

THOMAS HOBART BALL, HER-
MAN PRENSLAUER and SIMON
FLORSHEIM, trading under the
style of "CHICAGO CORSET COM-
PANY." and CLINTON ETHEL-
BERT BRUSH and SEELY BENE-
DICT BRUSH, trading under the
style of "CLINTON E. BRUSH &
BRO. (PLAINTIFFS)

1886
* June 1, 2.
1887
* Mar. 1.

APPELLANTS ;

AND

THE CROMPTON CORSET COM-
PANY, ROBERT SIMPSON and
G. W. DUNN & CO. (DEFENDANTS)

RESPONDENTS.

ON APPEAL FROM THE COURT OF APPEAL FOR ONTARIO.

*Patent—Infringement of—Coiled wire springs in groups—Sub-
stituted for India-rubber—Mechanical equivalent—Want of in-
vention.*

In a suit for the infringement of a patent the alleged invention was the substitution in the manufacture of corsets of coiled wire springs, arranged in groups and in continuous lengths, for India-rubber springs previously so used. The advantage claimed by the substitution was that the metal was more durable, and was free from the inconvenience arising from the use of India-rubber caused by the heat from the wearer's body.

Held, affirming the judgment of the Court of Appeal for Ontario, Fournier and Henry JJ. dissenting, that this was merely the substitution of one well known material, metal, for another equally well-known material, India-rubber, to produce the same result on the same principle in a more agreeable and useful manner, or a mere mechanical equivalent for the use of India-rubber, and it was, consequently, void of invention and not the subject of a patent.

APPEAL from the Court of Appeal for Ontario (1) affirming the judgment of Proudfoot J. in the Chancery Division of the High Court of Justice (2), by which the plaintiffs action was dismissed.

* PRESENT.—Sir W. J. Ritchie C.J., and Strong, Fournier, Henry, and Gwynne JJ.

(1) 12 Ont. App. R. 738.

(2) 9 O. R. 228.

1886
BALL
v.
CROMPTON
CORSET Co.

The action was for infringement by the defendants of a patent granted to the plaintiff Florsheim which had been assigned to the plaintiffs the Chicago Corset Company. The latter had granted to the plaintiffs Brush & Brother a licence for using the said patent in Canada.

The following was the invention as described in the letters patent :—

First. An elastic gore, gusset, or section for wearing apparel composed of a covering material having tubes, spiral metal springs inclosed by such tubes and not extending to the edges of the covering material and stayed at their ends by such covering material, and inelastic margins outside of the springs, substantially as and for the purpose set forth.

Second. In an elastic gore, gusset, or section of the character described, the springs arranged in groups and made of a continuous length of coiled wire, substantially as described and shown.

Third. In an elastic gore, gusset or section of the character described, metal fastenings extending across the ends of the tubes between the thicknesses of the covering material, substantially as described and shown.

The portion of the patent specially claimed as the patentee's invention was the metal springs arranged in groups and made of a continuous length of coiled wire. Previous to the patent metal springs had been used, but not in continuous lengths, and the manner in which they were used caused the covering material to become cut and frayed. There were also in previous use India-rubber springs in continuous lengths, but the India-rubber was an objectionable material, from liability to decay, and to contract when the body became heated, and so injure the health of the wearer.

By the statement of defence it was denied that

Florsheim was the first and true inventor of the improvements described in the letters patent; that the alleged invention was new or useful, or that it was a patentable invention; and it was claimed that such alleged inventions were known and used by others previous to the issue of the patent, and that patents for the improvements were in existence in the United Kingdom and in the United States more than twelve months prior to Florsheim's application for a patent in Canada.

1886
BALL
v.
CROMPTON
CORSET CO.

On the hearing before Proudfoot J. judgment was given dismissing the plaintiffs' action, the learned Judge holding that defendants had infringed the patent of the plaintiffs; that Florsheim was the first inventor, and that the invention was useful; but he also held that the coiled wire spring was only a mechanical equivalent for the india-rubber spring, and that it did not possess any element of invention, and therefore could not be the subject of a patent. The Court of Appeal affirmed this judgment. The plaintiffs then appealed to the Supreme Court of Canada.

W. Cussets Q.C. and Akers for appellants:

By his judgment the learned judge who tried this case finds all the issues in favor of the plaintiffs but one. He finds as a fact that Florsheim was the inventor as between himself and Schilling. 2ndly. He finds as a fact that the defendants infringed the patent. 3rdly. He finds as a fact that "it was clearly established that the invention was useful." 4thly. He finds that none of the patents set out by the defendants anticipated the invention of the plaintiffs, with the exception of a patent granted to one Miller on the 31st day of December, 1866, but because of this patent the learned judge, for reasons given in his judgment, was of opinion that plaintiffs' action must fail.

The learned judges in the Court of Appeal concurred

1886
 ~~~~~  
 BALL  
 v.  
 CROMPTON  
 CORSET CO.

with Mr. Justice Proudfoot in all his findings in favor of the plaintiffs, but agree with him that the Miller patent anticipated the invention of the plaintiffs, and on this ground dismissed the appeal.

The patent sued upon is a patent for, among other claims, "an elastic gore, gusset, or section for wearing apparel" "composed of a covering material having tubes, spiral" "metal springs enclosed by such tubes and not" "extending to the edges of the covering material and" "stayed at their ends by such covering material, and" "inelastic margins outside of the springs."

The patent relied upon by the learned judges, as anticipating the plaintiffs patent, is a patent for a corset with continuous India-rubber springs. It is proved that the patent was never practically used.

A patent similar to that granted in Canada was granted in the United States of America to Florsheim, on the 22nd of February, 1881. This patent was granted to Florsheim after an interference with Schilling. Before the patent was granted a reference was made by the officials of the Patent office to the Miller patent, relied on as a defence to this action, but after full consideration the American Patent Office were of opinion that the Miller patent did not anticipate Florsheim's invention, and the patent was granted to Florsheim.

We do not contend, of course, that the decision of the American Commissioner of Patents is in any way binding upon our Courts; but we say that where, after a protracted interference, with the full consideration of the Miller patent, the American Patent Office granted a patent it has some weight.

In *Smith v. Goldie* (1) Mr. Justice Gwynne is reported to have said: "Now upon the question" "whether the combination is or is not the proper sub-" "ject of a patent it appears to me, I confess, not to be

“altogether immaterial, although not conclusive, that  
 “after a protracted contestation, which must have in-  
 “volved enquiry into the patentable character of the  
 “combination, the plaintiff Smith obtained a patent in  
 “the United States.”

1886  
 BALL  
 v.  
 CROMPTON  
 CORSET CO.

In this case it was the same as in the Purifier case. With the full knowledge of the patent in question granted to Miller, and after full consideration of its effect, the United States granted a patent to Florsheim.

As hereinbefore stated, the patentee Florsheim by his specifications expressly states that the object he has in view “is to *produce the means for the successful and practical substitution of metal springs for India-rubber.*”

As far back as the year 1815 those interested in the corset trade were endeavoring to invent some means for a practical application of spiral metal springs for corsets, the use of rubber being injurious and objectionable on various grounds.

In none of the prior patents relied on was a spiral metal spring made continuous, and it is beyond question that up to the time of Florsheim’s invention the fact that spiral metal springs could be used continuously was unknown.

The learned counsel then contended upon the evidence that it was established beyond any reasonable controversy: (1) That for over sixty years those in the trade had been endeavouring to successfully substitute spiral metal springs in corsets in lieu of India-rubber; (2) That this had been attempted in various ways, all of which were found to be impracticable; (3) That the use of rubber in corsets was practically useless for the reasons hereinbefore set out; (4) That the improvement made by the defendants was of great value, and that thereby a vastly better article was introduced, and at a greatly reduced cost.

The following cases were cited and relied on:—

1886  
BALL  
 v.  
 CROMPTON  
 CORSET CO.

*Smith v. Goldie* and cases there cited (1); *Unwin v. Heath* (2); *Walton v. Potter* (3); *Muntz v. Foster* (4); *Dalton v. Nelson* (5); *Smith v. Goodyear* (6).

*MacLennan Q.C.* and *Osler Q.C.* for respondents.

The evidence clearly establishes that Florsheim was not the "first and true inventor" of this article, for it was "known or used by others before his invention thereof in February, 1879," and had been anticipated by prior patents in England and the United States.

The substitution of a device well known and used for another device equally well known to obtain the same result does not possess any element of invention. The learned judge who tried the case so found (following *Thompson v. James*) (7), and the Court of Appeal has unanimously affirmed that decision.

In support of their case the respondents relied upon the reasoning of the learned judges of the Court of Appeal (8), and in addition to the cases cited by them, referred also to the following authorities:—

*Terhune v. Phillips* (9); *Pickering v. McCullough* (10); *Hailes v. Van Wormer* (11); *Smith v. Nicholls* (12); *Crouch v. Roemer* (13); *Hollister v. Benedict Manf. Co.* (14); *Walker on Patents* (15).

Sir W. J. RITCHIE C. J.—The learned judge who tried this case thought that the patent of the Millers, of the 31st Dec. 1866, No. 3451, embraced the whole of the plaintiffs' invention. The only question then, he says, is "whether the substitution of a coiled wire "spring for India-rubber, and the arrangement of tubes

- |                                          |                                             |
|------------------------------------------|---------------------------------------------|
| (1) 9 Can. S. C. R. 46.                  | (9) 99 U. S. R. 592.                        |
| (2) 5 H. L. Cas. 505.                    | (10) 104 U. S. R. 310.                      |
| (3) 1 Web. Pat. Cas. 597; 3 M. & G. 411. | (11) 20 Wall. 353.                          |
| (4) 2 Web. Pat. Cas. 103.                | (12) 21 Wall. 112.                          |
| (5) 13 Blatch. 357.                      | (13) 103 U. S. R. 797.                      |
| (6) 93 U. S. R. 496.                     | (14) 113 U. S. R. 59.                       |
| (7) 32 Beav. 570.                        | (15) Ss. 23, 25, 2*, 32, 36, 349, 362, 376. |
| (8) 12 Ont. App. R. 738.                 |                                             |

"into groups, are sufficiently novel, and display enough  
 "invention, to entitle the plaintiffs to a patent" and the  
 learned judge thought they were not; that the plain  
 result of the evidence was, that the coiled wire spring  
 is only a mechanical equivalent for an india-rubber  
 spring, and that it does not possess any element of  
 invention; or, as the learned chief Justice of Ontario  
 says "it therefore stands as a mere substitution of one  
 very well known material for another equally well  
 known material, to produce the same effect on the same  
 principle in a more agreeable and useful manner." The  
 evidence of Edward Wilhelm is very strong and con-  
 clusive upon this point. It is as follows:

1887  
 ~~~~~  
 BALL
 v.
 CROMPTON
 CORSET Co.
 Ritchie C.J.
 —

