

some one of the exceptions contained in the Statute of Limitations, even in a jurisdiction where those exceptions are still in force.

Better proof to show that persons claiming title to the premises were notified that her possession was adverse and hostile to their claim can hardly be imagined than what is exhibited in the case before the court. Thirty years before the present suit was commenced, a common-law action of ejectment was instituted for the same premises, in which the father and the grantors of the plaintiffs were described as the lessors of the fictitious plaintiff in the suit, and it appears that the suit was defeated by the testatrix of the defendant, aided by her second husband, then in full life.

Viewed in any light, we are all of the opinion that there is no error in the record.

*Judgment affirmed.*

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COCHRANE v. DEENER.

1. The powers and jurisdiction of the Supreme Court of the District of Columbia, in patent cases, are the same, as well in equity as at law, as those of the circuit courts of the United States; and whether a case, involving the validity or the infringement of letters-patent, shall be first tried at law is a matter of discretion and not of jurisdiction.
2. The improvement in processes for manufacturing flour, for which reissued letters-patent No. 5,841 were granted to William F. Cochrane and his assignees, April 21, 1874, being a reissue of letters-patent No. 37,317, granted to him Jan. 6, 1863, does not consist in using drafts or currents of air, but in the process as a whole, comprising the application of the blast, and the carrying off the fine impurities whereby the middlings, after being separated from the other parts, are purified, preparatory to regrinding.
3. A process may be patentable, irrespective of the particular form of the instrumentalities used. If one of the steps of a process be that a certain substance is to be reduced to a powder, it may not be at all material what instrument or machinery is used to effect that object, whether a hammer, a pestle and mortar, or a mill. Either may be pointed out; but, if the patent is not confined to that particular tool or machine, the use of the other would be an infringement, the general process being the same.
4. A process is a mode of treatment of certain materials to produce a given result. It is an act or a series of acts, performed upon the subject-matter, to be transformed and reduced to a different state or thing. If new and useful, it is just as patentable as a piece of machinery. In the language of the patent law, it is an art.

5. The machinery pointed out as suitable to perform the process may or may not be new or patentable, whilst the process itself may be altogether new, and produce an entirely new result. The process requires that certain things should be done with certain substances, and in a certain order; but the tools to be used in doing this may be of secondary consequence.
6. The court holds that reissued letters-patent No. 5,841, bearing date April 21, 1874, for improvements in processes for manufacturing flour; No. 6,030, bearing date Aug. 24, 1870; No. 6,594 and No. 6,595, bearing date Aug. 17, 1875, for improvements in machines for bolting flour, and issued to William F. Cochrane and his assignees,—are valid, and were infringed by the defendants, in using machines constructed according to reissued letters-patent No. 5,346, bearing date April 1, 1873, being a reissue of letters-patent No. 135,953, bearing date Feb. 18, 1878, and granted to Edward P. Welch and his assignees, for improvements in middlings-purifiers, and being for improvements upon machines patented to Jesse B. Wheeler and Ransom S. Reynolds; but that letters-patent No. 37,319 and No. 37,320, bearing date Jan. 6, 1863, issued to said Cochrane, for improvements in bolting flour, were not infringed.

APPEAL from the Supreme Court of the District of Columbia.

The case is stated in the opinion of the court.

Submitted on printed arguments by *Mr. Walter S. Cox*, *Mr. Charles F. Blake*, and *Mr. Rodney Mason* for the appellant, and by *Mr. A. L. Merriman* and *Mr. Howard C. Cady* for the appellee.

MR. JUSTICE BRADLEY delivered the opinion of the court.

This is a suit in equity, instituted in the Supreme Court of the District of Columbia for injunction and relief against an alleged infringement of various patents belonging to the complainants. The bill was dismissed, and the complainants have appealed.

