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KNAPP *v.* MORSS.

APPEAL FROM THE CIRCUIT COURT OF THE UNITED STATES FOR
THE DISTRICT OF CONNECTICUT.

UFFORD *v.* MORSS.

APPEAL FROM THE CIRCUIT COURT OF THE UNITED STATES FOR THE
DISTRICT OF MASSACHUSETTS.

Nos. 55, 310. Argued October 26, 1893.—Decided November 20, 1893.

The second claim in letters patent No. 233,240, for improvements in dress forms, issued October 12, 1880, to John Hall, and by him assigned to Charles A. Morss, viz.: “2. In combination with the standard *a* and ribs *c*, the double braces *e*², the sliding blocks *f*¹ and *f*², and rests *h*¹ and *h*², substantially as and for the purposes set forth,” when read and interpreted with reference to other and broader claims which were made by the patentee and were rejected by the Patent Office, must either be held to be invalid for want of invention, or must be so limited in view of that action by the Patent Office, and in view of the prior state of the art, as not to be infringed by a combination leaving out one of the elements of the patentee’s device.

A claim in letters patent cannot be so construed as to cover what was rejected by the Patent Office on the application for the patent.

The combination of old elements which perform no new function, and accomplish no new results, does not involve patentable novelty.

The end or purpose sought to be accomplished by a device is not the subject of a patent, but only the new and useful means for obtaining that end.

In equity to restrain the infringement of letters patent.
The case is stated in the opinion.

Mr. John Kimberly Beach for appellants.

Mr. Payson E. Tucker and *Mr. Charles F. Perkins* for
appellee.

MR. JUSTICE JACKSON delivered the opinion of the court.

These two causes, which were heard at the same time, are substantially alike in every particular affecting their proper

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determination, and will, therefore, be considered together, although they come from different jurisdictions. They are suits for the infringement of letters patent No. 233,240, for improvements in dress forms, issued October 12, 1880, to John Hall, and by him assigned to Charles A. Morss, the appellee. In one cause the appellants, William H. Knapp and Charles L. Knapp, are the manufacturers of the articles alleged to infringe, while the appellants in the other cause, Samuel N. Ufford & Son, are merely the selling agents of the manufactured articles. In both cases it was decreed below that the second claim (the only one in controversy) of the patent was infringed. From these decrees the present appeals are prosecuted.

The invention relates to improvements in dress forms, by means of which every part of the device is rendered adjustable, so that it may be applied to a dress of any size or style and fill it out perfectly in order that trimming may be placed upon it. The device described in the patent by which this result is to be accomplished consists of upright ribs of thin, springy material assembled around a central standard, which supports the whole structure. The ribs are connected near their top and bottom extremities to braces or stretchers, which extend obliquely from the ribs to the standard, and are there concentrated and hinged on small movable collars which encircle the standard. There is a single set of braces at the bottom, while at the top there is a double set. This double brace consists of a series of arms or stretchers, part of which radiate from the upper movable collar obliquely downward to the ribs, to which they are fastened at a point near where the other part of the arms or stretchers are fastened. The lower series of stretchers extend obliquely downward from the point on the ribs where they are fastened to a collar separate from and independent of the upper collar. Following each collar, which is loose, is a rest which may be secured to the standard at any point desired by a set screw, thus enabling the whole structure to be adjusted and revolve upon the standard.

The second claim of the patent reads as follows: "2. In combination with the standard *a* and ribs *c*, the double braces

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e^2 , the sliding blocks f' and f^2 , and rests h' and h^2 substantially as and for the purposes set forth."

The defences set up by the answer were invalidity in the patent and non-infringement, and in support of the former defence the following patents were relied on: To C. W. Wilson, May 3, 1870, No. 102,638; to F. A. Balch, September 17, 1867, No. 68,831; to S. B. Ferris, August 27, 1878, No. 207,351; to C. Franke, September 7, 1875, No. 167,394.