(His Lordship here read the evidence).

I have been unable to escape from the conclusion
 arrived at by the learned judge in the court of first
 instance and by the Court of Appeal, that the use of
 the coiled wire was only a mechanical equivalent for the
 india-rubber spring in the Miller patent, and that the
 plaintiffs' patent, consequently, does not possess any
 element of invention; that the substitution in this case
 is in no sense the creative work of an inventive faculty,
 which the patent laws are intended to encourage and
 reward; and that the fact that the plaintiffs' improve-
 ment has proved successful and highly useful does not,
 necessarily, establish that it is an invention entitling
 the plaintiffs to a patent. Such was the case in *Hinks*
v. The Safety Lighting Co. (1).

The employing one known material in place of
 another to produce the same result, though greater
 cheapness and durability may thereby be secured, is
 not invention; it involves no new mode of construc-
 tion and developes no new uses and properties of the
 article formed, and does not produce a substantially
 different manufacture. It is a matter of mere mechan-

1887
 ~~~~~  
 BALL  
 v.  
 CROMPTON  
 CORSET CO.  
 Ritchie C.J.

ical judgment. The substitution may be new and useful but there must be some real novelty in the substitution, or in the application of an old invention to a new purpose. This cannot be said to be the application of an old thing to a new purpose; the means by which the intended result is obtained are substantially the same; there is no difference in function, mode of operation, or character of construction; there is identity of function and substantial identity of performing that function. The use of the coiled wire produced no new and different result not produced by the old combination. There is no change of action; the change of utility was nothing more than a question of degree, and merely did the same thing with better effect. Comparative utility, that is, comparative superiority or inferiority of utility, is not alone a criterion. In this case I cannot discover that the superiority of the plaintiffs' patent over the Miller patent arises from any other cause than the superiority of one well known elastic substance over another equally well known elastic substance, and is, therefore, simply the superiority of material to insure elasticity. India-rubber accomplished the end sought, coiled wire accomplished the same end; both did the same work in, substantially, the same way, accomplishing, substantially, the same result. What was this, then, but the substitution of a mere mechanical equivalent? In *Thompson v. James* (1), which was as to the question of substitution of steel springs in the place where other elastic materials were used before, though the Master of the Rolls found, as a matter of fact, that the substitution was new and useful, he felt bound to determine, as a judge, that the substitution of steel wire for whalebone was not the subject of a patent. I cannot distinguish that case from the present.

(1) 32 Beav. 570.



In the United States, where the subject of patents has undergone so much judicial discussion, we naturally turn to ascertain the reasoning which has led to the decisions in that country, and in doing so we find the reasoning and principles enunciated in *Thompson v. James* acted on in the highest tribunal of that country. Thus, in *Smith v. Nicholls* (1) we find Mr. Justice Swayne, of the Supreme Court, speaking thus :

1887  
 BALL  
 v.  
 CROMPTON  
 CORSET CO.  
 Ritchie C.J.

A patentable invention is a mental result. It must be new and shown to be of practical utility. Everything within the domain of the conception belongs to him who conceived it. The machine, process or product is but its material reflex and embodiment. A new idea may be engrafted upon an old invention, be distinct from the conception which preceded it, and be an improvement. In such case it is patentable. The prior patentee cannot use it without the consent of the improver, and the latter cannot use the original invention without the consent of the former. But a mere carrying forward, or new or more extended application, of the original thought, a change only in form, proportions or degree, the substitution of equivalents, doing substantially the same thing in the same way by substantially the same means with better results, is not such invention as will sustain a patent. These rules apply alike, whether what preceded was covered by a patent or rested only in public knowledge and use. In neither case can there be an invasion of such domain and an appropriation of anything found there. In one case every thing belongs to the prior patentee, in the other to the public at large.

Chief Justice Waite, in *Crouch v. Roemer*, (2) delivers himself thus :

It is conceded in the patent itself that shawl straps with handles attached to a leather cross piece having loops at the ends were old. Eustace, one of the witnesses for the complainant, says he made his goods with a cross-piece of the firmest leather he could get, doubled and stitched, so as to render it firmer still. His object clearly was to keep the weight of the bundle from drawing the ends of the handle together so as to press against the sides of the hand.

The testimony leaves no doubt on our minds that handles fastened on rigid cross-bars and used to carry bundles were known long before the complainant's invention. Possibly in adjusting them to use, though this is by no means certain, the straps to bind the

(1) 21 Wall. 118.

(2) 103 U. S. R. 799.

1887  
 ~~~~~  
 BALL
 v.
 CROMPTON
 CORSET Co.

 Ritchie C.J.

bundle were not passed through loops across the bar, yet it is clear beyond all question that the handle, rigid cross-bar, loops, or their equivalent, and straps, or equivalents, were used in combination to keep together and carry one or more articles in a package made by piling or rolling the articles together. Under these circumstances it was no invention to stiffen by artificial means the leather cross-piece which had been before made as rigid as it could be by thickness, doubling and stitching. All that was done by the inventor was to add to the degree of rigidity which had been used before. The addition of metal or other substance as a stiffener of the known cross-piece, which had already been made rigid in a degree, was not invention. The substantial elements of a well known structure were thus, in no patentable way, changed.