The patents sued on are six in number, originally five, granted to the appellant Cochrane on the 13th of January, 1863, and numbered respectively 37,317, 37,318, 37,319, 37,320, and 37,321. They all related to an improved method of bolting flour, the first being for the general process, and the others for improvements in the different parts of the machinery rendered necessary in carrying on the process. Three of the original patents, Nos. 37,317, 37,318, and 37,321, were surrendered, and reissues taken in 1874, which reissues were numbered 5,841, 6,029, and 6,030, the first being for the process, and the other two for portions of the machinery. Reissue 6,029, being in place of the original patent numbered 37,321, was also subse-

quently surrendered, and two new reissued patents substituted therefor, numbered 6,594 and 6,595.

The case has been mainly argued on the question of infringement, the defendants using a bolting apparatus constructed according to letters-patent issued to Edward P. Welch in April, 1873, for improvements upon machines patented to Jesse B. Wheeler and Ransom S. Reynolds, which, as well as the process employed, they contend, are radically different from the apparatus and process of Cochrane.

A preliminary question is raised with regard to the jurisdiction of the court below to hear the case on a bill in equity, before a determination of the rights of the parties in an action at law.

The powers of the Supreme Court of the District of Columbia in patent cases are the same as those of the circuit courts of the United States. See Revised Statutes relating to the District of Columbia, sects. 760, 764.

The circuit courts were first invested with equity jurisdiction in patent cases by the act of Feb. 15, 1819, which declared that these courts should have "original cognizance, as well in equity as at law, of all actions, suits, controversies, and cases arising under any law of the United States, granting or confirming to authors or inventors the exclusive right to their respective writings, inventions, and discoveries; and upon any bill in equity, filed by any party aggrieved in any such cases, should have authority to grant injunctions, according to the course and principles of courts of equity," &c.

This law was substantially re-enacted in the seventeenth section of the patent law of July 4, 1836, and the fifty-fifth section of that of July 8, 1870, special powers to assess damages in equity cases being also conferred by the latter act.

Before the act of 1819 was passed, the circuit courts had cognizance of actions at law brought to recover damages for the infringement of patents, but not of suits in equity in relation thereto, unless the parties happened to be citizens of different States. Phillips on Pat. 379; *Livingston v. Van Ingen*, 1 Paine, 54; *Sullivan v. Redfield*, id. 447. Under that act and the subsequent acts in which it became incorporated, bills in equity for injunction, discovery, and account have constantly

been sustained, frequently without any previous action at law. As said by Mr. Justice Grier, in a case decided at the circuit, "It is true that, in England, the chancellor will generally not grant a final and perpetual injunction in patent cases, when the answer denies the validity of the patent, without sending the parties to law to have that question decided. But even there the rule is not universal: it is a practice founded more on convenience than necessity. It always rests in the sound discretion of the court. A trial at law is ordered by a chancellor to inform his conscience, not because either party may demand it as a right, or that a court of equity is incompetent to judge of questions of fact or of legal titles. In the United States, the practice is by no means so general as in England." *Goodyear v. Day*, 2 Wall. Jr. 296. Subsequently, in the case of *Sickles v. Gloucester Manufacturing Co.*, 3 id. 196, the same judge said: "The courts of the United States have their jurisdiction over controversies of this nature by statute, and do not exercise it merely as ancillary to a court of law." And, after quoting the statute, he proceeds: "Having such original cognizance, . . . the courts of the United States do not, in all cases, require a verdict at law on the title, before granting a final injunction, or concede a right to every party to have every issue as to originality or infringement tried by a jury."

The position of Mr. Justice Grier is undoubtedly true, that whether a case shall be first tried at law is a matter of discretion, and not of jurisdiction; and in this matter the courts of the United States, sitting as courts of equity in patent cases, are much less disposed than the English courts are to send parties to a jury before assuming to decide upon the merits.