The theory of the invention is that as the collar at the bottom of the standard is raised the braces will force the ribs to expand to the circumference limited by the tape or elastic affixed to the lower extremities of the ribs. Should the collar be pushed above the mean centre of expansion, which is attained when the braces are at right angles with the standard, the tendency to expand would cease and contraction would begin. But the proper degree of expansion produced by the lower braces is never exceeded in expanding the dress form. At that point the skirt hangs loosely on the form, and the resistance is so slight that this brace is of but little use. However, the lower brace is not one of the elements of the combination of the second claim. But at the upper part of the form, where expansion and opposition to contraction are alike desired, the mechanical difficulty resulting from pushing the single brace beyond the mean centre of expansion is avoided by using double braces. If the ribs were unrestrained, either by a tape or a skirt of any fabric, the double braces would not be necessary, but as the chief purpose of the invention is to give a proper contour to what is called the hip portion of the dress form, the double braces are most essential. Inasmuch as the ribs at their tops are confined by a tape to a circumference corresponding with the size of the waist, it is reasonably clear that if they were expanded to their utmost tension at the hip portion a single set of braces would afford but slight resistance to contraction. But by the use of the double set of braces, with the arms fastened to the ribs at or near the same point, and diverging obliquely in opposite directions to collars, some distance apart, a triangle is formed which is well known to offer the most powerful resistance to contraction of any device used in the

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whole range of mechanics. The opposing force brought to bear by pushing the lower collar up and the upper collar down operates on the ribs to give shape to the hip portion of the skirt form closely resembling the human figure, and to oppose all tendency to contraction caused either by the ribs being too closely confined by the tape, or by the tight adjustment of the skirt to the contour of the dress form.

In determining the proper construction to be placed upon the second claim of the patent it is necessary to consider the action of the Patent Office upon the original application of the patentee, and also examine the prior art. In his original application the patentee sought to secure the following claims:

“1. A dress form consisting essentially of a central standard, one or more series of adjustable ribs, and corresponding series of braces or stretchers hinged to one or more runners or sliding blocks upon said standard and having their outer ends connected with said ribs, whereby the dress form may be expanded and contracted substantially as and for the purpose set forth.

“2. In combination with the standard *a*, rest *h*, sliding block *f*, and braces *e*, the ribs *c*, and elastic band *d*, substantially as and for the purpose described.”

These broad and general claims were rejected by the Patent Office for the following reasons:

“The first claim is rejected on patents 202,713, Everett, April 23, 1878, and 207,351, Ferris, August 27, 1878, (both in dummies and hangers.)

“There is no novelty in the elements of the second claim, in view of the above patents in connection with the elastic band shown in 75,864, Keffer, March 17, 1868, (blocking and stretching hats,) which band is there used in the same way and for the same purpose as in applicant's device.”

The patentee acquiesced in the rejection, and thereupon accepted his patent with its specific claims, the second of which is alleged to be infringed.

It is well settled that the second claim must be read and interpreted with reference to the rejected claims and to the prior state of the art, and cannot be so construed as to cover

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either what was rejected by the Patent Office, *Shepard v. Carrigan*, 116 U. S. 593; *Sutter v. Robinson*, 119 U. S. 530, or disclosed by prior devices.

A brief reference to the prior state of the art will serve to show what limitations should be placed upon the claim in question.

In 1878 a patent was issued to George W. Everett for a skirt exhibitor, in which there was a standard and a waist-band, divided into two segments. These segments were expanded and adjusted by a slide and socket mechanical device. The standard and adjustable waist-band perform the same function as the standard and tape in the Hall patent. Vertical ribs were afterwards added to the waist-band, but the owner of the patent did not claim such ribs as a part of his invention.

In 1870, a patent was granted to C. W. Wilson for an adjustable form for the manufacture of hoop-skirts. There is in this device also a standard and an adjustable waist-band, but in addition to these elements it was said there might be "as many ribs as are necessary hinged to the waist-band." These ribs are hinged near their lower ends, to jointed braces, whose inner ends are hinged to a block sliding on the standard, and the position of the sliding block is determined by a set screw. In the specification of this patent it is stated that "in operation the adjustable band block may be drawn out to make any size waist-band for skirts without its being necessary to increase the circumference of the bottom of the form, and, by simply moving the sleeve upon the shaft (standard) up or down, the size of the skirt is uniformly increased or diminished." This invention contains all of the elements substantially of the Hall patent, except the double braces. It has the standard, ribs, sliding blocks, and rests. It also has the brace-expanding mechanism for the lower part, which performs the same function as that in the Hall patent.

It appears, so far, that all the elements of the claim have been shown to have been anticipated except that of the double braces. But it is manifest that this element is not new. It was the principal novelty employed in the patent granted to

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S. B. Ferris, August 27, 1878, for a corset exhibitor. The invention consists of a central standard with a block at the top and also at the bottom. Between these blocks is an umbrella-like framework, the braces of which extend beyond the point of junction with the outside ends from the standard, and, pressing against the interior of the corset, impart shapeliness to it. The ribs or braces are triangulated on the standard the same in principle as the double braces in the Hall patent.