And in *Blake v. San Francisco* (1), Mr. Justice Wood, delivering the opinion of the court, says :

"It is settled," says Mr. Justice Gray, speaking for the court, "by many decisions of this court. . . that the application of an old process, or machine, to a similar or analagous subject, with no change in the manner of application, and no result substantially distinct in its nature, will not sustain a patent, even if the new form of result has not before been contemplated. *Pennsylvania Railroad Co. v. Locomotive Truck Co* (2); and cases there cited."

If there is any qualification of this rule, it is that if a new and different result is obtained by a new application of an invention, such new application may be patented as an improvement of the original invention; but if the result claimed as new is the same in character as the original result, it will not be deemed a new result for this purpose.

And the cases of *Thompson v. Boisselier* (3) and *Stephenson v. Brooklyn R. R. Co.* (4); decided that it must not only be new and useful but must amount to invention.

The Appellants in their factum invoke, and also strongly urged on the argument, the following—

It is not contended, of course, that the decision of the American Commissioner of Patents is in any way binding upon our Courts; but the appellants do say that where, after a protracted interference with the full consideration of the Miller patent, the American Patent Office granted a patent it has some weight.

(1) 113 U. S. R. 682.

(2) 110 U. S. R. 490.

(3) 114 U. S. R. 1.

(4) 114 U. S. R. 149.

In *Smith v. Goldie* (1) Mr. Justice Gwynne is reported to have said: "Now upon the question whether the combination is, or is not, the proper subject of a patent it appears to me, I confess, not to be altogether immaterial, although not conclusive, that after a protracted contestation, which must have involved inquiry into the patentable character of the combination, the plaintiff, Smith, obtained a patent in the United States."

1887

BALL
v.CROMPTON
CORSET CO.

Ritchie C.J.

In this case it was the same as in the *Purifier* case. With the full knowledge of the patent in question granted to Miller, and after full consideration of its effect, the United States granted a patent to Florsheim.

Allowing every weight to the presumption in favor of the validity of the patent, arising from the action of the Patent Office in granting it, any such presumption is surely entirely rebutted by a judicial decision declaring that the patent so granted is void, which has actually taken place with reference to this very patent. The question of the validity of this patent came up for adjudication in the United States Circuit Court from the Northern District of Illinois, and was decided January 11th, 1886, and reported in the official gazette of the United States Patent Office under the heading: "decisions of the Commissioner of Patents and of the United States courts in patent cases." It was decided on the same grounds, and for the same reasons, as was the action before us. After detailing minutely the plaintiffs' patents and the English patents to Mills of March 14th, 1815, to the Millers of December 31st, 1866, and the American patent to M. J. Van Norstrand of February 1st, 1876, the learned judge decided that the latter's patent No. 238,101 as to groups, 2308 as to elastic gussets and gores as to durability, &c, were voidable for want of patentable invention over the English patents to Jane Mills of March 14th 1815, the English patent to the Millers of December 31st, 1866, and the American patent to M. S. Van Nostrand of February 1st, 1876; that the substitution of one

1887

BALL

v.

CROMPTON
CORSET CO.

Ritchie C.J.

material, metal, for India-rubber springs is not a patentable difference. The learned judge says of the Miller patent :

Letters patent, No. 238,100, corsets, and No. 238,101, elastic gore or gusset for wearing apparel, granted February 22, 1881, to Simon Florsheim, as inventor, and Thomas H. Ball, as assignee, are void for want of patentable novelty over the English patent to John Mills, of March 14th, 1815, the English patent to Miller, of December 31, 1866, and the American patent to Mary J. C. Van Norstrand, of February 1, 1876.

Patent No. 238,100 claimed a corset having elastic side sections comprising two layers of cloth stitched together transversely so as to form tubes, wherein were inserted in groups of spiral metal springs formed of one continuous spring, and such sections having plain margins or edges for uniting the elastic sections to the non-elastic sections of the corset. The prior patents taken together disclosed this construction, except that they did not show an elastic section composed of groups of spiral metal springs. Held, that no invention, but only mechanical skill, was required to group such springs.

Same—Change of material.

The substitution of one material (metal for India-rubber springs) is not a patentable difference, even where a superior article is produced by such substitution.

Same—Complete device not shown in single prior patent.

Although the complete devices described in these patents may not be found in any one of the prior patents, yet enough is shown in the Miller (1866) patent to invalidate them.

The English patent of John Mills, of March 14, 1815, shows elastic sections or gores in corsets made of cloth with tubes stitched into the same, into which are inserted metal spiral springs, so as to pucker the cloth over the springs and give the sections the required elasticity. The patentee, in his specifications, says :

Figure I is a representation of a stay composed of the same material as common stays, with the introduction of an elastic or expansive portion or slit down the middle, which will dilate or expand by a more than ordinary pressure or force being exerted, as in the case of breathing or exercising of the arms. This flexible portion is composed of springs either of brass, copper or iron wire, or of any other matter or thing capable of producing sufficient elasticity ; but this which I recommend is small brass wire worm springs, which extend by a small degree of force. These I place close together in runners or spaces stitched in between two pieces or layers of silk, satin, or other fit material puckered or quilted loosely to give room

for expansion, the ends of the springs and their covering of silk, satin, or other matter on them sewed or otherwise fastened to and between the two half pieces of the stay, previously made of the usual material.

Here we have an elastic section for a corset, the elasticity being secured by spiral springs transversely set into the material of which the section is made, and this section extending from the top to the bottom of the corset either at the back or front or both.

In the American patent, granted February 1, 1876, to Mary J. C. Van Nostrand, a corset is shewn with elastic sections at the sides extending from under the arms to the hips or bottoms of the corsets, this section being made of elastic webbings, the elastic material being presumably India-rubber. The elastic sections in this corset are located in the same place and perform the same functions as those shown in the complainant's corset.

In the English patent to Miller, of December 31, 1866, elastic gussets suitable for use on boots, stays, and for other purposes are described where the elastic material used is India-rubber strips run continuously back and forth in tubes formed in cloth. The patentee says :

According to our invention we secure the vulcanized India-rubber springs between two pieces of woven fabrics, leather or other material by stitching with the sewing machine, the stitches running in parallel lines and passing through the two pieces of fabric or material between the India-rubber springs ; and the springs, in place of being each a separate piece, are in one piece, the length of the vulcanized India-rubber cord at the end or each traverse across the gusset being turned around and caused to return parallel to itself ; thus the liability of the India-rubber to slip and work out of the gusset is much reduced. When gussets made in this manner are worked into boots or other articles, the stitches by which they are secured are passed through a margin on each side of the gusset, and not through the India-rubber part of the gusset, as heretofore.

We first cut the material, leather, silk, cotton, or any other woven fabric, and the lining to the size required of the gusset when it is finished and for leaving the required margin. We then turn over the top edge and baste or tack it down to the lining. We then commence to stitch with a sewing machine a series of rows in parallel lines transversely across the gusset, the stitching passing through the two materials, commencing at the top, and so on, from row to row, until the whole of the gusset is stitched. The distance between the rows of stitches will depend on the thickness of the India-rubber thread to be inserted."

1887

~
BALL
v.

CROMPTON
CORSET CO.