But the counsel for the defendants suggest that the Revised Statutes have not preserved in entirety the previous enactments on this subject, but have omitted the vesting of original cognizance in the circuit courts sitting as courts of equity in patent cases. From a careful consideration, however, of all the sections of the Revised Statutes on the subject, we think that no intention is evinced to make any change in the law. The original enactments are separated into distinct parts, and somewhat condensed; but the substance of them is retained. By sect. 629, the circuit courts are invested with jurisdiction, among

other things, "Ninth, of all suits at law or in equity arising under the patent or copyright laws of the United States." And, by sect. 4921, it is declared, that "the several courts vested with jurisdiction of cases arising under the patent laws shall have power to grant injunctions according to the course and principles of courts of equity," &c., following precisely the language used in the act of 1870, the last previous revision of this branch of the law. The grant of jurisdiction is as broad and general as it could well be, and the mode of exercising it is prescribed in precisely the same terms as in previous statutes.

In the present case, we see no special reason for sending the case to a court of law or to a jury for trial. There are no such issues depending upon the credibility of witnesses, or on the intricacy of machinery, as to make the case susceptible of easier solution or greater certainty as to the truth before such a tribunal than it admits of when presented to the consideration of a chancellor. It would, perhaps, be desirable if all cases of this sort could be referred to a commission of intelligent experts and practical men to report their opinion thereon, with their reasons, for the final action of the court. A proceeding of this kind was probably in the mind of Congress in passing the act of Feb. 16, 1875, authorizing a reference to a jury of five persons. Neither courts nor ordinary juries are perfectly adapted to the investigation of mechanical and scientific questions. The court below, however, exercised its discretion to decide the case upon its merits, without the aid of a jury of any sort, and their action is not a ground of appeal. If we were convinced, however, that the case was not properly decided, and could not be properly decided without such a reference, we might undoubtedly, in the exercise of our own discretion, remand it to the court below for that purpose. But we see nothing in the questions raised which require that such a course should be adopted.

The principal patent sued on in this case was granted on the 21st of April, 1874, being a reissue of a patent granted to William F. Cochrane on the 6th of January, 1863. The original patent was numbered 37,317, and the reissue 5,841. The alleged invention is for a process in manufacturing flour. The patentee, in his specification, says: "The object of my inven-

tion was to increase the production of the best quality of flour; and my improvement consisted in separating from the meal first the superfine flour, and then the pulverulent impurities mingled with the flour-producing portions of the middlings-meal, so as to make 'white' or 'purified' middlings, which, when reground and rebolted, would yield pure white flour, which, when added to the superfine, would improve the quality of the flour resulting from their union, instead of deteriorating its quality, as had heretofore been the case when the middlings flour was mingled with the superfine." The process employed for producing the result here indicated is then described. It consists in passing the ground meal through a series of bolting-reels clothed with cloth of progressively finer meshes, which pass the superfine flour and retard the escape of the finer and lighter impurities; and, at the same time, subjecting the meal to blasts or currents of air introduced by hollow perforated shafts furnished with pipes so disposed that the force of the blast may act close to the surface of the bolting-cloth; the bolting-chest having an opening at the top for the escape of the air, and of the finer and lighter particles therewith, through a chamber where the particles are arrested, whilst the floor and sides of each compartment of the chest are made close, so as to prevent the escape of the air in any other direction than through the said opening. By this means, the superfine flour is separated, and the fine and light specks and impurities, which ordinarily adhere to the middlings and degrade the flour produced therefrom, are got rid of; and when the middlings are now separated from the other portions of the meal, they are white and clean, and capable of being reground and rebolted, so as to produce superfine flour equal in quality and even superior to the first instalment.

This is the process described; but the patentee claims that it is not limited to any special arrangement of machinery. He admits the prior use of currents of air in the interior of the reels, introduced by means of hollow, perforated shafts, for the purpose of keeping back the speck, and increasing the quantity of superfine flour; but not for purifying the middlings preparatory to regrinding. His improvement, therefore, does not consist in using drafts and currents of air, but in the process as a

whole, comprising the application of the blast, and the carrying off of the fine impurities, whereby the middlings are purified preparatory to regrinding after being separated from the other parts.

The defendants deny that they use this process. They purify the middlings of the flour, as before stated, by means of machines constructed according to letters-patent issued to Edward P. Welch, in April, 1873, for improvements upon machines patented to Jesse B. Wheeler and Ransom S. Reynolds.

