1882 GEORGE THOMAS SMITH, *et al*.....APPELLANTS;

*Nov. 28,29, 30.

AND

1883 JOHN GOLDIE, *et al*.....RESPONDENTS.

*June 19.

ON APPEAL FROM THE COURT OF APPEAL OF ONTARIO.

Patent—Combination—Novelty—Inventor—Prior patent to person not inventor—Pleading and practice—Section 6 *Patent Act—Use by others in Canada—Use by patentee in foreign countries—Section* 28 *Patent Act—Final decision—Judgment in rem—Section* 7 *Patent Act*, 1872—*Commencement to manufacture before application in Canada—Section* 48—*Use by defendant before patent.*

An invention consisted of the combination in a machine of three parts, or elements, *A*, *B* and *C*, each of which was old, and of which *A* had been previously combined with *B* in one machine and *B* and *C* in another machine, but the united action of which in the patented machine produced new and useful results.

Held, 1 (*Strong*, J., dissenting) to be a patentable invention.

To be entitled to a patent in *Canada*, the patentee must be the first inventor in *Canada* or elsewhere. A prior patent to a person who is not the true inventor is no defence against an action by the true inventor under a patent issued to him subsequently, and does not require to be cancelled or repealed by *scire facias*, whether it is vested in the defendant or in a person not a party to the suit.

2. The words in the 6th section of the Patent Act, 1872, "not being in public use or on sale for more than one year previous to his

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

application in *Canada*," are to read as meaning "not being in public use or on sale in *Canada* for more than one year previous to his application."

3. That the Minister of Agriculture or his Deputy has exclusive jurisdiction over questions of forfeiture under the 28th section of the Patent Act, 1872, and a defence on the ground that a patent has become forfeited for breach of the conditions in the 28th section, cannot be supported after a decision of the Minister of Agriculture or his Deputy declaring it not void by reason of such breach.

Per *Henry*, J.—The jurisdiction of the Commissioner is administrative rather than judicial, and he may look at the motive and effect of an act of importation, and a single act, such as the importation of a sample tending to introduce the invention, is not necessarily a breach of the spirit of the conditions of the 28th section.

Under the 7th and 48th sections of the Patent Act, 1872, persons who had acquired or used one or more of the patented articles before the date of the patent, or who had commenced to manufacture before the date of the application, are not entitled to a general license to make or use the invention after the issue of the patent.

APPEAL from the judgment of the Court of Appeal for *Ontario* (1), affirming a decree of the Court of Chancery dismissing the bill of complaint with costs.

The bill of complaint alleged an infringement by the respondents of the appellants' patented machine for purifying flour during its manufacture. The patent in question, No. 2257 for a "Flour Dressing Machine," is for a combination and arrangement of parts to effect the purification of flour, and consists of a sieve down which the middlings, (the residuum of the meal after removing the very finely pulverized flour and the very coarse bran,) are made to travel, by giving it a shaking or reciprocating motion by proper machinery, of a fan and air spout placed on the box above the sieve or shaker to produce, when put in motion, an upward draft of air through the meshes of the sieve; of proper apertures being made below the shaker in the case enclosing the whole apparatus, to admit the air at that point, and

(1) 7 Ont. App. R. 628.

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finally of a brush arranged upon guides to move continually against the under side of the shaker. The appellant, *Smith*, was the discoverer of the process of purification which was unknown before he invented the above combination.

The history of the invention, as stated by Mr. *Smith* and other witnesses in the case is stated in the judgment of Mr. Justice *Patterson* in the court below (1), and in the judgment of *Henry*, J., hereinafter given.

In answer to appellants' claim, the respondents contended that the novelty or combination was not patentable; that the patent was void: 1st. because prior patents had been issued in *Canada* to one *Sherman* and to one *Lacroix*, and that in a suit of this nature the patent to *Lacroix* could not be impeached, but sec. 29 of the Patent Act, 1872, points out the method of impeaching a patent namely by *scire facias*; 2nd. because that the patent was in public use by patentee in the *United States*; 3rd. because the patentee imported the machine into *Canada* after the expiration of 12 months from the issue; 4th. because the patentee failed to commence or carry on the construction or manufacture of the invention within two years from the date of the patent, and also because the respondents commenced to manufacture the article complained of prior to the application of *Smith* for a patent in *Canada*, and under sec. 6 of the Patent Act, the respondents have the right to continue such manufacture and sale. Some of the objections relied on by the respondents as avoiding the patent were previously heard and adjudicated upon by the Deputy Minister of Agriculture, under 28th section of the Patent Act, the Deputy Minister of Agriculture upholding the validity of the appellants' patent.

Mr. *Bethune*, Q.C., and Mr. *Howland* for appellants:

On the question of patentable novelty relied on

(1) 7 Ont. App. R. 633.

Crane v. *Price* (1); *Lewis* v. *Marling* (2); *Cannington* v. *Nuttall* (3); *Murray* v. *Clayton* (4); *Union Sugar Refining Co.* v. *Matthieson* (5); *Hailes* v. *Van Wormer* (6); *Harrison* v. *Anderston Foundry Co.* (7); *Harwood* v. *Great Northern R. R.* (8); *Hayward* v. *Hamilton* (9); *Liardet* v. *Johnson* (10); *Household Co.* v. *Neilson* (11); *Galloway* v. *Bleaden* (12); *Muir* v. *Perry* (13); *Van Norman* v. *Leonard* (14); *Bump* on Patents (15); *Metropolitan Board of Works* v. *N. W. R. R.* (16); *Cornish* v. *Keene* (17); *Plimpton* v. *Malcolmson* (18); *Bartholomew* v. *Sawyer* (19).