In the patent issued to F. A. Balch, in 1867, for a winding reel are shown the double braces, the standard, the sliding collars, and the rest with a set screw, comprising all of the expanding mechanism of the Hall patent. The outer ends of the braces are hinged on a blade which may be made as long as desired, and it would require only mechanical skill to adapt this reel to the device patented by Hall. Such an adaptation, produced by simply lengthening the ribs, would have secured the accomplishment of the same result in exactly the same way.

But, aside from these prior patents, the state of the art is perhaps more clearly illustrated in the device used for opening and shutting a common umbrella. In this device are found all the elements of the combination of the second claim. There are the standard, the collar with the rest, the double braces, and the ribs. Because the upper ribs are elongated so as to hold the fabric which covers them, it cannot be said that the double braces are different in principle and operation from those used in the patent in controversy. It would require but ordinary mechanical skill to convert a skirt form into an umbrella, or an umbrella into a skirt form like that described in the Hall patent.

It is conceded by the appellee that all of the elements of the second claim are old, except ribs *c*, which, it is claimed, constitute the new and patentable feature of the Hall invention; but, from the foregoing brief review of the prior art, we think it clearly shown that the ribs *c* do not constitute any new feature. They are shown in the Everett invention; in the Wilson patent, where it is said there may be as many as neces-

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sary; and in the common umbrella; also in the Ferris device for a corset exhibitor, where the function performed by the ribs constitutes the chief feature of the invention; and in the Balch reel short ribs are used, which might be lengthened to adapt the device to the dress form patented by Hall.

But it is urged on behalf of the appellee that the Hall patent differs from all previous devices in presenting a structure which, as an entirety, is radially expansible in all directions from a common centre, so as to preserve the symmetry of the form, whatever its diameter may be, and by the combination of the patent a new and useful result is thus attained which involves patentable novelty. In support of the validity of the patent, the principle stated in *Loom Co. v. Higgins*, 105 U. S. 580, 591, is invoked. In that case it was laid down by the court, as a general rule, though not an invariable one, "that if a new combination and arrangement of known elements produce a new and beneficial result, never attained before, it is evidence of invention." But we do not consider the Hall patent as coming within the principle there laid down, for the reason that the standard, the double braces, sliding blocks on the standard, and the rests to hold the blocks, as well as the ribs, which constitute the combination of the second claim, were not only found in the prior devices, but they separately and in combination with such devices performed the same function, and operated in substantially the same way as in the Hall patent. The combination of old elements which perform no new function and accomplish no new results does not involve patentable novelty. *Mosler Safe Co. v. Mosler*, 127 U. S. 354, 361; *Hailes v. Van Wormer*, 20 Wall. 353, 368; *Reckendorfer v. Faber*, 92 U. S. 347; *Pickering v. McCullough*, 104 U. S. 310, 318; *Peters v. Hanson*, 129 U. S. 541.

The use and purpose sought to be accomplished by the Hall patent was the radial expansion of the dress form, but it is well settled by the authorities that the end or purpose sought to be accomplished by the device is not the subject of a patent. The invention covered thereby must consist of new and useful means of obtaining that end. In other words, the subject of a patent is the device or mechanical means by which the desired

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result is to be secured. *Carver v. Hyde*, 16 Pet. 513, 519; *LeRoy v. Tatham*, 14 How. 156; *Corning v. Burden*, 15 How. 252; *Barr v. Duryee*, 1 Wall. 531; *Fuller v. Yentzer*, 94 U. S. 288.

Tested by these authorities the validity of the patent in question must be ascertained, not from a consideration of the purposes sought to be accomplished, but of the means pointed out for the attainment thereof, and if such means, adapted to effect the desired results, do not involve invention, they can derive no aid or support from the end which was sought to be secured. All that Hall did was to adapt the application of old devices to a new use, and this involved hardly more than mechanical skill, as was ruled in *Aron v. Manhattan Railway Co.*, 132 U. S. 85, where it was said: "The same device employed by him (the patentee) existed in earlier patents; all that he did was to adapt them to the special purpose to which he contemplated their application, by making modifications which did not require invention, but only the exercise of ordinary mechanical skill; and his right to a patent must rest upon the novelty of the means he contrived to carry his idea into practical application."