In this process, reels are not used for purifying the middlings, but a flat and slightly inclined vibrating screen or sieve is used for the purpose; over which the ground meal is passed, and whilst passing is subjected to currents of air blown through a series of pipes situated close underneath the screen; which currents pass up through the screen and through an opening at the top of the chest into a chamber, carrying with them the finer and lighter impurities, whereby the middlings are rendered clean and white, and capable of being reground into superfine flour. The bolting-chest is made tight and close on all sides except the opening at the top, so that the currents of air may be forced to escape by that exit.

Now, except in the use of a flat sieve or screen in place of reels, it is difficult to see any substantial difference between these two methods. The defendants use, in addition, brushes, which revolve on the under side of the screen, so as to keep the meshes thereof constantly clean and free; but this is merely an addition, which does not affect the identity of the two processes in other particulars. We have substantially the same method of cleaning the middlings preparatory to regrinding by means of currents of air passed through them whilst being bolted, and whilst being confined in a close chest or chamber, said chamber having an opening above for the escape of said currents of air and the impurities with which they become loaded. The middlings being thus purified are reground and rebolted, producing a superfine flour of superior grade, — a new, useful, and highly valuable result.

The use of a flat screen instead of a revolving reel for bolting and cleaning the middlings is a mere matter of form. It

may be an improved form, and, perhaps, patentable as an improvement; but it is at most an improvement.

The forcing of the air-currents upward through the screen and film of meal carried on it and against the downward fall of the meal, instead of forcing them through the bolting-cloth in the same direction with the meal, is also a mere matter of form, and does not belong to the substance of the process. The substantial operation of the currents of air in both cases is to take up the light impurities and bear them away on the aggregate current through the open flue, and thus to separate them from the middlings. This, too, may be an improvement on Cochrane's method; but it is only an improvement.

The defendants admit that the process has produced a revolution in the manufacture of flour; but they attribute that revolution to their improvements. It may be as they say, that it is greatly due to these. But it cannot be seriously denied that Cochrane's invention lies at the bottom of these improvements, is involved in them, and was itself capable of beneficial use, and was put to such use. It had all the elements and circumstances necessary for sustaining the patent, and cannot be appropriated by the defendants, even though supplemented by and enveloped in very important and material improvements of their own.

We do not perceive that the patent of Cogswell and McKiernan, if valid at all as against Cochrane (a point which will be more fully considered hereafter), affects the question in the least. That patent is not at all for the process which Cochrane claims. If valid, and if, in using his process, Cochrane is obliged to use any device secured to Cogswell and McKiernan, it does not detract in the slightest degree from his own patent. One invention may include within it many others, and each and all may be valid at the same time. This only consequence follows, that each inventor is precluded from using inventions made and patented prior to his own, except by license from the owners thereof. His invention and his patent are equally entitled to protection from infringement, as if they were independent of any connection with them.

That a process may be patentable, irrespective of the particular form of the instrumentalities used, cannot be disputed. If



one of the steps of a process be that a certain substance is to be reduced to a powder, it may not be at all material what instrument or machinery is used to effect that object, whether a hammer, a pestle and mortar, or a mill. Either may be pointed out; but if the patent is not confined to that particular tool or machine, the use of the others would be an infringement, the general process being the same. A process is a mode of treatment of certain materials to produce a given result. It is an act, or a series of acts, performed upon the subject-matter to be transformed and reduced to a different state or thing. If new and useful, it is just as patentable as is a piece of machinery. In the language of the patent law, it is an art. The machinery pointed out as suitable to perform the process may or may not be new or patentable; whilst the process itself may be altogether new, and produce an entirely new result. The process requires that certain things should be done with certain substances, and in a certain order; but the tools to be used in doing this may be of secondary consequence.

The machine patents come next to be considered.