Mr. *Lash*, Q.C., and Mr. W. *Cassels* for respondents, relied on the following authorities: *Hailes* v. *Vanwormer* (20); *Pickering* v. *McCullough* (21). *Haywood* v. *Great Northern R'y.* (22); *Brook* v. *Astor* (23); *Harrison* v. *Anderston Foundry Co.* (24); *Yates* v. *G. W. R'y. Co.* (25); *Cannington* v. *Nuttall* (26); *Curtis* v. *Platt* (27); *Mowry* v. *Whitney* (28); *Rubber Co.* v. *Goodyear* (29); *Jackson* v. *Lawton* (30); *Plympton* v. *Malcolmson* (31); *Walton* v. *Bateman* (32); *Stead* v. *Williams* (33); *Beard* v. *Egerton* (34);

(1) 4 M. & G. 603.
(2) Webster P. C. 490.
(3) L. R. 5 H. L. 216.
(4) 10 Chy. App. 675.
(5) 2 Fisher Pat. 600.
(6) 20 Wallace, 368.
(7) 1 App. Cas. 574.
(8) 11 H. L. Cas. 654.
(9) Reported in the "Engineer" June 31st, 1881.
(10) Webster P. C. 54.
(11) Webster P. C. 705.
(12) Webster P. C. 526-529.
(13) 2 L. C. R. 305. Vol. 20 Patent Office Gazette, p. 1233.
(14) 2 U. C. Q. B. 72.
(15) Page 150.
(16) Weekly notes 27th Feb., 1880.
(17) Webster P. C. 501.
(18) L. R. 3 Ch. 555.
(19) 1 Fisher Pat. 516.
(20) 7 Blatch. 443.
(21) Decided by the Supreme Court of the United States, on the 12th December, 1881, and reported in the Official Gazette of the U. S. Patent Office, January 3rd, 1882.
(22) 11 H. L. 667.
(23) 8 E. & B. 478.
(24) 1 App. Cases 574.
(25) 2 Ont. App. R. 227.
(26) L. R. 5 H. L. 205.
(27) 3 Ch. D. 135.
(28) 14 Wall. 434.
(29) 9 Wall. 796.
(30) 10 Johnson N. Y. 23.
(31) 3 Chy. Div. 555.
(32) 1 Web. P.C., 615.
(33) 8 Scott, N. R. 449.
(34) 3 C. B. 97.

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Nickels v. *Ross* (1); *Milligan* v. *Marsh* (2); *Agawam Co.* v. *Jordan* (3); *Cook* v. *Sholl* (4); *Baldwin* v. *Sibley* (5); *Bicknell* v. *Todd* (6); *Day* v. *Union Rubber Co.* (7); *Wilson* v. *Simpson* (8); *Wilson* v. *Rousseau* (9); *Simpson* v. *Wilson* (10); *Bloomer* v. *McQuewan* (11).

RITCHIE, C.J.:—

This is a very important case. The main and substantial question raised and on which the case was decided in the court below, was whether the machine was a patentable machine, and the learned judges of the Court of Appeal held that the combination, though admittedly producing a useful result, was nevertheless not patentable in law.

After a careful consideration of the evidence, I have arrived at the conclusion that this machine was a new combination of old machinery or instruments, whereby a new and useful result was obtained by which a new effect was produced which is stated to have revolutionized the manufacture of a certain description of flour producing a materially better article, and therefore, I think, it is the subject of a patent. I think where the patent is for a combination, the combination itself is the novelty and also the merit, and this view is, in my opinion, abundantly supported by the following authorities.

In *Harrison* v. *Anderston Foundry Co.* (12) the Lord Chancellor says:

> It is, as I read it, a claim for a combination; that is to say, a combination of all the movements going to make up the whole of the mechanism described. It must for the present at least, be assumed

(1) 8 C. B. 679.
(2) 2 Jurist, N. S. 1083.
(3) Whitman's. Patent cases, 205.
(4) 5 T. R. 256.
(5) 1 Clifford, 150.
(6) 5 McLean, 236.
(7) 8 Blatchford, 488.
(8) 9 Howard, 109.
(9) 4 Howard, 648, 683.
(10) 4 Howard, 710.
(11) 14 Howard, 539.
(12) 1 App. Cases 577.

that this combination as a combination is novel; that it is, to use the words of the Lord President, a new combination of old parts to produce a new result, or to produce a known result in a more useful and beneficial way. It is not doubted that a combination of which this may be said is the subject of a patent.

In *Penn* v. *Bibby* (1), the head note is as follows:

The new application of any means or contrivance may be the subject of a patent, if it lies so much out of the track of the former use as not naturally to suggest itself, but to require some application of thought and study.

* * * * * *

Lord *Chelmsford*, L. C., says:

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. The criterion given by Lord *Campbell* in *Brook* v. *Aston* (2) has been frequently cited (as it was in the present argument), that a patent may be valid for the application of an old invention to a new purpose, but to make it valid there must be some novelty in the application. I cannot help thinking that there must be some inaccuracy in the report of his lordship's words, because, according to the proposition, as he stated it, if the invention is applied to a new purpose, there cannot but be some novelty in the application. Lord Chief Justice *Cockburn* approaches much nearer to the enunciation of a principle, or at least of a rule, for judging these cases, in *Harwood* v. *Great Northern Railway Co.* (3), where he says, "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." In every case of this description one main consideration seems to be, whether the new application is so much out of the track of the former use as not naturally to suggest itself to a person turning his mind to the subject, but to require some application of thought and study. Now, strictly applying this test, which cannot be considered an unfair one, to the present case, it appears to me impossible to say that the

(1) L. R. 2 Ch. App. 127. (2) 8 E. & B. 485.
(3) 2 B. & S. 208.