There is another test as to the validity of the second claim. If the Balch, Everett, Wilson, or Ferris patents, or even the umbrella, were subsequent in date to that of the Hall patent, they would constitute an infringement thereof, for the rule is well established that "that which infringes, if later, would anticipate if earlier." *Peters v. Active Mfg. Co.*, 129 U. S. 530, 537; *Thatcher Heating Co. v. Burtis*, 121 U. S. 286, 295; *Grant v. Walter*, 148 U. S. 547, 554; *Gordon v. Warder, ante*, 47.

If, however, the patent could be sustained at all, it would have to be restricted and confined to the specific combination described in the second claim as indicated by the letters of reference in the drawings, and each element specifically pointed out is an essential part thereof. *Duff v. Sterling Pump Co.*, 107 U. S. 636, 639; *Newton v. Furst & Bradley Co.*, 119 U. S. 373; *Bragg v. Fitch*, 121 U. S. 478; *Crawford v. Heysinger*, 123 U. S. 589; *Dryfoos v. Wiese*, 124 U. S. 32.

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For if not so restricted by the letters of reference the effect would be to make the claim coextensive with what was rejected in the Patent Office.

If any validity could be conceded to the patent, the limitation and restriction which would have to be placed upon it by the action of the Patent Office, and in view of the prior art, would narrow the claim, or confine it to the specific structure therein described, and as thus narrowed there could be no infringement on the part of appellants if a single element of the patentee's combination is left out of the appellants' device. *Sargent v. Hall Safe & Lock Co.*, 114 U. S. 63; *Eddy v. Dennis*, 95 U. S. 560; *McCormick v. Talcott*, 20 How. 402.

The appellants' dress form, which is alleged to infringe the combination of elements particularly described in the second claim of the Hall patent, does not contain several of the specific elements of said claim; it has a tubular standard, within which is a loose vertical rotatable shaft extending above the end of the standard. Surrounding this shaft are several ribs. The shaft is screw-threaded at one portion with a left-hand thread, and at a portion above the left-hand thread there is a right-hand screw-thread. On each of these portions is a corresponding nut, so that the shaft being rotated in one direction will cause the nuts to approach each other, or, rotated in the opposite direction, the nuts will separate. Above the screw-threaded nuts is a fixed and immovable collar. To this collar and the movable nuts are hinged the braces which are similar to those described in the Hall patent. By turning the top of the standard either to the right or to the left the whole form is adjusted by one movement.

Comparing this device with the combination described in the Hall patent, it is found that there are a standard, double braces, and ribs, but there are no sliding blocks or rests, and the function of the standard is doubled. There is no sliding block whatever at the top of the upper braces, and the lower collar is a screw-threaded nut resting upon corresponding screw-threads in the standard. It is clear that the sliding blocks and the rests, two of the five elements specifically described in the Hall patent, are not employed in the dress form of the appellee.

Dissenting Opinion: Brown, Shiras, JJ.

lants. If the Hall patent was a valid pioneer invention, the doctrine of equivalents might be invoked with regard to the sliding blocks and rests, and thus a different question would be raised, but, being confined to the specific elements enumerated by letters of reference, it is neither entitled to a broad construction, nor can any doctrine of equivalents be invoked so as to make the appellants' device an infringement of the second claim in controversy.

Our conclusion, therefore, is that the Hall patent is invalid, and further, if it could be sustained at all, it would have to be in the most restricted form, and thus restricted, it is not infringed by the appellants. It follows, therefore, that in each case the judgment of the courts below must be

Reversed, and the cause remanded, with direction to dismiss the bill.

MR. JUSTICE BROWN (with whom was MR. JUSTICE SHIRAS) dissenting.

In the construction of his device Hall took the principle of the common umbrella and of an adjustable reel for unwinding yarn, and by adding to it ribs and elastic bands, adapted it to an entirely different purpose, namely, to the construction of an adjustable dress form, which has largely supplanted those previously in use. While the changes made were not radical in their character, I think they were such as to involve invention within the rule stated in *Loom Co. v. Higgins*, 105 U. S. 580, 591; *The Barbed Wire Patent*, 143 U. S. 275; *Gandy v. Main Belting Co.*, 143 U. S. 587; and *Topliff v. Topliff*, 145 U. S. 156; and that the change made by the defendant in using a collar fixed to the standard for the upper sliding block, and a nut and threaded standard for the lower sliding block and rest of the Hall patent, was in fact the substitution of well-known equivalents, and does not exonerate them from the charge of infringement.

The CHIEF JUSTICE did not sit in this case and took no part in its decision.