As to number 6,030, which is a reissue of the original patent number 37,318, the defendants clearly infringe, at least, the last claim, which is in these words: "In combination with the screen incased in a chest, the perforated blast-pipe and the suction-pipe, arranged to operate on opposite sides of the screen, substantially as set forth."

As to the patent next in order, namely, the original patent number 37,319, which relates specially to the use of what the patentee calls the pump for introducing the meal into the chest and reels, whilst the valve arrangement used by the defendants may be an equivalent in the general combination with the said pump described by Cochrane, yet, taken by themselves, as separate pieces of machinery, they are not the same, and the use of the one is not an infringement of a patent for the other. Curtis, sect. 332; *Foster v. Moore*, 1 Curtis, C. C. 279. Nor can we perceive that the defendants infringe the next patent, number 37,320, which is for certain combinations of machinery, including the bolting-reels, dead-air chamber therein, slotted shaft, and reciprocating board for discharging the meal, &c., which it is unnecessary to describe more particularly.

The two remaining patents, numbered 6,594 and 6,595, being reissues of original patent number 37,321, are for combinations of essential parts of the machinery required for bolting flour and purifying the middlings according to the general process described in the first patent. The principal claim of the original patent was for the condensing or collecting chamber, through which the currents of air, on leaving the bolting-chest, make their escape, and where they leave the fine particles with which they become loaded. This claim, it is said, was found to be too broad, inasmuch as a collecting chamber, somewhat similar, had been used in another connection, though not in the combinations presented in Cochrane's bolting process. The original patent, therefore, was surrendered, and the two patents now under consideration were issued in place thereof, claiming the use of the collecting chamber in combination with the various material parts of the bolting apparatus. The reissue, number 6,594, contains three claims, and number 6,595, one claim.

The first claim of reissue number 6,594 is for the collecting chamber (used for the purpose aforesaid) in combination with the bolter, air-pipes, and valves for feeding and delivering the meal without allowing the air to pass therewith. Now, although the defendants use a flat bolter instead of a reel, and use different kinds of valves for feeding and delivering the meal without allowing the air to pass, yet they employ the combination of devices described in this claim. They use the collecting chamber for the same purpose as that pointed out in the patent, and use it in connection with a bolter, air-pipes, and valves for feeding and delivering the meal without allowing the air to pass therewith, each effecting the same separate purpose, and all combined effecting the same general purpose, which the like parts are intended to accomplish in Cochrane's bolting apparatus. Though some of the corresponding parts of the machinery, designated in this combination, are not the same in point of form in the two bolting apparatuses, and, separately considered, could not be regarded as identical or conflicting, yet having the same purpose in the combination, and effecting that purpose in substantially the same manner, they are the equivalents of each other in that regard. The claim

of the patent is not confined to any particular form of apparatus, but (in regard to the valves, for example) embraces generally any valves for feeding and delivering the meal without allowing the air to pass through. We are of opinion, therefore, that the combination here claimed is infringed by the apparatus used by the defendants.

It is unnecessary to make a separate examination of the other claims embraced in the two patents under consideration. They are all susceptible of the same observations which we have made with regard to the first claim. In our opinion, the defendants do infringe them.

But a question is raised with regard to Cochrane's priority of invention. A patent was granted on the 12th of June, 1860, to Mortimer C. Cogswell and John McKiernan for improvements in ventilated bolting-chests, which, it is contended, antedates and nullifies Cochrane's apparatus as patented to him in the original patent 37,321, and in the two reissues thereof before mentioned. This patent (of Cogswell and McKiernan) we have examined, and find that it does contain five of the elements embraced in those reissues; namely (besides the bolting-chest and bolter, which are always used), it contains the perforated air-pipe extending inside of the bolting-reel, the fan for producing a blast of air therein, and a collecting-chamber for arresting the flour carried off by the blast. The purpose was simply to cool the meal and keep the bolting-cloths dry. The flour which collected in the chamber was returned to the chest. The parts contained in this apparatus are those which are patented in combination in Cochrane's reissue 6,595, which was separated, it is said, from reissue 6,594 on account of this patent of Cogswell and McKiernan. The combinations patented in reissue 6,594 embrace other parts not contained in Cogswell and McKiernan's patent; and the defendants contend that this reissue is void, as not being sustained by the original patent 37,321.