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patented invention is merely an application of an old thing to a new purpose.

In *Murray* v. *Clayton* (1), the head note is as follows:

Where a machine, for which a patent had been granted, was shewn to produce work more expeditiously, more economically, and of a better quality than any previous machine:—Held (reversing the decision of *Bacon*, L.C.,) that the patent could not be invalidated on the ground that the machine was formed by the mere arrangement of common elementary mechanical materials, producing results of the same nature as those previously accomplished by other mechanical arrangements and construction. The public exhibition of a machine in which there are defects, owing to which it proves an entire failure, does not affect the validity of a subsequent patent for a machine, in which, though similar in some of its details to the former, the defects are remedied so as to produce a serviceable machine.

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And Sir *W. M. James*, L.J., says:

This evidence shews that the defendants, when competing for government work, with all the knowledge they possessed from this previous user, which is said to be an anticipation of the plaintiff's patent, never thought of anything in any way like the machine which the plaintiff invented; and it is scarcely possible to get stronger evidence of the entire novelty of the plaintiff's machine. The machine, too, when produced, is so simple and so completely adapted to effect its object, that one feels disposed to wonder how people could have gone on for thousands of years making bricks without ever having thought of it; but that is the case with many noted inventions—when the thing is once hit it seems a marvel that it was not hit before.

Cannington v. *Nuttal* (2) decided that a patent might be sustained, though each principle or process in it was well known to all persons engaged in the trade, to which the patent relates, provided that the mode of combining these processes was new and produced a beneficial result; and provided also that the specification claimed not the old processes, or any one of them, but only the new combination; and it was held that a

(1) L. R. 7 Ch. App. 570. (2) L. R. 5 H. L. Cas. 208 (1871).

direction to a jury that if the combination has been and was useful the patent could be supported, though each separate process employed in it was previously known was correct.

In *Crane* v. *Price* (1), *Tindal*, C.J., says:

Such an assumed state of facts falls clearly within the principle exemplified by *Abbott*, C.J., in *The King* v. *Wheeler* (2), where he is determining what is and what is not the subject of a patent, viz.: It may perhaps extend to a new process, to be carried on by known implements or elements, acting upon known substances, and ultimately producing some other known substance, but producing it in a cheaper or more expeditious manner, or of a better or a more useful kind. And it falls also within the doctrine laid down by Lord *Eldon* in *Hill* v. *Thompson* (3), viz.: There may be a valid patent for a new combination of metals previously in use for the same purpose, or for a new method of applying such materials; but in order to its being effectual, the specification must clearly express that it is in respect of such new combination or application.

There are numerous instances of patents which have been granted when the invention consisted in no more than the use of things already known, the acting with them in a manner already known, the producing effects already known, but producing those effects so as to be more economically or beneficially enjoyed by the public. It will be sufficient to refer to a few instances, in some of which the patents have failed on other grounds, but in none on the objection that the invention itself was not the subject of a patent.

* * * * * *

And at page 605:

* * in point of law, the labor of thought or experiment, and the expenditure of money, are not the essential grounds of consideration upon which the questions, whether the invention is or is not the subject matter of a patent, ought to depend; for if the invention be new and useful to the public, it is not material whether it is the result of long experiments and profound research, or whether of some sudden and lucky thought, or of mere accidental discovery. The case of monopolies in—*Darcy* v. *Allein* (4)—states the law to be "that where a man by his own charge and industry, or by his own wit or invention, brings a new trade into the realm, or any engine tending to the furtherance of a trade that never was used before,

(1) 4 M. & G. 603.
(2) 2 B. & Ald. 350.
(3) 3 Meriv. 629.
(4) 11 Co. Rep. 84, Noy 178.

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and that for the good of the realm, the king may grant him a monopoly-patent for a reasonable time."

In *Hayward* v. *Hamilton* (1), Mr. Baron *Pollock* says:

In our judgment it is properly and fairly described; it is described as a patent claiming the construction of something by a combination of things, many of which—possibly all of which—may be old, in such a manner as to produce a result that is new, and a result which is valuable when it is treated as a commercial article. I do not think it is necessary to refer to the older cases on this subject. No doubt *Crane* v. *Price* (2) was in one's mind during the whole of the argument of this case. But we have a recent dictum on this point—indeed, it is more than a dictum, because it is contained in the judgment of the House of Lords by the Lord Chancellor in the case of *Cannington* v. *Nuttall* (3); and what the Lord Chancellor says is this: "Few things come to be known now in the shape of new principles, but the object of an invention generally is the applying of well known principles to the achievement of a practical result not yet achieved; and I take it that the test of novelty is this; is the product which is the result of the apparatus for which an inventor claims letters patent effectively obtained by means of your new apparatus, whereas it had never before been effectively obtained by any of the separate portions of the apparatus which you have now combined into one valuable whole for the purpose of effecting the object you have in view." That seems to me as clear and as reasonable a definition as one can well have of that branch of the subject.

* * * * * *

In all these cases the real question must depend very much upon the extent to which the subject-matter, to which the particular apparatus or particular contrivance is applied, is cognate in its character, and wherever you find it is cognate in its character, and that there is not sufficient novelty in the combination which is put forward, then the patent cannot stand. If, however, it is otherwise, if the subject-matter is not cognate, or if the combination is really new, or if what is done comes within the language which was used in *Crane* v. *Price*, and in the later case of *Cannington* v. *Nuttall*, so as to show that there is in substance a new commercial product, then the patent is good.

