

the community, leaving the use and enjoyment of property and the compensation for its use to the discretion of the legislature. Having already expressed my objections to that decision in a dissenting opinion, I need not repeat them here.

DUNBAR v. MYERS.

1. In letters-patent of the United States, No. 10,965, bearing date May 23, 1854, issued to John Myers and Robert G. Eunson, granting to them, for the term of fourteen years from that date, the exclusive right and liberty of making, using, and vending to others to be used, an improved machine for sawing thin boards, &c., which letters-patent were subsequently extended for the term of seven years from May 23, 1868, the claim of the improvement described as the employment or use of deflecting plates, — one or two, — placed at the sides of a circular saw, for the purposes set forth in the specification, is void, because it does not describe a patentable invention.
2. This court finds that the respondents below did not infringe the second and fourth claims of the patent.

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

The facts are fully stated in the opinion of the court.

This case was argued by *Mr. Charles F. Blake* and *Mr. Samuel J. Glassey* for Dunbar, and by *Mr. Frederic H. Betts* for Myers.

MR. JUSTICE CLIFFORD delivered the opinion of the court.

Inventions, in order that the inventors may be entitled to patents for the same, must be new and useful; and the better opinion is, that the improvement must be of such a character that it involved invention to make it, as the Patent Act confers no right to obtain a patent except to a person who has invented or discovered some new and useful art, machine, manufacture, or composition of matter, or some new and useful improvement in one or the other of those described subject-matters.

Sufficient appears to show that a patent in due form was granted to John Myers and Robert G. Eunson, on the 23d of May, 1854, for an alleged invention, described in the specification as relating to certain new and useful improvements

in machines for sawing lumber into thin stuff for the backs of mirrors and picture-frames, and other purposes for which thin stuff is used. Due application was subsequently made for an extension; and the record shows that the patent was regularly extended for the further term of seven years from the expiration of the first term.

Subsequent to the extension of the patent, one of the patentees, to wit, Robert G. Eunson, sold and assigned all his right, title, and interest in the same, and the extension thereof, to Eugene S. Eunson, one of the complainants, who instituted the present suit in the court below. Pending the suit, the other complainant departed this life; and Margaret Myers, his sole executrix, was duly admitted in his stead to prosecute the suit as co-complainant with the assignee of the other half-interest in the extended patent. Infringement is charged, and that the respondents have made large gains and profits by the unlawful use of the patented invention; and the complainants pray for an account and for an injunction.

Process having been issued and service made, the respondents appeared and filed an answer, in which they set up in substance and effect the following defences: 1. That the invention is of no utility or value. 2. That the patentees are not the original and first inventors of the alleged improvement. 3. That the alleged improvement was well known and had been in public use long prior to the supposed invention by the patentees. 4. That knowledge of such prior public use was possessed by the several persons whose names and places of residence are set forth in the answer. 5. That the patented improvement, years before the application for the patent was executed, was fully described in the respective printed publications mentioned in the answer filed by the respondents.

Minute and accurate description of the patented machine is given in the drawings, and the specification divides the invention into four separate features, as follows: 1. That it consists in the employment or use of deflecting plates, — one or two, — placed at the sides of a circular saw, for the purpose of enlarging or expanding the saw kerf to prevent the sawed stuff from coming in contact with the sides of the saw and binding the edge of the same near the teeth. Deflecting plates of the kind

also allow the saw to be stiffened by a proper plate, so that a thin veneer saw may be employed, which will cause but a small waste of stuff in sawing. 2. That the invention consists in the employment or use of elastic clamps attached to the ordinary adjustable and elastic beds, between which the stuff is fed to the saw. Clamps of the kind have an elasticity independent of the beds, and compensate for the varying thickness of the different pieces of stuff to be sawed, by holding firmly the extreme end of the stuff, and keeping it in proper position to the saw, however much the elastic bed may be expanded by a succeeding piece of stuff of greater thickness. 3. That the invention also consists in the employment or use of knives or cutters secured to the adjustable beds, and so arranged as to cut or smooth off the rough and projecting sides of the stuff at the ends, making it of uniform thickness. 4. That it also consists in the combination of an adjustable bed and circular saw, arranged as shown in the specification.

Such a machine necessarily requires a frame, and the patentees state that the frame of the machine described in the specification may be constructed in any proper manner, and that the circular saw is placed on a shaft which runs transversely across the front of the frame.

They employ a circular saw, made of thin steel-plate, such as is used for sawing veneers, on one side of which is a circular plate secured by rivets or screws, the plate being less in diameter than the saw, which has the effect to stiffen the plate of the saw, and to enable the operator to use a thinner saw than he would otherwise be able to do.