The latter position, we think, is untenable. Cochrane's apparatus, as exhibited in his model, and described in his original patent, and in the series of patents taken out at the same time, all having relation to the same general process, and referred to in patent 37,321, contained all the parts which go to make the

combination claimed in reissue number 6,594. We see no reason, therefore, why such reissue was not properly granted to him by the Patent Office, the claim being, in fact, a much narrower one than that of the original patent.

The same observations apply to reissue number 6,595. But, as to that, as before stated, the particular elements of the combination claimed in it are found in Cogswell and McKiernan's machine; and if this is entitled to the precedence over Cochrane's, reissue number 6,595 is void. He contends that it is not entitled to such precedence; but that, in fact, Cogswell and McKiernan surreptitiously obtained a patent for his invention. We have examined the evidence relating to this matter, and are satisfied that the improvement claimed by Cochrane was his invention; that Cogswell and McKiernan obtained their knowledge of it from him; and that there is nothing connected with their patent which ought to invalidate the reissued patent in question.

A French patent, dated 27th of September, 1860, granted to one Perigault, is also referred to as anticipating the combinations in these patents. But it being shown that Cochrane's invention was actually made before that date, the point was not pressed in the argument. By the act of 1870, a foreign patent, in order to invalidate an American patent, must antedate the invention patented.

Our conclusion is, that the patent for the process, being reissue number 5,841, and the several reissued patents for combinations of mechanical devices, numbered respectively 6,030, 6,594, and 6,595, are valid patents, and are infringed by the defendants; and that the other two patents named in the bill of complaint, numbered respectively 37,319 and 37,320, are not infringed by the defendants.

*Decree reversed, and cause remanded with directions to enter a decree for the complainants, and to proceed therein in conformity with this opinion.*

MR. JUSTICE CLIFFORD, with whom concurred MR. JUSTICE STRONG, dissenting.

I dissent from the opinion and judgment of the court in this case, for the following reasons:—

1. Because the mechanical means employed by the respondents to effect the result are substantially different from those described in the complainants' patent.

2. Because the process employed by the respondents to manufacture the described product is materially and substantially different from the patented process employed by the complainants.

3. Because the respondents do not infringe the combination of mechanism patented and employed by the complainants. *Prouty v. Ruggles*, 16 Pet. 341; *Vance v. Campbell*, 1 Black, 428; *Gill v. Wells*, 22 Wall. 26.

4. Because the respondents do not infringe the process patented by the complainants, the rule being, that a process, like a combination, is an entirety, and that the charge of infringement in such a case is not made out unless it is alleged and proved that the entire process is employed by the respondents. *Howe v. Abbott*, 2 Story, C. C. 194; *Gould v. Rees*, 15 Wall. 193.

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DAVIS v. INDIANA.

1. The Supreme Court of Indiana having decided in this case that the moneys arising from section 16 in each congressional township of that State, all of which are to be paid into the county treasury by the school trustee, form a part of the school fund which the county auditor is required to distribute to the various townships in the county, and that, in so doing, he is bound by the proviso in the act of March 4, 1855, "that in no case shall the congressional township fund be diminished by such distribution, and diverted to any other township," this court affirms the decision.
2. This court adheres to the ruling in *Springfield Township v. Quick*, 22 How. 56, that the right of the inhabitants of the several congressional townships in that State to such moneys for the use of schools in the township where section 16 lies is sufficiently protected by that proviso.

ERROE to the Supreme Court of the State of Indiana.

The case is stated in the opinion of the court.

Submitted on printed arguments by *Mr. Ralph Hill* for the plaintiff in error, and by *Mr. S. Stansifer*, contra.

MR. JUSTICE MILLER delivered the opinion of the court.

The Congress of the United States, in the act admitting Indiana as a State, declared that every sixteenth section of a