STRONG, J.:—

I am compelled to dissent from the conclusion which

(1) The Engineer, June 3, 1881, 408.
(2) 1 Web. P. C. 393.
(3) L. R. 5 H. 216.

has been arrived at by the other members of the court in this appeal, for I think, upon the first ground taken in the very able judgment of Mr. Justice *Patterson* in the court below, the plaintiff's invention was not one entitled to the protection of a patent. Without going into any detailed examination of the evidence, which would now serve no useful purpose, but referring to the analysis of it contained in the judgments delivered in the Court of Appeal, and adopting the conclusions there arrived at, it appears to me very clear that the only invention of which the appellant can be entitled to claim the merit, is the combination of what is called "The Complete Middlings Purifier" with the brushes worked by machinery instead of by hand. The machine without the attachment of the brushes is not claimed to be new. Then the application of the brushes moved by hand to what is called the bolt or sieve of a middlings purifier is also admitted by *Smith* to be old. The decree of the Court of Appeal, therefore, seems to me to be in exact conformity with the decree of the Queen's Bench Division in the case of *Saxby* v. *The Gloucester Waggon Co.* (1), where it was held that as any person of ordinary skill and knowledge of the subject, placing two inventions, known previous to the discovery of that covered by the plaintiffs patent, side by side, could effect the combination of the two in a manner similar to the plaintiffs invention without making any further experiments or obtaining any further information,—the patent obtained by the plaintiff was void. Upon the principle of this decision and upon the authorities referred to by Mr. Justice *Burton* applied to the facts in evidence, I am of opinion that the plaintiff was not entitled to a patent, and that the judgment of the Court of Appeal affirming the decree dismissing the bill was correct and should be affirmed.

(1) 7 Q. B. D. 305.

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FOURNIER, J.:—

I have read my brother *Henry's* notes in this case, and for the reasons contained in his notes, I am in favor of allowing the appeal.

TASCHEREAU, J.:—

I also fully concur in that judgment.

HENRY, J.:—

This is an action commenced by the appellants by a bill in chancery in *Toronto, Ontario*, amongst other things, to restrain the respondents from denying the validity of a certain patent of invention issued to *George Thomas Smith*, one of the appellants, and from making and constructing, using, or vending to others to be used, the machine, or any other machine, or machines, or part, or parts of a machine, or machines, embodying or involving the said patented invention, or any part thereof. And from causing or procuring other persons to manufacture, use or vend to others, to be used, any of the same, and from infringing the said letters patent or causing, or procuring the same to be infringed.

The bill was amended twice, and several answers were given to it. The case was decided by the learned Chancellor, before whom it was heard, against the appellants, not on the merits of the claim for the patent, but rather on the ground that the patentee had not complied with the terms of the patent in regard to the manufacture, in *Canada*, of the combined machinery described in the patent; and in regard to the importation into *Canada*, after twelve months, of the same. He says, however, that apart from such objections:

I am inclined to think—I would not say, that it is more than an inclination of my opinion—I would say, that the patent is not in itself void, upon the evidence before me. What the other evidence is I

do not know, but upon the other points I think the plaintiffs' case fails.

After a good deal of consideration of the bill and answers, I am of opinion, that the main and important question raised by the pleadings and evidence is that upon which the judgment of the Appeal Court below was given. That judgment substantially admitted, and I think properly, that *Smith* was the real inventor of the art or process as contended for by the appellants. Being such, and having therefore been entitled to the patent which he obtained at the time it was issued, the court below decided that the subject-matter was not patentable.

The claim made in his application was for a machine called a "Middlings Purifier," consisting of the combination described in this patent. The object was to remove from what is called the "Middlings," produced in the grinding of wheat, by the operation of specific gravity, light fibrous impurities and fine particles of bran, required to be separated to produce the finest quality of flour. The process is, therefore, "purification" as well as "separation", the latter being all that can be effected by bolts or sieves only.

It is alleged in the appellants' factum and sustained by evidence that "before the plaintiffs' invention it had "been the object of millers to make the least possible "quantity of middlings, as it had been found impossi- "ble to separate the fine particles of bran and other "impurities from the coarse flour granules by sifting; "and the middlings, when re-ground, made an inferior "quality of flour. Since *Smith's* invention and discovery "of the process of purification, this practice has been "reversed; and millers now seek to make only coarse "flour or middlings at the first grinding, in order to "obtain the benefit of the purifying process, as it has "been found that, by that process, certain light fibrous

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" impurities can be removed, which the old process of " sifting left, even in the finest flour."

The process of purification is by causing a thin stream of middlings to descend a slightly inclined sieve or bolt, through the meshes of which a current of air is drawn up by an exhausting fan, so as to pass upward through the middlings as they pass over or through the sieve or bolt. The current of air passing through this thin stream of middlings, lifts, and carries away, the light impurities, leaving the pure middlings, which have a greater specific gravity, to be ground into flour. It was found, however, that the current of air from below the sieve or bolt, by creating a resistance to the descent of the fine particles passing through the sieve or bolt, and, by accumulating them upon the under side of the sieve or bolt-cloth, clogged the latter so much, that unless constantly removed, the fan would fail to draw air through the cloth, the upward current of air would cease, and purification would not take place. The upward current of air through the sieve or bolt was the chief factor in producing the desired results; but it, when operating alone, by its action clogged up the sieve or bolt, and its beneficial operation was prevented. Before the invention, by *Smith*, it was attempted to keep the seive or bolt clear by hand brushing; but after a reasonable trial the attempt was abandoned, as it was found costly and unsatisfactory. *Smith* directed the experiments made in that way, and when the owner of the mill, where they were tried, discontinued them, he (*Smith*) made the combination of the machinery for which the patent issued to him. The result was most satisfactory, and its value may be, to some extent, estimated when flour of such superiority was, through its means, produced that was worth, and sold for, about three dollars a barrel more than that produced by any means previously known or used. It was, in regard to

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the public interests, a most valuable combination; and the public therefore became largely indebted to him who made it.