Ritchie C.J.
—

1887
 ~~~  
 BALL  
 v.  
 CROMPTON  
 CORSET CO.  
 ———  
 RITCHIE C.J.  
 ———

They then describe the manner in which they pucker the cloth and a machine for doing puckering, and proceed :

"We then insert with the bodkin or needle the thread or strand of India-rubber, which is in one length. We commence at the top cavity to insert the India-rubber thread or cord, and follow back in the next row or cavity, causing it to return parallel to itself, and so on, the same from row to row until the whole of the cavities are filled with India-rubber. We then pull back the margin that is left as large as required and tack it down with an ordinary needle, and the gusset is ready for use."

There can be no doubt that there is described in this patent a gusset with non-elastic margins, edges or ends, and the only conceivable difference between this device and the elastic sections in the complainant's corset patent is that an India-rubber spring is used instead of a metal spiral spring and the springs in this English patent are not grouped. This patent seems to fully instruct any person how to make a section like the section shewn in the complainant's corset patent with India-rubber springs. It does not seem to me that there is any patentable difference between the gussets described in the English patent of Miller and the sections in the complainant's corset patent. The substitution of one material for another is not a patentable difference, even where a superior article is produced by such substitution. *Hotchkiss v. Greenwood* (1), *Hicks v. Kelsey* (2), *Terhune v. Phillips* (3).

In the corset patent the patentee gives his reasons for grouping the springs. He says :

The Springs are arranged in groups as shown. The number of springs composing the group will vary according to location, so as to give the requisite stiffness and elasticity. Those at the top and bottom of the elastic side sections of the groups of springs should not be made so stiff as at the waist. It is essential also that the springs be arranged in groups since if placed contiguous throughout the elastic sections the corset would be much too heavy and expensive, and such sections would be too stiff at some points and not stiff enough at others.

Here is a mere mechanical reason given for grouping these springs clearly applicable to the change of material and the use to which the gusset or section is applied. Were a good mechanic to attempt to apply the Miller gusset or gore to a corset in the manner shown in the complainant's corset patent, where an unequal degree of elasticity is required at different points, there can be no doubt that he would

(1) 11 How. 248.

(2) 18 Wall. 670.

(3) 99 U. S. R. 592.

provide for that inequality of elasticity by placing his rubber springs closer together or farther apart, which would not require inventive ability, but mere mechanical skill of adaptation. With the part of corset making so far developed in the direction of complainant's device as is shewn by the elastic sections of Miller and Van Nostrand, and with the Miller section showing continuous springs and non-elastic margins, it would seem that all complainant did, in his corset, was fully entitled in the older art. The substitution of wire for rubber makes the Miller corset in all respects an elastic section such as is shewn in complainant's corset, except that the springs are not grouped, and this is not a patentable difference, as the only advantage of the grouping is to make the sections less rigid at some points than at others.

As to complainant's gusset or gore patent, it seems to me that all the elements of this patent are found in the English patent of Miller, just considered. The only difference is the material of the springs, and that I have already said in the discussion of the first patent is not a patentable difference. Miller's patent shows a gusset with tubes into which the springs are inserted, and upon which the cloth or gusset material is puckered, and margins for attaching the gusset to the garment where it is to be used or applied. The old Mills patent of 1815 showed a gusset with metal springs inserted in tubes, and the cloth puckered over those tubes, so as to provide for the expansion; but the patent did not expressly provide for a plain or a non-elastic margin, and all that Miller did in 1866 over Mills in 1815 was to put a non-elastic margin upon the Mills gusset, and all that Florsheim did was to substitute metal springs in place of the rubber springs shown in the Miller patent. This cannot amount to invention in the then state of the art. Coiled wire springs for a gusset or gore were old, and gussets with non-elastic margins were old and well known long before Florsheim applied for his patent, and the proof shows that he examined the Miller patent before he applied for the patent now under consideration, so that he must have known that the field was already covered before his device was produced.

It is urged on the part of complainant that the complete device as described in each of these patents is not found in any of the older devices; but, as I have already said, I find enough in the Miller patent alone to meet and anticipate both these patents. When Miller had shown how to make an elastic gusset or section for wearing apparel with non-elastic margins, there was no invention in applying such a gusset or section to a corset when corsets had already been made with elastic sections, although these older

1887  
 ~~~~~  
 BALL
 v.
 CROMPTON
 CORSET CO.
 ~~~~~  
 Ritchie C.J.  
 ~~~~~

1887

~
BALL
v.

CROMPTON
CORSET Co.

—
Ritchie C.J.

sections did not have non-elastic margins, as it did not require invention to put Miller's elastic sections into Mills or Van Nostrand stays.

For all these reasons I am constrained to conclude that the use of wire did not lay so much out of the track of the former use of India-rubber as not naturally to suggest itself, and, therefore, that the mere substitution of metal for India-rubber was destitute of patentable invention.

STRONG J.—The principle of the invention claimed by the plaintiff is the same as that of the Miller patent, namely, a continuous spring instead of one cut into lengths. The substitution of a wire spring for one of India-rubber is no novelty, but a mere adaptation of a device already well known and used which attains precisely the same object. Numerous authorities show that there is nothing in this to entitle the plaintiff to a patent. It is sufficient to refer to two cases precisely in point and closely resembling the present in their circumstances, *Thompson v. James* (1), cited and relied on in the judgments in both the courts below, and that of *Cave v. The Morgan Envelope Co.* (2), decided by Judge Lowell in the Circuit Court of the United States.

The appeal should be dismissed with costs.

FOURNIER J.—For the reasons given by Mr. Justice Henry, whose judgment I have read, I am in favour of allowing the appeal.

HENRY J.—The only question for decision in this case arises upon the issue raised by the 4th statement of defence of the respondents, wherein they allege that the invention claimed by the appellants was not patentable. The statute provides that a party may obtain a patent for

(1) 32 Beav. 570.

(2) 4 Bann. & Ard. Pat. Cas. 109.

Any new and useful art, machine, manufacture or composition of matter, or any new and useful improvement on any art, machine, manufacture or composition of matter not known or used by others before his invention.

The claim in this case is for a new and useful improvement on a manufacture, and our inquiry is simply from the evidence to ascertain if the manufacture by the appellants of corsets within the terms of his patent was new and useful.

The learned judge who tried the action decided that it was useful, and on that point his judgment is fully sustained, and, I think, very properly so. In this connection I was struck by the statements of Mr. Justice Burton in his judgment in the court below as follows :

I have not the slightest doubt that the improvement made by the plaintiffs was of great value, and that thereby a vastly better article was introduced, and at a greatly reduced cost, and I regret that the effect of our decision is to enable the defendants to avail themselves of the plaintiffs' ingenuity and skill without compensation. It does not commend itself to one as a very honest proceeding, &c.

With all due deference to the learned judge, I must express the opinion that entertaining such views, in which I fully concur, his judgment, in my opinion, should have been for the appellants. He finds, substantially, that the improvement produced two results—"a vastly better article," and "at a greatly reduced cost." Now, when we consider that the claim in the appellants' patent was for a new combination, which has produced the results just mentioned, it seems to follow as a necessary result that that "combination" must have been new. Otherwise, no such results would have been produced. In *Penn v. Bibby* (1) the Chancellor says :

To this it is objected that the alleged invention was merely a new application of the old and well known theory. It is very difficult to extract any principle from the various decisions on this subject which can be applied with certainty to every case nor, indeed, is it easy to reconcile them with each other.

(1) 2 Ch. App. 135.

1887
 BALL
 v.
 CROMPTON
 CORSET CO.
 Henry J.

1887

BALL

v.

CROMPTON
CORSET CO.

Henry J.

And Sir A. Cockburn, in *Harwood v. Great Northern Railway* said (1) ;

Although the authorities establish the proposition that the same means, apparatus, or mechanical contrivance, cannot be applied to the same purpose, or to purposes so nearly cognate and similar as that the application of it in the one case naturally leads to application of it when required in some other, still the question in every case is one of degree, whether the amount of affinity or similarity which exists between the two purposes is such that they are substantially the same, and that determines whether the invention is sufficiently meritorious to be deserving of a patent.

Under the ruling in the latter case, as well as the preceding one, the inquiry in a case like that before us must be directed to ascertain in the words of Sir A. Cockburn :

Whether the amount of affinity or similarity which exists between the two purposes is such that they are substantially the same. If the improvement of the appellants is not substantially the same as that of another opposed to it, and that the results are useful in the production of a better article and at a largely reduced cost, that, in the concluding words of Sir A Cockburn, determines that "the invention is sufficiently meritorious to be deserving of a patent."

Let us now see how the matter stands by comparing the two opposing patents separately.

In the specification of the appellants' patent the applicant says ;

The object I have in view is to produce means for the successful and practical substitution of spiral metal springs for India-rubber as an element in elastic gores, gussets and sections of wearing apparel. My invention consists, first, in securing the metal springs to the covering material, and extending such covering material beyond the ends of the springs, to form inelastic margins ; second, in arranging the springs in groups, and in making the springs of two or more of such groups continuous ; and third, in peculiar cross-fastenings for staying the springs at their ends when not made continuous.