Two deflecting plates are also employed by the patentees, one on each side of the saw; the one on the same side of the saw with the stiffening plate covers the upper part of that plate, the outer end of which projects further from the saw than the inner end, — the deflecting plate on the other side of the saw being of the same description, except that it is rather smaller in diameter, and that it projects from the saw at about an equal distance at both ends. They are arranged one on each side of the saw, and are attached to the frame by means of bolts, rivets, or screws.

Two feed-roller beds are placed vertically in the back part

of the frame parallel with each other, both of which are made adjustable by screw-rods which bear against the sides of the beds, the screw-rods of each bed being operated simultaneously by means of chains passing round small toothed wheels at the ends of the screw-rods.

Two cranks are also employed, one of which is attached to one of the toothed wheels of each bed. Lateral elasticity is given to the beds by means of india-rubber or other springs attached to them in a proper manner.

Four feed-rollers are employed, two of which are placed in each bed, and the specification states that the feed-rollers project some distance beyond the inner edges of the beds. Clamps, two in number, are attached to the inner ends of the beds, and at the back part of each clamp there are two journals, one at the top and one at the bottom, fitted in boxes which work or slide in recesses in the top and bottom pieces of the beds.

Set-screws are also provided, which pass transversely through the top and bottom pieces of each bed, the inner ends of which bear against india-rubber springs placed directly back of the boxes.

There are two of these rubber springs at the top of the clamps, one to each clamp, and it appears that they are placed between the clamps and the set-screws, passing transversely through the top pieces of the beds. Hence it follows that the clamps may be made to vibrate laterally; but it also appears that two stops are provided, which pass through the top pieces of the beds, one through each top piece, for the purpose of limiting and regulating the extent of such lateral vibration.

Knives or cutters are also provided, which are placed vertically, one in each bed; but it is unnecessary to enter into those details, as it is not pretended that the respondents have infringed the third claim of the patent.

Motion is given to the feed-rollers by gearing, which is shown in the drawings at the lower part of the rollers.

Means are also provided for adjusting the beds relatively to the saw, so that the boards or other lumber may be sawed into the desired thickness. Either side of the saw may be made the line side in the operation of sawing by the adjustment of the proper roller-bed, so as to prevent expansion or contraction.

Stuff to be sawed, whatever it may be, is placed between the feed-rollers in the beds, and, motion being communicated to the saw and rollers, the stuff is fed forward towards the saw and is cut by it, the two pieces being prevented from bearing against the sides of the saw by means of the deflecting plates. When the outer end of the material to be sawed has passed the inner feed-roller, the clamps bear against the board and hold it in a proper relative position to the saw, so that if another board to be sawed is placed between the feed-rollers it will advance and press forward the board first placed between the rollers, and if the last board is thicker than the preceding one the only effect is that it acts upon the beds and forces the elastic one farther from the permanent one without affecting the clamps, which, owing to the springs, have an independent elasticity.

Tested by the example given in the specification, as illustrating the mode of operation, it is plain that either side of the saw may be made the line side in the practical working of the machine. In the example put by the patentees, they assume that the roller-bed in line with the deflecting plate, which is on the same side of the saw as the stiffening plate, is permanently fixed at one-quarter of an inch from the side of the saw, and that the opposite bed being elastic, the side of the saw on which the thin strip passes is the line side during the operation of sawing; but the patentees state that the opposite side of the saw may be made the line side by permanently fixing the opposite roller-bed and by allowing the other one to remain elastic, and that by these improvements they are enabled to use a thin veneer saw, and to keep the stuff to be sawed in a proper relation to the saw, even when varying in thickness.

Three of the claims of the patent, it is charged, are infringed by the respondents; to wit, the first, second, and third. They are as follows: 1. The employment or use of the deflecting plates, one or both, placed at the sides of the saw, as shown, for the purpose of preventing the sawed stuff from bearing against the sides of the saw and expanding the saw kerf, and also for the purpose of allowing a thin veneer saw to be stiffened by plates, one or two, as desired. 2. They claim the employment or use of the clamps arranged as shown, or in any equivalent way, so that they may have a lateral elastic movement, independent of

the roller-beds to which the clamps are attached, for the purpose of compensating for the varying thickness of different pieces of stuff, and to keep the same in a proper relative position to the saw. 4. They also claim "the employment of an adjustable bed with clamps, as described, in combination with the saw when the saw has a stiffening plate in line with the adjustable bed, by which the stiffened or rounded side of the saw is made the line side of the same for practical operation."