Was that combination entitled through a patent to protection?

The result, in this case, is produced by the combined and simultaneous action of the draft upwards created by the fan and the continuous operation of the brush or brushes worked by the machinery as described in the specification. It was the simultaneous action which produced the result. It could not have been obtained by the independent action of either. It was, therefore, to all intents and purposes, a combination that produced simultaneous results—it is true, a combination of old elements; but it is one in which the constituents so entered it that each qualified the other. Referring to the judgment of the Supreme Court of the *United States* in *Pickering* v. *McCulloch* (1), cited by Mr. Justice *Burton* in the court below, I may say that the constituents in this case are fully up to the standard therein adopted; they are "joint tenants" of the domain of the invention, seized each of every part per *my et per tout*; and not mere tenants in common, with separate interests and estates.

By the co-operation of the constituents a new machine of a distinct character and function was formed; and a beneficial result produced by the co-operating action of the constituents, and not the mere adding together of separate contributions. The importance and value of the invention to the public in the case of the invention in question, cannot, under the evidence, be questioned; the circumstances connected with the discovery of the invention are not necessarily a matter for judicial inquiry, according to the ruling of Chief Justice *Tindal* in *Crane* v. *Price* and others (2).

(1) Decided 12 Dec., 1881. (2) 1 Webster P. C. p. 411.

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In delivering judgment in that case, he said;

But in point of law, the labour of thought or experiments, and the expenditure of money, are not the essential grounds of consideration on which the question whether the invention is or is not the subject-matter of a patent, ought to depend. For if the invention be new and useful to the public it is not material whether it be the result of long experiments and profound research, or whether by some sudden and lucky thought, or mere accidental discovery.

There have been some most important inventions made by mere accidental discovery, and after being discovered the great wonder has been, that what appears after discovery so palpable, had never been discovered before. Such may be said to some extent of the discovery in this case; but that is no reason why the inventor should not get the benefit of his discovery, through its protection, as provided by law. The person entitled to a patent, is one who has invented any new and useful art, machine, manufacture, or composition of matter, or any new and useful improvement in any art, machine, manufacture, or composition of matter, not known or used by others before his invention thereof; and not being in public use, or on sale, for more than one year, previous to his application in *Canada*, with the consent or allowance of the inventor thereof—35 *Vic.* ch. 6.

The evidence leaves no doubt on my mind that *Smith* was the first and only inventor of the combination he claims in his specification; and I feel as little doubt that the other parties who obtained the two other contesting patents became acquainted with the value of the combination by obtaining the knowledge of his discovery. There are one or two minor objections raised to his patent which I will hereafter dispose of. Setting out, then, with the affirmative proposition that *Smith* was the *bonâ fide* inventor of the combination in question, the only important remaining question is, was the dis-

covery and invention in question the proper subject for protection by letters patent?

As some of the authorities I intend to refer to are decisions in cases in *England*, it is proper to ascertain what legislation affected the rights of parties to patents in that country. It will be seen that the right there depended on legislation, not nearly so liberal or extensive as that of the Canadian Act, or the patent laws of the *United States*. *Curtis* in his work on patents (1) says:

> In *England* the corresponding system has rested upon a proviso in the statute of monopolies, which excepted from the prohibitions of that act letters-patent, granted by the Crown for the sole working or making of any manner of new manufactures within this realm to the first and true inventor or inventors of such manufactures, which others at the time of the making of such letters-patent and grants did not use, so they be not contrary to the law, nor mischievous to the state.

The principle upon which the exception referred to was made, was clearly that he who has first exercised the right of invention has bestowed something upon society, which ought to procure for him thereafter, at least for a time, the exclusive right to make or use that thing.

The same writer (2) referring to the English statute says:

> The subjects of patents which could be lawfully granted were to be "new manufactures" or "the working or making of new manufactures" invented by the grantee, and which "others" at the time of the grant "did not use." Hence it was apparent that something of a corporeal nature, something to be made, or at least the process of making something, or of producing some effect or result in matter, or the practical employment of art or skill, and not theoretical conception or abstract ideas, must constitute the subjects of exclusive privileges which the Crown was authorized to grant. See *The King* v. *Wheeler* (3).

(1) P. 1. (2) At page 2.
(3) 2 B. & Ald. 349.

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Referring to the decision in *Boulton* v. *Bull* (1), Mr. *Curtis* says:

> The distinction to which this case gave rise and which greatly extended the meaning of the term "manufacture," is this, that although a principle or a rule in mechanics, or an elementary truth in physics cannot be the subject of a patent, yet a new principle, rule or truth, developed, carried out, and embodied in the mode of using it, may be the subject of a patent. A mere principle is an abstract discovery incapable of answering the term "manufacture;" but a principle so far embodied and connected with corporal substances as to be in a condition to act and produce effects in any art, trade, mystery, or manual occupation becomes the practical manner of doing a particular thing. It is no longer a principle, but a "process."