With the exception of the substitution of metal springs for those made of India-rubber it is the same as

that in the Miller patent referred to, and it claims nothing more. The ruling decisions as to mechanical equivalents include nothing beyond what is simply and solely mechanical.

1837
 BALL
 v.
 CROMPTON
 CORSET CO.

There is very much beyond that in this case. An equivalent is to be considered not only in regard to its mechanical powers, but as to its general efficiency to do what is claimed for it. We may suppose the case of an inventor producing a machine in which he claims to use a material substance which on trial from the want, say, of elasticity or otherwise, failed to insure the working of the machine, and the patent lapses. It would have been, if successful, a valuable invention to the public, but its benefits are lost through the failure of the specified material substance. Another inventor substitutes suitable materials and succeeds in producing a machine valuable to the public. It is, therefore, meritorious and deserving of a patent. Here, then, we have an invention for the application of India-rubber. Two substantial objections to its use are shown to exist. First, its offensive smell, and next, that in a short time its elasticity is gone.

Henry J.

It is not shown that Miller's invention was ever practically used, but, on the contrary, there is evidence going to show that from the obnoxious qualities of India-rubber, and its want of durability as an elastic substance, it could not be successfully used. It is an English patent, but has not been shown to have had any practical value.

The public, therefore, derived, as far as we can discover, no benefit from it. On the other hand the appellants' improvement has been shown to have been a public benefit, and therefore well worthy of a patent. We have evidence of the application of spiral springs, but not continuous or at all adapted to the purpose of producing satisfactory results. The trial of them

1887
 ~~~~~  
 BALL  
 v.  
 CROMPTON  
 CORSET Co.  
 Henry J.

resulted in failure, because they were not continuous and were not fastened to elastic margins. Besides, in the plaintiffs' specification arrangements were made for groups of spiral springs in places where a greater amount of strain would naturally be felt, leaving the other parts, although connected, to be more easily affected; and, therefore, making the corset lighter and more easy and comfortable to the wearer. This case resembles very much that of *Smith v. Goldie*, decided lately in this court. There was a claim there for a combination only. It was by the simultaneous application by means of fans of a current of air to the revolving bolt of a grist mill and a set of brushes worked by machinery. The fans had been previously used for the same purpose and so had brushes, but no similar simultaneous action had been previously applied by means of machinery, and the result was the manufacture of a superior article of flour. This Court decided in favour of the patent for the combination as a meritorious invention on account of the improved results. I believe an application to the Privy Council to grant an appeal in that case was made and refused.

There was nothing new in that case but the simultaneous application of two well known and used powers both of which had been previously but ineffectually separately tried. On principle are not the two cases similar?

The India-rubber springs of Miller did not accomplish, as far as shewn, any beneficial result. The material is shown to contract with the heat of the wearer's body, and therefore to become to some extent uncomfortable if not injurious. Articles manufactured with India-rubber to give them elasticity very soon lose it, and if kept any time in stock become to that extent injured. It is alleged, therefore, that dealers

refused to purchase articles so made. From the evidence before us the proper conclusion is that Miller's patent was worthless and that of the appellants most valuable.

1887  
BALL  
 v.  
 CROMPTON  
 CORSET CO.  
Henry J.

To decide, then, that the former should be held to have anticipated the latter would not, in my opinion, be conformable to law, equity, or common justice. I think the appellants have fully established their patent rights and are entitled to our judgment with the usual results in such cases, and that the appeal should be allowed with costs in all the courts.

GWYNNE J.—This is an action for alleged infringement by the defendants of a patent for invention granted to one Florsheim by letters patent bearing date the 29th day of April, 1881.

The defendants, among other defences, deny

1st. That the alleged invention is new or useful.

2nd. They deny that the alleged invention is a matter for which letters patent could be granted.

3rd. They say that the alleged inventions were known and used by others before the alleged invention thereof by the patentee.

4th. They say that patents for the said inventions were in existence in other countries, to wit, in the United Kingdom of Great Britain and Ireland and the United States of America, more than twelve months prior to the application in Canada for the said alleged patent.

5th. They say that the specification of the alleged patent does not correctly or fully describe the mode or modes of operating contemplated by the alleged inventor. Nor does the same state clearly or distinctly the contrivances or things claimed as new for which the patentee claimed an exclusive property or privilege.

6th. They say that the said alleged patent claims more than the patentee had a right to claim as new.

1887  
 ~~~~~  
 BALL
 v.
 CROMPTON
 CORSET Co.
 Gwynne J.

The letters patent of the 29th April, 1881, purport to grant to the patentee and his assigns, for the period of five years, the exclusive right, privilege and liberty of making, constructing and using, and vending to others to be used, certain new and useful improvements on elastic gores, gussets, &c., for wearing apparel, of which he claimed to be the inventor, such his invention consisting, as stated, in the letters patent as follows:—

It consists, 1st. in an elastic gore, gusset or section for wearing apparel, composed of a covering material having tubes, spiral metal springs inclosed by such tubes and not extending to the edges of the covering material, and stayed at the ends by such covering material, and inelastic margins outside of the springs.

2nd. in an elastic gore gusset or section of the character described, the springs arranged in groups and made of a continuous length of coiled wire.

3rd. in an elastic gore, gusset or section of the character described, the metal fastenings C extending across the ends of the tubes between the thicknesses of the covering material.

In the specifications referred to in, and made part of, the letters patent the patentee says ;

The object I have in view is to produce means for the successful and practical substitution of spiral metal springs for India rubber as an element in elastic gores, gussets and sections for wearing apparel.

My invention (he says) consists first in securing the metal springs to the covering material and extending such covering material beyond the ends of the springs to form inelastic margins ; second in arranging the springs in groups and in making the springs of two or more of such groups continuous and, third, in peculiar cross fastenings for staying the springs at their ends when not made continuous.

In 1815 Letters patent of invention were granted in England to one Mills for improved elastic stays. The invention for which such Letters Patent were granted was described to consist of the introduction of a flexible or elastic portion in those parts of the stays best calculated to give relief to the wearer and at the same time preserving that stability and support usually given to the body by the common adaptation of whalebone, steel, and other hard or inflexible

materials. Three drawings of stays showing the elastic portions introduced are annexed to the specifications and are referred to therein as figures 1, 2, and 3. The improvement as introduced into the stays shewn in Figure 1 was described as follows :

1887
 BALL
 v.
 CROMPTON
 CORSET Co.
 Gwynne J.

Figure 1 is a representation of a stay composed of the same materials as common stays with the introduction of an elastic or expansive portion or slit down the middle which will dilate or expand by a more than ordinary pressure or force being exerted as in the case of breathing or exercise of the arms. The flexible portion is composed of springs either of brass, copper, or iron wire, or of any other matter or thing capable of producing sufficient elasticity; but that which I recommend is small brass wire worm springs which extend by a small degree of force. These I place close together in runners or spaces stitched in between two pieces or laying of silk, satin or other fit material puckered or quilted loosely to give room for expansion; the ends of the springs and their covering of silk, satin or other matter on them, sewed or otherwise fastened to, and between, the two half pieces of the stay previously made of the usual materials such as jean, or other cotton, linen, silk woollen or leather, &c.

As to figure 2 the specifications say ;

This elastic portion is composed of dilating springs as before expressed, either of copper, brass, iron or other matter, but brass wire worm springs I prefer, covered as before described. In this elastic portion the springs need not be placed so close together as in figure 1, and it will be found necessary to place stronger springs at the top and bottom than in the middle, the latter being intended to yield very readily, the power to help support and brace the body with busks of a slighter kind than usually adopted in common stays placed down the stay in order to distend it as seen in the drawing.

In all these drawings the ends of the coverings of the springs extending beyond and outside of the elastic portion were shewn to be sewn to the two half pieces of the stay between which the elastic portion was introduced.

It thus appears that before ever India-rubber was used as an elastic material in stays, or in gussets gores, &c., for wearing apparel, the use of metal spiral or worm springs was well known; to speak therefore of the

1887
W
 BALL *substitution of spiral metal springs for India-rubber as*
 an invention in 1881 seems rather anachronistic.

v.
 CROMPTON In 1866 letters patent of invention were granted to
 CORSET CO. James Miller and James Miller Jr. for the invention of
Gwynne J. improvements in the manufacture of elastic gussets.

