means which held the spring from longitudinal movement; but the operative character of the combination was much better expressed by the language subsequently employed. The defendant insists that the language of the claim, as finally amended, which was that the spring was held from longitudinal movement by the reduced end of the tube, requires that the reduced tube should prevent the spring from moving longitudinally in either direction, and that such requirement compels the reduction to take place by compression. If this construction was necessary, in view of the state of the art, or of the limitations in the specification, or of the requirements of the patent office, it would merit favor; but it is not required by either of those considerations. The specification was coextensive with the actual invention, and described three ways in which the spring could be prevented from being pushed through the end of the tube,—by compression, or by forming an internal flange, or by indenting the end so as to hold the outer end of the spring from longitudinal movement. The claim requires the end to be reduced in diameter, and specifies that the spring was to be held from longitudinal movement by the reduced end, the specification having particularly described three ways in which the end of the spring could be thus held. The claim does not limit the invention to such means of reducing the internal diameter as shall entirely prevent the spring from movement. The defendant took one of the methods of construction described in the specification, and included in the claim. It is not of importance that it did not take the best method which was so described.

The defendant's remaining answer to the charge of infringement is that, by a proper construction of the claim, the reduced end is to form the entire seat for the neck of the tip, whereas, in the defendant's device, the tip is said to be carried or have its seat by that portion of the end of the tube back of the reduced portion, which is of full diameter. The point seems too wire-drawn to require discussion. The specification said that "on the reduced outer ends of the sliding tube, C, C, are placed the tips, D, D." This part of the patented invention consisted in the fact that the reduced end of the sliding tube received or carried, or upon it was placed, the neck of the tip. The decree of the circuit court is affirmed, with costs.

SHAPLEIGH v. CHESTER ELECTRIC LIGHT & POWER CO. et al.

(Circuit Court, E. D. Pennsylvania. May 29, 1894.)

No. 21.

PATENTS—INTERPRETATION—INFRINGEMENT.

The Shapleigh patent No. 433,187, for a "safety cut-off" for electrical apparatus, construed, and held not infringed.

This was a bill by M. S. Shapleigh against the Chester Electric Light & Power Company and others, for infringement of a patent. Heard on the pleadings and proofs.

Mark W. Collet, John R. Bennett, and Randall Morgan, for complainant.

Strawbridge & Taylor, for respondents.

DALLAS, Circuit Judge. This suit is brought by Marshall S. Shapleigh upon letters patent No. 433,187, dated July 29, 1890, granted to him for a "safety cut-off." The claims which he alleges the defendants have infringed are as follows:

"(1) The combination of a pair of spring clamps, a fuse placed between the jaws of said clamps and automatically clamped thereby, and terminals provided with lateral supports operating to compress the jaws of said clamps externally, substantially as described.

"(2) The combination of a pair of spring clamps insulated from each other except through the fuse, terminals placed on a suitable insulating block, and provided with lateral supports, between which the jaws of said clamps pass, and are compressed externally, and a fuse automatically held by and between the jaws of said clamps, substantially as described."

"(4) The combination of a pair of spring contact clamps, made of an elastic conducting material, and provided with jaws, by and between which the fuse is placed and automatically clamped, with a pair of terminals placed on a suitable insulating block, and provided with lateral supports operating to compress the jaws of the clamping contacts externally, substantially as described."

"(7) The combination of a block provided with two terminals, supports of conducting material electrically connected to said terminals, and in permanent mechanical connection therewith, a pair of spring clamps provided with jaws connected by an insulating piece, and a fuse, the whole being arranged so that the jaws are pressed upon the fuse automatically, and complete the circuit between the terminals."

"(9) The combination of a pair of spring clamps insulated from each other, and provided with jaws, a fuse automatically held by and between the jaws of said clamps, and terminals provided with lateral supports sufficiently close to compress the jaws, substantially as described."

Safety cut-offs were not new with this inventor. Before the patent in suit was applied for, they were well known, and, as in the complainant's device, their principal constituent was a strip of metal more fusible than the conducting wire employed throughout the system generally. These more fusible pieces are themselves capable of conducting, without fusing, the current intended to be transmitted, and, being interposed as a part of the continuous conductor, they simply form, so long as the normal current is not exceeded, a small section of any circuit to which they are applied; but if and when, from any cause, the ordinary current is materially