He refers, to sustain those views, to the decision of *Eyre*, C.J., in *Boulton* v. *Bull* (2), a quotation from which will be found at page 3. His Lordship there says:

> It was admitted at the argument at the bar that the word "manufacture" in the statute was of extensive signification, that it applied not only to things made but to the practice of making, to principles carried into practice in a new manner, and to the results of principles carried into practice * * * Under the practice of making we may class all new artificial manners of operating with the hand, or with instruments in common use, new processes in any art producing effects useful to the public." * * * When the effect produced is no substance or composition of things, the patent can only be for the mechanism, if new mechanism is used, or for the process, if it be a new method of operating, with or without old mechanism by which the effect is produced. To illustrate this: The effect produced by Mr. *David Hartley's* invention for securing buildings from fire is no substance or composition of things; it is a mere negative quality, the absence of fire. The effect is produced by a new method of disposing iron plates in buildings. In the nature of things it could not be for the effect produced. I think it could not be for making the plates of iron, which, when disposed in a particular manner, produced the effect, for those things are in common use. But the invention consists in the method of disposing those plates of iron so as to produce their effect; and that effect being a useful and meritorious one, the patent seems to have been properly granted to him for his method of securing buildings from fire.

(1) 2 H. Bl. 463. (2) *Ubi supra.*

His Lordship thus concludes his judgment:

> Now, I think these methods may be said to be new manufactures, in one of the common acceptances of the word, as we speak of the manufactory of glass, or any other thing of that kind.

Here, then, is laid down most explicitly the doctrine deduced from the English statute for patents under the terms "new manufactures, or the working or making of new manufactures." It is exactly the case before us under *Smith's* application for the "combination" or "method" he claims. The specification or claim made by *Smith* admits that the elements of the combination were old, and that other machines had existed, in which some of those elements had been found working together, though never arranged in the combination, and adapted to the purpose described. It is therefore objected that the mere combination is not patentable. His patent being confined to the combination, the court below decided he was not entitled to it. That decision, in my opinion, is not only contrary to the doctrine laid down by *Eyre*, C.J., before in part recited, but to the current of the decisions since, both in *England* and the *United States*, which establish the position that a new arrangement of old parts producing new results beneficial to the public is patentable. See the cases referred to in the appellant's factum: *Crane* v. *Price* (1); *Lewis* v. *Davis* (2); *Cannington* v. *Nuttal* (3); *Murray* v. *Clayton* (5); *Union Sugar Refining Co.* v. *Mathieson* (5); and also *Hailes* v. *Van Wormer* (6.)

In *Hailes* v. *Van Wormer*, Mr Justice *Strong* said:—

> All the devices of which the alleged combination is made are confessedly old. No claim is made for any of them singly as an independent invention. It must be conceded that a new combination, if it produces new and useful results is patentable, though all the consti-

(1) 1 Webster's Pat. Cases 375.
(2) Ib. 490.
(3) L. R. 5 H. L. 216.
(4) 10 Chy. App. 675.
(5) 2 Fisher 600.
(6) 20 Wallace 368; see also *Brunton* v. *Hawkes*, 4 B. & Ald. 541.

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tuents of the combination were well known, and in common use before the combination was made. But the results must be a product of the combination, and not a mere aggregate of several results, each the complete product of one of the combined elements.

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The combination claimed by *Smith* is, in principle, the same as in the case of the disposition of the iron plates, the subject of the decision of *Eyre*, C.J., before in part recited. The constituents were old, but the combination or method was new. The result in the one case was but preventive in regard to security against fire, but the other was the production, by means never before known or used, of a superior quality of flour never before produced, and by a very cheap and available process. If the inventor in the one case was entitled to a patent for a useful discovery, upon no principle could it be refused to the other. *Smith's* combination was, in the terms of the concluding sentence above quoted of the judgment of Mr. Justice *Strong*, the means of producing a direct and combined result, not a mere aggregate of several results. There was but one result and it was produced, and could only be produced by the simultaneous action of the constituents. The operation of the combined constituents was performed on the mixed product of the result of grinding, consisting of fine flour, middlings, bran and impurities, whilst the same was, by the necessary mechanical contrivances, passing through the bolt, and at no other time. The draft upwards by itself was useless, and the constant and simultaneous aid of the brushes was necessary to enable that draft to be effective. By operating the constituents, unless simultaneously, the object could not be obtained. There was, therefore, by their union and simultaneous action, and in no other way, produced the important results shown by the evidence. To give the inventor a patent for his combination was no favor. By law he was entitled to it as being well earned.

Although unnecessary, I will quote some further authorities. *Whitman*, in his work on patents, says (1) :—

A machine is rightfully the subject of a patent whenever a new or an old effect is produced by mechanism new in its combinations, arrangements, or mode of operation. A machine is rightfully the subject of a patent when well known effects are produced by machinery entirely new in all its combinations, or when a new or an old effect is produced by mechanism of which the principle or *modus operandi* is new.

Again (2) :

There may be a patent for a new combination of machines to produce certain effects, whether the machines constituting the combination be new or old.

At page 238, under a classification of "Inventions pertaining to Machines," he includes :

Those, where all the elements of the machine are old, and where the invention consists in a new combination of those elements, whereby a new and useful result is obtained Most of the modern inventions are of this latter kind, and many of them are of great utility and value. See *Union Sugar Refinery* v. *Mathieson* (3).

He might have added that numerous inventions have been carried out and perfected by the co-operation of many minds or by the application of varied genius to the same object, year after year and age after age.

At page 241 the same author says :

Where the result or effect is a greatly improved article of manufacture it may be the test from which inventions may be inferred.

Let us now look at *Curtis*, another American authority on Patents. In his treatise he says (4) :

There may be a patent for a new combination of machines to produce certain effects, whether the machines constituting the combination be new or old. In such cases the thing patented is not the separate machines, but the combination.

And he cites six American decisions to sustain the proposition.

(1) p. 236.
(2) Page 237.
(3) 2 Fisher 600.
(4) At page 17.