By this time the use of vulcanized India-rubber as an elastic material for gussets, gores &c. had become common and the improvement patented by these letters patent was in the making India-rubber gussets.

The specifications accompanying these letters patent describes the invention patented as follows ;—

This invention has for its object improvements in the manufacture of elastic gussets suitable for use in boots and stays and for other purposes. In the manufacture of gussets it is usual to weave the vulcanised India-rubber springs into the fabric in the process of manufacture ; the India-rubber forming a portion of the warp of the fabric ; or when the gussets are of leather by means of cement, and in either case each spring or line of India-rubber has been a separate piece. Now, according to our invention we secure the vulcanised India-rubber springs between two pieces of woven fabric, leather. or other material by stitching with a sewing machine, the stitches running in parallel lines and passing through the two pieces of fabric or material between the India-rubber springs, which, in place of being each a separate piece are in one piece, the length of vulcanized India rubber cord at the end of each traverse across the gusset being turned round and caused to return parallel to itself ; thus the liability of the India-rubber to slip and work out of the gusset is much reduced. When gussets made in this manner are worked into boots or other articles the stitches by which they are secured are passed through a margin on each side of the gusset and not through the India-rubber part of the gusset as heretofore.

Now, from these Letters Patent it is apparent, that if the mode as described in the Letters Patent of April, 1881, for securing metal springs to their covering material, and the extension of such covering material beyond the ends of the springs, to form a margin for the purpose of thereby attaching the covering material of the springs to other parts of the fabric to which the elastic portion was to be applied, had not been known

ever since the granting of the Letters Patent to Mills in 1815, this mode of fastening springs in gussets and of attaching such gussets was known ever since the granting of the Letters Patent in 1866. The mode of securing springs in their covering material, or of attaching the covering material containing the springs to other portions of the fabric to which they were to be attached, were matters wholly independent of all consideration of the nature of the material of which the elastic springs were made. There would be no patentable novelty in the application of a mode of fastening, in a gusset, elastic springs made of one material, or of attaching the gussets containing such springs to another material, to the case of gussets containing elastic springs made of a different material, whatever novelty there might be in the use of a different material for the making of the elastic springs.

1887
 BALL
 v.
 CROMPTON
 CORSET CO.
 Gwynne J.

In 1872 Letters Patent of invention were granted in England to one Adlam for the invention of "an improvement in stays." In the Letters Patent and in the specifications accompanying the same the invention was described as :

An elastic fabric made of India-rubber webbing, or its elasticity may be derived from small spiral springs inserted in the fabric.

The patentee in the specifications referring to drawings therein, said :

When metallic springs are employed I insert them in the following manner: The inner and outer fabric, *a a*, figure 2, are united together by a series of parallel stitches, *b b*, to form channels to receive springs, and the fabric is then reeved upon wires, which are withdrawn to enable the springs to be inserted. I may here observe that the springs are of brass wire, and are the same as those employed for garters or belts, which are covered in a similar manner to that above described.

And again :

The elastic fabric may consist of India-rubber fabric, but I prefer small spiral springs inserted in the fabric as being more durable.

Now, from these letters patent, it is apparent that

1887 the use of spiral metal springs in preference to India-
BALL rubber, for the purpose of making elastic fabrics, had
v. long been well-known, and from the time of the
CROMPTON granting of these letters patent we must take to be
CORSET Co. well known the mode there described of inserting
Gwynne J. the metal springs in the covering material in
"channels," which seems to be but another word for
the "tubes" mentioned in the letters patent to Flor-
sheim of the 29th of April, 1881. On the first of
February, 1879, one Gustav Schilling applied for
letters patent of invention to be granted to him in the
United States, for what he claimed to be a new and use-
ful improvement in gloves and for which letters patent
were granted to him on the 5th of August, 1879. The
invention for which these letters patent were granted
was said to consist in a series of springs made of very fine
brass wire coiled upon a small mandrel so that their
spirals are successively in close contact with each other,
such springs being enclosed in finely wrinkled leather
tubes and attached with their ends across the wrist
portion of the glove. In his specifications the patentee
declared that he was aware that elastic woven bands,
straps or gores were well known and had long been
used in gloves, such bands, straps, or gores being com-
posed of india-rubber strands, upon which when under
tension a filling of small threads has been woven.
And he therefore disclaimed the invention of an elastic
attachment for the purposes mentioned. He also de-
clared that he was well aware of the shoe fastenings of
Fitch and Jones, composed of a spiral spring coiled
around an elastic core, and permanently secured to the
shoe at one end only, and he therefore disclaimed the
invention of a spiral spring coil to be used for gloves.
He also declared that he was aware of an English
patent of 1866, wherein was described an elastic gore
for shoes, composed of leather, divided by stitches into

numerous tubes, through which when wrinkled a small India-rubber strand is threaded back and forth, and he *therefore disclaimed* the invention described in such English patent. And all that he claimed as his invention was the *combination with a glove* of a series of spiral metal springs enclosed in separate puckered tubes and permanently attached at both ends to the wrist portion of the glove. We are not called upon now to determine whether this attachment to a glove, or as it is called "combination with a glove at the wrist" of a well known elastic fabric made of spiral metal springs producing the elasticity which spiral metal springs were known to produce, was a patentable invention. For our present purpose it is sufficient to say that the elastic fabric here described, for the combination of which with a glove the Letters Patent were granted in the United States, and its elastic property were things that were well known.

1887
 BALL
 v.
 CROFTON
 CORSET CO.
 Gwynne J.

On the 7th of February, 1879, the same Gustave Schilling applied for Letters Patent to be granted to him in the United States for what he claimed to be a new and useful improvement in elastic gores for gaiters, and Letters Patent were granted therefor on the 22nd of April, 1879. The invention for which these Letters Patent were granted was said to consist in the application of a series of small coil springs enclosed in finely wrinkled tubes formed by uniting two flaps of thin leather with parallel seams of stitching and arranged in series with blank spaces between the different series so as to adjust the tension of the various parts of the elastic gore.

In the specifications accompanying these Letters Patent the springs are described as being made of very fine brass wire which are coiled upon a small mandrel so that its spirals are successively in close contact with each other, precisely as in the specifications accom-

1887

BALL

v.

CROMPTON
CORSET CO.

Gwynne J.

panying the application of the same applicant on the 1st of February, 1879, above mentioned. The specifications further say :

The leather tubes, after the springs are inserted therein, are contracted over the same so as to form a multitude of small wrinkles equally distributed over the whole length of the springs, and the ends of the latter are secured in the ends of the tubes in the gore, which again, with its edges, is secured by stitching between the edges of the material and the lining of the gaiter in the usual manner. The springs I arrange in the gore in series of two, three or four, with a blank space between each two series, in accordance with the required elastic resistance for making a tight and yet easy fit of the gaiter round the angle of the foot. Heretofore the gores for gaiters were made of an elastic fabric composed of rubber tiers interwoven with or covered with silk or cotton threads. Such gores, however, were not durable, soon lost their elasticity, and could not be blackened with the rest of the shoe, and therefore soon had a worn out appearance, while a gore of my above described construction will exert a uniform tension which will not relax with its use and will out-last the gaiter, can be shined with blacking, and will be impervious to water as much as the rest of the shoe. The unpleasant feeling of rubber to the skin, particularly in the summer time, is well known, and a substitute of leather gores is therefore something desirable.

What I claim as my invention is the elastic gore for gaiters and boots, composed of wrinkled flaps and coiled metal springs placed in tubes between the flaps and arranged in series, with blank spaces between the series, substantially as described and shewn.

It is to be observed here that the covering material of leather is described as having ends or edges extending beyond the spiral springs and the tubes in which they are placed, by which edges the gore containing the spiral springs is sewn to the gaiter in what is called the usual manner. In the specifications the novelty which is relied upon seems to be the substitution of leather for India-rubber.