Prior to the hearing, the complainants filed a petition in the Patent Office, in which they state that the patentees, through inadvertence, accident, and mistake, and without any fraudulent or deceptive intention, claimed more in their specification than that of which they were the original inventors. Pursuant to that petition, they were permitted to enter a disclaimer in two respects: 1. To amend the first claim by striking out the words "one or" before the word "both," so that the claim includes *only* the employment and use of the saw with both of the deflecting plates, when both of the plates are used at one and the same time, in the manner and for the purposes described. 2. They also made a corresponding amendment in the specification, limiting the description of the invention to the employment of the two deflecting plates placed at the sides of the circular saw, disclaiming the use of one plate *only*, for the purposes set forth in the specification.

Proofs were taken; and, both parties having been heard, the court entered a decretal order in favor of the complainants, and referred the cause to a master. Due report was made by the master, to which both parties excepted; but the court overruled the exceptions, and, having confirmed the report, entered a final decree in favor of the complainants for the sum of \$9,120.94, being the gains and profits made by the respondents, as ascertained by the master. Both parties appealed to this court.

Eight errors are assigned by the respondents, two of which only will be examined: 1. That the court erred in holding that there was invention in using two deflecting plates when the use of one was well known. 2. That the court erred in holding that the respondents infringed the letters-patent granted to the complainants.

Viewed in the light of the disclaimer, it is clear that the first

claim of the patent is for the employment or use of two deflecting plates, one being placed on each side of the saw, for the purpose of preventing the sawed stuff from bearing against the sides of the saw, and to allow a thin veneer saw to be stiffened by the plate employed or used for that purpose; and it is equally clear that the employment or use of one deflecting plate for the purpose was well known and in public use long before the original patentees in this case applied for a patent.

Conclusive evidence to support that proposition is found in the disclaimer filed by the complainants pending the suit, in addition to the other evidence in the case, which is abundantly sufficient to establish the proposition, even without the disclaimer. Authority to make such a disclaimer is beyond question, if it be made in writing, and is duly attested and recorded in the Patent Office. When so made, attested, and recorded, it becomes a part of the original specification to the extent of the interest of those who make it; but the provision is that it shall not affect any action pending at the time of its being filed, except so far as may relate to the question of unreasonable neglect or delay in filing it. 16 Stat. 206; Rev. Stat. sect. 4917.

Pending suits may proceed, but the disclaimer, when recorded, becomes a part of the original specification, and must be taken into account in construing the patent, and in ascertaining the rights of the parties to the suit, unless it appears that the effect of the disclaimer is to enlarge the nature of the invention, and prejudice the rights of the respondents. *Perry v. Skinner*, 1 Webster, Pat. Cas. 253; *Ralston v. Smith*, 9 C. B. x. s. 117; s. c. 11 id. 471; *Smith v. Nichols*, 21 Wall. 117.

Where the effect of the disclaimer is to diminish the claims of the patent without prejudicing the rights of the respondent, the suit may proceed, notwithstanding the disclaimer, it being held that the disclaimer, under such circumstances, does not affect the pending suit, except to limit and qualify the claims of the patent, and in respect to the question of unreasonable neglect or delay in filing the same. Unreasonable delay not having been suggested, the only effect of the disclaimer in such a case is to limit the nature of the invention secured by the patent, and to diminish the claims of the patent as set forth in

the specification. *Guyon v. Serrell*, 1 Blatchf. 245; *Hall v. Wiles*, 2 id. 198.

Matters properly disclaimed cease to be a part of the invention; and it follows that the construction of the patent must be the same as it would be if such matters had never been included in the description of the invention or the claims of the specification. 16 Stat. 206; *Seed v. Higgins*, 8 El. & Bl. 767; *Higgins v. Seed*, id. 763; *O'Reilly v. Morse*, 15 How. 121; *Taylor v. Archer*, 8 Blatchf. 317.

Tested by these considerations, it is clear that the first claim of the patent is for the employment or use of two deflecting plates, one placed on each side of the saw, for the purposes therein set forth and described. Circular plates attached to circular saws, secured by rivets or screws, for the purpose of strengthening the central portion of the saw-plate, and sometimes called stiffening plates, are old devices which have been known to the operators of the circular saw ever since the circular saw came into general use for sawing shingles, laths, and clapboards. Nor is any argument necessary to show that the employment of one deflecting plate covering the upper part of the stiffening plate on the same side of the circular saw is old, as that is proved by the evidence, conceded in argument, and alleged in the disclaimer filed by the complainants.

Concede that, and still it is insisted by the complainants that they employ or use two deflecting plates, one placed on each side of the saw, and that the employment or use of the additional deflecting plate on the opposite side of the saw is a new and useful improvement in the operation of the machine, for which the patentees, whom they represent, were justly entitled to the patent set forth in the bill of complaint.