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At page 20, in a note, he cites a decision of *Abbott*, L.C.J., in *The King* v. *Wheeler* (1), in which I find his Lordship saying in respect of the right of a person to a patent:

> Or it may perhaps extend also to a new process to be carried on by known implements or elements acting on known substances and ultimately producing some other known substance by producing it in a cheaper or more expeditious manner, or of a better and more useful kind.

He also cites from *Webster's* Patent cases (*Cornish* v. *Green*) (2) from which I extract the following:

> The use of all materials in other combinations may have been known before; but if they are used in a new combination producing a new result, there will be a good subject for a patent for a "manufacture;" as there is, in respect to "machinery," when the same thing is effected.

The right to obtain a patent for a new combination of old constituents producing a new and useful result is fully admitted in a comparatively recent case (*Clark* v. *Adie*) (3), and such is unequivocally alleged by lord *Gordon*, who says:

> There is no doubt whatever that there may be a patent right in a combination, and there may be a patent granted for improvements in machinery, but in order to carry out the patent in a legal and proper manner, there ought to be distinct intimation given to the public of what was the intention of the party proposing to take out the patent, with a view to prevent others infringing on what he claims as his invention. There may possibly be cases of subordinate combinations protected by a patent as my noble and learned friend on the woolsack has explained.

I will refer to but one more case, *Harrison et al* v. *The Anderston Foundry Company* (4). In his judgment in that case the Lord Chancellor *Cairns* says:

> In my opinion the first claim is also sufficient in point of form. It is, as I read it, a claim for a combination, that is to say, a combination of all the movements going to make up the whole of the

(1) 2 B. & Ald. 349.
(2) Pages 512-517.
(3) 2 App. cases 315.
(4) 1 App. Cases 574.

mechanism described. It must for the present, at least, be assumed that this combination, as a combination, is novel; that it is, to use the words of the lord president, a new combination of old parts to produce a new result, or to produce a known result in a more useful and beneficial way. It is not doubted that a combination of which this may be said, is the subject of a patent. If there is a patent for a combination, the combination itself is *ex necessitate* the novelty.

Lord *Hatherly*, referring to the case of *Foxwell* v. *Bostock* (1), says:

It could not have been meant in that case to say that where that happens, which may well happen, that a person arranging his machinery in a totally different way from the way in which it has ever before been arranged, although every single particle of that machinery is a well known implement, produces an improved effect by his new arrangement, that new arrangement cannot be the subject of the patent. It may be said that the levers may be perfectly well known in their mode of action, and it may be that all the other portions of the machinery to which the patent relates may be perfectly well known; but if he says: "I take all those known parts "and I adjust them in a manner totally different from that in which "they have ever before been adjusted; I have found out just what it "is that has made these parts, though they have been used in "machinery, fail to produce their proper effect, and it is this, that "they have not been properly arranged. I have, therefore, recon-"sidered the whole matter and put all these several parts together "in a mode in which they never were before arranged, and have "produced an improved effect by so doing." I apprehend it is competent for that man so to do. That, my lords, I apprehend, is the principle of a patent for a combination.

Under all the authorities I have quoted, and many others that I might have quoted, I cannot conceive that any doubt should exist that the combination claimed by *Smith* is the proper subject of a patent. I have considered the reasons given for the decision in *Harwood* v. *The Great Northern Railway Co.* (2) upon which the judgment in the court below was principally rested, but I cannot perceive any similarity in the principle upon which that case was decided and the case before us. In that case there was really no new result. The

(1) 4 De G. J. & S. 298. (2) 2 B. & S. 194.

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constituents were all admitted to be old—there was no combination, as such, but the mere application of grooved plates in connecting rails of railways; and the principle was decided not to be new because the same kind of grooved plates had previously been applied for connecting timbers in the construction of bridges. It was, however, clearly admitted in that case that a new combination of old materials, producing a new and useful result, is properly the subject of a patent.

An objection has been taken, that under one or other of the conditions imposed upon a patantee under section 28 of the Patent Act, *Smith's* patent became null and void. The proviso to the provisions of that section is as follows:

> And provided always that in case disputes should arise as to whether a patent has or has not become null and void under the provisions of this section, such disputes shall be settled by the Minister of Agriculture or his deputy, whose decision shall be final.

The evidence shows that a complaint, by petition, was made to the Minister of Agriculture under the provisions of that section in 1876 setting forth that the three patents to the appellant, including the one in question, were null and void under the provisions of that section. After a lengthened and exhaustive investigation, in which both parties were represented by able counsel before Mr. *Taché*, the Deputy Minister of Agriculture, he, in a very logical and sound judgment, in which he reviewed the law and commented on the evidence, decided that *Smith* had not forfeited his patent rights or any of them, in any of the three patents. The statute makes his decision final; and, in view of the whole subject, I have arrived at the conclusion that parliament intended that it should be so; and that it was intended solely as a matter for ministerial, and not for judicial, determination. But in case of any doubt, on that subject, I will add that, having well considered

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the case, as presented before him, I would have come to the same conclusion as he did. I think the law as laid down and explained by him in his exhaustive, and, I will add, able judgment, cannot properly be questioned. I concur fully in his conclusions, as I do also in his reasons. The patent now in question, being one of the three referred to in the judgment just mentioned, was issued for five years from the 18th of April, 1873. The judgment of the Deputy Minister of Agriculture was given on the 15th February, 1877. The extension of the patent was given on the 30th of March, 1878, for a further period of five years. The infringement is admitted by the respondents, and having dealt with the case, as presented at the argument before us, I have only to express my opinion that the appeal should be allowed with costs, and the necessary decree ordered for the plaintiffs on the bill filed by them.