That the use of spiral metal springs and their superiority as an elastic material over India-rubber was well known I have already shewn. Whether the insertion of spiral metal springs in leather as a covering

material was a patentable invention, we need not now enquire, for I refer to these Letters Patent for the purpose merely of showing that, neither in the use of spiral metal springs for the purpose of making an elastic fabric, nor in the mode of attaching such elastic fabric to the material in which the elastic fabric was to be inserted, by sewing to such material the ends or edges of the covering material of the metal springs extending beyond the ends of the spring, was there any novelty.

1887
 ~~~~~  
 BALL  
 v.  
 CROMPTON  
 CORSET CO.  
 \_\_\_\_\_  
 Gwynne J.  
 \_\_\_\_\_

On the 4th of March, 1879, the above named Gustav Schilling, jointly with the plaintiff Florsheim, applied for, and on the 17th February, 1880, obtained, Letters Patent to be granted to them in the United States for what they claimed to be new and useful improvements in pantaloons garments, and they described what they claimed their invention to be as follows :

Our invention consists in Pantaloon, Drawers, or Overalls as a new article of manufacture provided with elastic straps at the sides, such straps composed of a series of spiral springs held in puckered tubes between two layers of materials and arranged lengthwise of the waistband and supported by intermediate loops; and also in Pantaloon, Drawers, or Overalls as a new article of manufacture having a triangular gore at the back of the waistband composed of a series of spiral springs held in puckered tubes and arranged in a close group at the top, followed by puckered spaces separated by two spiral springs, all as more specifically hereinafter described.

Figures are then referred to with letters upon them indicating the several parts as follows :

*C* is an elastic gore inserted in the rear upper of the garment, and *D D* are elastic straps secured with their ends upon the waistband at the sides of the overalls, whereby the support of the garment is brought upon the hips and the loose portion of the waistband intermediate of the strap ends for the purpose of preventing its sagging down; has two loops, *E E*, attached, which inclose, and by which it is suspended on, the straps.

The gore *C*, as well as the straps, *D D*, are composed each of two flaps, *c c*, of thin leather or of cloth, which may be of a corresponding color with the fabric of the pantaloons. These flaps are cut about twice the length the gore or strap is to be when finished, and are united by longitudinal parallel seams of stitching so as to form

1887

BALLY  
v.CROMPTON  
CORSET CO.

Gwynne. J.

small tubes between two such seams, into each of which is inserted a small coil spring, *d.* These springs are made up of very fine brass wire, which we coil upon a small mandrel, so that the spirals are successively in close contact with each other. The leather or fabric tubes are contracted over these springs so as to form a multitude of small wrinkles equally distributed over the whole length of the said springs and the ends of the latter we secure in the ends of the tubes to the fabric.

For the gore we arrange the springs in series of two, three, or four with a blank space between each two series and in accordance with the required elastic resistance necessary for insuring a close yet comfortable fit for the pantaloons and with the length of the springs proportioned to the varying width of the gore. For the side straps we arrange about four such springs side by side and we attach the ends of such straps upon the waistband and cover said ends by small patches of leather or fabric, and to the waistband at equal distance between the ends of, and over, the straps we secure two leather or fabric loops which will sustain the otherwise loose portion of the waistband.

Such springs interlaid between leather or cloth which will conceal and protect the same and will prevent their being stretched beyond the length of the covering material, make a much more durable elastic strap or gore than those made of rubber shirrs interwoven with or covered with the threads of the fabric, which are early influenced by the weather and become brittle with age, besides the disagreeableness of rubber where it comes in contact with the human skin.

Although it may be desirable to apply both the gore and the straps to pantalon garments, yet one or the other alone may be sufficient to bring about the desired good result, and, therefore, we do not wish to be restricted to their combined application.

The straps may be detachably secured by buttons or buckles so as to enable the same to be taken off while the overalls, pants or drawers are sent to the laundry for cleaning or washing, and such elastic straps may be applied with good advantage also to the vest in place of the rear latches and buckles.

After describing in this manner the mode of construction of the elastic fabrics made of metal springs, the use of which in pantaloons was claimed to be so superior to elastic fabrics made of India-rubber, and the use of which, as applied to vests, was claimed to be so superior to "rear latches and buckles" theretofore in use as to make the garment in which they should be inserted such "*a new article of manufacture*" as to

entitle the applicants to have letters patent granted to them as for a new invention, the specifications nevertheless proceed to say ;

We do not claim in this application the invention of spirally-coiled wire springs, held in puckered tubes between two layers of material, neither do we claim the application to pantaloons, overalls, or drawers of elastic gore, pieces or straps—but as we have not found described and do not know of such garments provided with straps or with gores constructed, arranged, and applied as described in our specification. We do claim as new and as our invention ;

1. As a new article of manufacture pantaloons, drawers or overalls provided at the sides with elastic straps composed of a series of spiral wire springs held in puckered tubes between two layers of material arranged lengthwise of the waistband and supported by intermediate loops substantially as and for the purposes set forth.

2. As a new article of manufacture pantaloons, drawers or overalls provided with a triangular gore composed of a series of spiral wire springs, held in puckered tubes and arranged in a close group at the top followed by puckered spaces, separated by two spiral wire springs substantially as and for the purposes set forth.

What was claimed to be the new invention was not the spiral metal springs, as described, but, 1st, as a new article of manufacture, pantaloons, drawers and overalls provided at their sides with straps composed of a series of well known spiral springs arranged lengthwise of the waistband and supported by intermediate loops ; and,

2nd, as a new article of manufacture, pantaloons, drawers or overalls provided with a triangular gore composed of a series of the well known spiral metal springs arranged, &c , &c.

For the above, as new inventions, letters patent were granted. Whether such letters patent, if granted in this Dominion, could be held to be valid is not now the question. I refer to the specifications accompanying the application for these letters patent merely to point out the plaintiff Florsheim's disclaimer of elastic gore pieces composed of spirally coiled wire springs held in puckered tubes between two layers of covering material being a new invention.

1887

BALL

v.

CROMPTON  
CORSET CO.

Gwynne J.

1887

BALL

v.

CROMPTON  
CORSET CO.

Gwynne J.

On the 10th March, 1879, the above named Gustav Schilling and the plaintiff Florsheim jointly applied for, and subsequently, on the 25th November, 1879, obtained, letters patent in the United States, to be granted to them for what they claimed to be a new and useful improvement in corsets.

In the specifications accompanying the application, and forming part of the letters patent, the applicants, describing their invention, say :

The object of our improvement is the production of a corset specially adapted for use in warm weather and in warm rooms and under circumstances of work or exercise which will produce free perspiration, and to that end we have now adopted a construction and an arrangement of parts which will ensure a constant, uniform, accurate fit of the corset to the wearer under all changes of her position, without chafing or annoying in any part, and will be cool, comfortable and exceedingly durable. To that end India-rubber elastic portions are dispensed with, as these soon lose their elasticity and durability in the presence of animal heat and perspiration, and instead of such, metallic spiral springs encased in puckered cloth tubes are used. For this same purpose the corset instead of being made in two parts as usual, is made practically of a single part, the central back portion being made of the elastic material above referred to inserted in the form of a piece with substantially parallel sides so as to give an equal degree of elasticity to all parts of the corset. For the same purpose, also, gores of the elastic material above referred to are inserted at the sides where an annoying pressure is ordinarily given by corsets to the hip bones; and shoulder straps of the same elastic material are provided in order to hold the corset, which should not fit tightly in any part, from a tendency to slip down under some circumstances.

The novelty of our invention consists in the application (to a corset constructed substantially as described) of shoulder straps composed of wire springs in puckered tubes substantially as described, and of the entire corset as a new article of manufacture, having the elastic back, hip gores and shoulder straps, all as more fully hereinafter described.

After referring to certain drawings accompanying the specifications, they say :

We are aware that it is not original with us to use metallic wire coiled springs inclosed in cloth tubes in corsets, or to make a corset practically in one piece by inserting an elastic portion in the back, or to use elastic gores in corsets at the hips, or to provide corsets



with partially elastic shoulder straps, and we disclaim all such inventions broadly.

After this disclaimer I confess that I find a difficulty in seeing what remained to be patented as a new and useful improvement in corsets. The applicants, however, without defining precisely what they claimed to be novel, or claiming that they had obtained any new result by the combination of known materials, add :

But, as we believe that we have certain novelties in our corset for which we are entitled to letters patent, we claim as new and as our invention,

1st. In combination with a corset the elastic shoulder straps composed of wire springs in puckered tubes throughout their entire length substantially as described and shewn ; and

2nd. As a new article of manufacture the corset described and shewn having an elastic back piece, elastic hip gores, and elastic shoulder straps, all constructed and arranged substantially as specified.

That is to say, they claim 1st. as a patentable novelty the application, throughout the entire length of the shoulder strap of a corset, of wire springs in puckered tubes, the use of which, partially in shoulder straps, was well known ; and, 2ndly., they claim as novel the corset just as it was shewn in the drawing and model accompanying and forming part of, the specifications, having elastic pieces made of well known materials producing well known effects, arranged in the particular manner shewn in such drawings and model. Now, in the model of the corset which accompanied the specifications, a copy or drawing of which, certified by the Commissioner of Patents of the United States, has been produced in evidence, is shewn the elastic back piece or strip used in the corset in the lower end of which (a copy or drawing of which on an enlarged scale is filed) the metallic wire coiled springs are shown to be inserted in one continuous coil. On the part of the plaintiffs it was contended, that, although the continuous coil of wire springs did so appear, yet that it did not form part of what was specifically patented by the

1887

~

BALL

ø.

CROMPTON  
CORSET CO.

Gwynne J.

1887

BALL

v.

CROMPTON  
CORSET CO.Gwynne J.

letters patent; and the reason given was, that the continuity of the coil was, as was alleged, the invention of Florsheim, whereas the other matters were the joint invention of Schilling and Florsheim, and that they could not be united in the same letters patent. But whether the continuous coil of wire springs as part of the corset which was the patented article having an elastic back piece in which the continuous coil is shewn, was or not covered by the letters patent, or whether it was intentionally omitted for the reason suggested, appears to me to be of no importance; for the article which was patented, being a corset having the elastic back piece, as shewn in the drawings, which elastic back piece contained the continuous coil, the use of which, whether in itself the subject of a patent or not, plainly appeared, the plaintiffs Florsheim and Schilling by their specifications proclaimed to the world, if not already well known, the use of the continuous coil more than twelve months before the plaintiff Florsheim applied for the letters patent of the 29th April, 1881.

From these extracts from the above several letters patent, I think it very plainly appears, that the defendants have maintained their contention, that the letters patent of the 29th April, 1881, cover more than the patentee Florsheim had a right to claim as new, and that the several matters professed to be patented were known and used by others before the alleged invention thereof by the plaintiff Florsheim, and that letters patent for the several matters covered by the letters patent of April, 1881, or at least some of such matters, were in existence in other countries more than twelve months prior to Florsheim's application for such letters patent. In fact, those letters patent have been, in my opinion, well described as having been granted for divers matters for which, whether patentable novelties or not, letters patent had been granted, some to certain

parties in Great Britain for some of the matters, and others to other parties in the United States, of whom the plaintiff Florsheim himself was one, for other such matters

1887  
 BALL  
 v.  
 CROMPTON  
 CORSET Co.

The letters patent of the 29th of April, 1881, profess to grant to the plaintiff Florsheim the exclusive right, privilege and liberty of making, constructing and using, and vending to others to be used : —

1st An elastic gore, gusset or section, for wearing apparel, composed of a covering material having tubes, spiral metal springs inclosed by such tubes and not extending to the edges of the covering material, and stayed at their ends by such covering material, and inelastic margins outside of the springs.

2nd. An elastic gore, gusset or section of the character described, the springs arranged in groups and made of a continuous length of coiled wire.

3rd. An elastic gore, gusset or section of the character described, the metal fastenings, *C*, extending across the ends of the tubes between the thicknesses of the covering material.

The metal springs as used in the elastic gore or gusset, first and thirdly above described, are not continuous. The elastic gore secondly described differs from that first described only in the insertion in the tubes of a continuous coil or continuous coils of wire springs.

And that thirdly above described differs from that first described only in the insertion of a wire fastening extending across the ends of the tubes, which in the elastic gore first described have no such fastening.

Now, the elastic gore or gusset as first above described, the exclusive right or privilege of making and using which, and vending to others to be used, the letters patent purport to grant to the plaintiff Florsheim, is covered by the descriptions taken together as contained in the specifications forming part of the above English letters patent of 1815, 1866, and 1862, and as

Gwynne J.

1887  
 ~~~~~  
 BALL
 v.
 CROMPTON
 CORSET Co.
 ~~~~~  
 Gwynne J.  
 ~~~~~