GWYNNE, J.:

At the close of the argument of this case I was of opinion that the only point requiring further consideration was that upon which the judgment of the Court of Appeal for *Ontario* proceeded, namely, that the combination in virtue of which the patentee claims that his patent should be sustained, was not, in point of law, the proper subject of a patent, the learned counsel for the appellant having, in my opinion, fully answered in his very able argument all the other objections. Now, upon the question whether the combination is or 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 enquiry into the patentable character of the combination, the plaintiff *Smith* obtained a patent in the *United States*. Apart from this consideration, however, there was not in the case of *Harwood* v. *The*

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G. N. Ry. Co. (1), upon which the judgment of the Court of Appeal for *Ontario* in the present case rests, any difference of opinion as to the rule of law there enunciated, namely, that one cannot have a patent for a well-known mechanical contrivance, merely when it is applied in a manner or to a purpose which is not quite the same, but is analogous to the manner or the purpose in or to which it has been hitherto notoriously used; the point upon which considerable difference of opinion did exist, arose on the facts of the case, namely, whether an additional result was not obtained by the application of grooved fish plates to connecting the rails of railways over that which had been obtained by the application of grooved plates to connecting timbers in the construction of bridges. It does not seem to have been doubted that, if a new result had been obtained, it would have been a good subject for a patent. It is, however, equally a rule of law which was not disputed in *Harwood* v. *Great Northern Railway Company*, that a new combination of old materials producing a new beneficial result is the valid subject of a patent.

The difficulty in these cases consists in the application of the rules of law to the circumstances of each case, not in any conflict of opinion as to what are the rules of law. The question in this case is, what rule of law is applicable to the circumstances of the present case? And with deference to the opinions of the learned judges of the Court of Appeal for *Ontario*, I do not think that the present case comes within the rule enunciated in *Harwood* v. *The Great Northern Railway Co.*, upon which the judgments of the House of Lords and of the Exchequer Chamber in that case was rested. There the patent was for constructing fishes for connecting the rails of railways, with a groove adapted for receiv-

(1) 2 B. & S. 194 & 3 B. & S. 984.

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the heads of the bolts or rivets employed for securing such fishes, and the application of such fishes for connecting the rails of railways in the manner in the specifications described, and by his specifications the patentee stated the advantages of the groove to be two, namely, that it serves to receive the square head of the bolts, and to prevent their turning round when they are being screwed in, and further that it renders the fish lighter for equal strength, or stronger for an equal weight of metal, than fish if made of equal thickness throughout. Upon the trial it was found as a fact that "channelled"—that is "grooved"—iron had been used before the patent for the double purpose of obtaining increased strength and preventing the bolt heads from turning round, but that they were not used for the purpose of fishing. It was also found as a fact that the use of iron plates ungrooved for fishes was known, and that for strengthening timbers in bridges and bolting them together, the use of iron plates grooved was known, and that the special advantages when so applied, of securing the bolt heads and of affording equal strength with less material were also known, Now, under these circumstances, the only question was, as stated by lord *Westbury* in the House of Lords, whether there could be any invention in the plaintiff taking a thing which had been used as a fish for a bridge, and using it as a fish for a railway—the purpose of the application in both cases and the result being the same. That the application of a series of brushes, as used in *Smith's* machine in the case before us, to the bolting surface of a flour bolt in combination with a current of air made to pass through the bolt by means of an air chamber or fan, is new, does not appear to be disputed; indeed, in the judgment of the Court of Appeal, it is admitted that there is no evidence that any one before

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Smith made use of this combination; that the result obtained by the use of this combination is wholly new there is no doubt, for, by this mode of making flour, it is admitted that a quality of flour superior to anything before known is obtained, and that, in fact, thereby a complete revolution is wrought in the manufacture of flour. Under these circumstances, I cannot see how *Harwood* v. *The Great Northern Ry. Co.* can apply. So neither can *Saxby* v. *Gloucester Waggon Company* (1). There it was held, that the combination of two formerly known articles, which had been the subject of patents, was not the subject of a patent because no new result was obtained by the combination different from that which had been obtained by the previous inventions; and the question seems to have been whether, admitting that no new result was obtained by the combination, it could be said that to make it, called forth the exercise of the inventive faculties so as to justify the application to it of the term invention. The cases of *Haywood* v. *Hamilton* (2) and *Cannington* v. *Nuttal* (3), are more applicable: that the combination of known things so as to create a new and artificial result is the subject of a patent; and that the combination first used by *Smith* does create such a result there can, I think, be no doubt. The combination, therefore, does come within the meaning of invention as applied to patents.

The purpose for which the brushes are applied in this case is different from that for which they were applied in the *Buchholz* machine for making semolina or cracked wheat. In the latter, they were used for forcing upwards the particles of cracked grain which were too large to pass through the meshes of the bolting cloth; in *Smith's* patent they are used for the purpose of brushing down-

(1) 7 Q. B. Div. 305. (2) Ubi supra.
(3) L. R. 5. H. L. 216.

wards the fine flour underneath the cloth, which after having passed through it are forced back against the cloth by the current of air going upwards, and which is thus impeded. The combination having been first used by *Smith* and applied by him to produce a wholly new result, which is highly beneficial and of the greatest utility in the manufacture of flour, the combination is, in my opinion, the proper subject of a patent, and the infringement being admitted, the plaintiffs are entitled to a decree in the court below for an account and a perpetual injunction. The appeal, therefore, should be allowed with costs and a decree ordered to be entered accordingly for the plaintiffs in the Court of Chancery with costs.

Appeal allowed with costs.

Solicitors for appellants: *Howland, Arnoldi & Ryerson.*

Solicitors for respondents: *Ball & Ball.*