also covered by the descriptions as contained in the specifications forming part of the above letters patent to Schilling of the 22nd of April and the 5th of August 1879 ; and by the description contained in the specifications accompanying the above recited application of the 4th March, 1879. In fact, a great part of what is covered by the *first* of the above paragraphs, taken from the letters patent of the 29th April, 1881, is wholly disclaimed as being novel by the plaintiff Florsheim himself in the specifications accompanying this application.

As to the elastic gore described in the second of the above paragraphs taken from the letters patent of the 29th of April, 1881, the only novelty there suggested is the use of a *continuous* coil of wire springs in lieu of the wire springs mentioned in the first paragraph which were not continuous. As to this I am of opinion that the substitution of continuous wire springs for non-continuous wire springs, there being no new result or special benefit attributed to the *continuity* merely, is not a patentable novelty. The use of continuous springs was known in 1866 as appears by the above recited letters patent granted in that year, and that the use of continuous *wire* springs for the same precise purpose had been known for more than twelve months prior to the plaintiff Florsheim's application for the letters patent of the 29th April, 1881, is apparent from the drawings and model of the corset described in the specifications, forming part of the United States letters patent which were granted to the plaintiffs Florsheim and Schilling on the 25th of November, 1879, upon their application of the 10th March, 1879.

In like manner, as to the insertion of a wire passed through the ends of non-continuous wire springs, as described in the third of the above paragraphs, taken from the Letters Patent of the 29th April, 1881, that does not appear to me to be a fit subject of Letters Patent

as for an invention. No special benefit or novel result is attributed to this insertion of the wire. In fact upon the argument the whole benefits relied upon as supporting the Letters Patent were the superiority which metal springs had over India-rubber as an elastic material, and the manner of attaching the gore or gusset containing the springs, by its edges or margins, to the fabric in which the gore or gusset was to be inserted. Now, as to the superiority of wire springs over India-rubber, that was well known as early as 1815, and the substitution of wire springs for India-rubber was disclaimed by the plaintiff Florsheim as being novel, or as being his invention, in the specifications accompanying and made part of the above recited Letters Patent, granted to him and Schilling on the 25th November, 1879, and the 17th February, 1880, and such substitution of metal springs for India-rubber is not now claimed to be novel, or to be part of the invention for which the plaintiff Florsheim applied for the Letters Patent now under consideration; and as to the method pointed out in the specifications accompanying the Letters Patent of April, 1881, of attaching the gore or gusset containing the wire springs by the edges or margins to the fabric to which it is to be attached, that method sufficiently clearly appears to be substantially shewn in the description contained in the specifications accompanying the above recited English patents of 1815 and 1866 and in those accompanying the United States Letters Patent to Schilling of the 22nd April, 1879.

In fine, for the avoidance of the Letters Patent now under consideration, it is sufficient to say that a part, indeed, as it appears to me, almost the whole, if not the whole of the articles thereby patented as novelties were known and in use for more than twelve months prior to the plaintiff Florsheim's application for the Letters Patent granted to him in April, 1881.

1887
 ~~~~~  
 BALL  
 v.  
 CROMPTON  
 CORSET Co.  
 ~~~~~  
 Gwynne J.

1887

BALL

v.

CROMPTON

CORSET Co.

Gwynne J.

The appeal, therefore, should, in my opinion, be dismissed with costs.

Appeal dismissed with costs.

Solicitor for appellants: *John Akers.*

Solicitors for respondents: *Mowat, MacLennan, Downey & Biggar.*