Operators of machines for sawing lumber, whether with circular or vertical saws, have long known that some means were useful, if not absolutely necessary, to spread the two parts of the lumber behind the saw, so as to prevent the lumber as sawed from binding against the two faces of the saw to such an extent as to endanger the saw and impede the progress of the work without an increase of the motive power. Wedges, in early times, were used by the operator to accomplish the object, and various other devices were employed before the

deflecting plate came into use, which, it seems, has had the effect to supersede all other devices previously known to effect the described function. Such machines for sawing lumber, constructed with one deflecting plate, were well known and in general use years before the patentees in this case made their application for a patent; and the evidence satisfies the court that for most purposes the machine will operate as well and as successfully with one deflecting plate as with two. Two deflecting plates may be better than one, where it is desired to split thin stuff into two parts of equal thickness, as in that case the saw kerf may be enlarged by deflecting the stuff on each side of the saw.

Grant that two such plates are in certain cases better than one used alone, still the question arises whether it involves any invention to add the second plate to a machine already constructed with one plate. Beyond doubt, every operator who had used a machine having one deflecting plate knew full well what the function was that the deflecting plate was designed to accomplish, and the reasons for placing it at the side of the saw are obvious to the understanding of every one who ever witnessed the operation of a circular saw. Ordinary mechanics know how to use bolts, rivets, and screws, and it is obvious that any one knowing how to use such devices would know how to arrange a deflecting plate at one side of a circular saw which had such a device properly arranged on the other side, it being conceded that both deflecting plates are constructed and arranged precisely alike, except that one is placed on one side of the saw and the other on the opposite side. Both are attached to the frame in the same manner; nor is it shown, either in the specification or drawings, that there is any thing peculiar in the means employed for arranging the deflecting plates at the sides of the saw, or in attaching the same to the frame. Both are alike, except that the outer end of the one on the same side as the strengthening plate projects farther from the saw than the inner end, and that the other is rather smaller in diameter, and that the ends project about an equal distance from the saw.

Expert witnesses were examined upon the point, whether it required invention to attach a second deflecting plate to such a

machine; and one of the most intelligent and learned of his class testified to the effect that the deflecting plate on one side of the complainant's machine performs precisely the same duty as the plate upon the other side of the saw, and that it required no invention to apply a second plate in such a case to perform exactly the same duty as the one previously applied on the opposite side of the saw,—that such second application is a mere duplication of the first; and he supports his conclusion by apt examples, which are both persuasive and convincing.

Persons seeking redress for the unlawful use of letters-patent must allege and prove that they, or those under whom they claim, are the original and first inventors of the alleged improvement, and that the letters-patent have been infringed by the party against whom the suit is brought. *Prima facie* support to the first requirement is derived from the patent, if it is introduced in evidence and is in due form, provided the alleged improvement is one which in its nature is patentable. Evidence to overcome that presumption, however, is always admissible, if due notice is given by the opposite party, as required by law; and the question is now well settled, that the question whether the alleged improvement is or is not patentable, is, in an equity suit, a question for the court.

Applicants for a patent are required to file in the Patent Office a written description of their invention, and of the manner and process of making, constructing, and using the same, in such full, clear, concise, and exact terms as to enable any person skilled in the art or science to make, construct, and use the patented improvement. Rights of the kind are given only to inventors or discoverers of some new and useful art, machine, manufacture, or composition of matter, or some new and useful improvement thereof; and the law is well settled that nothing short of invention or discovery will support a patent for any such alleged new and useful improvement.

Certain other important conditions are also annexed to the exercise of the right to obtain such a muniment of title for such an invention or discovery; as, for example, the improvement must not only be new and useful, but it must be one not known or used by others in this country, and not patented or described before the invention or discovery in any printed pub-

lication in this or any foreign country, and must not have been in public use or on sale for more than two years prior to the application for the patent. 16 Stat. 201; *Collar Company v. Van Dusen*, 23 Wall. 563.

Invention or discovery is the requirement which constitutes the foundation of the right to obtain a patent; and it was decided by this court, more than a quarter of a century ago, that unless more ingenuity and skill were required in making or applying the said improvement than are possessed by an ordinary mechanic acquainted with the business, there is an absence of that degree of skill and ingenuity which constitute the essential elements of every invention. *Hotchkiss v. Greenwood*, 11 How. 267.

Ten years later, a case came before this court, in which the plaintiff claimed certain improvements in the construction of a machine for sawing lumber with the circular saw, including the manner of affixing and guiding the saw by allowing end play to its shaft, in combination with the means of guiding the device by friction-rollers and other appliances. Mills for sawing logs with a circular saw had been well known long before the supposed invention; and, in construing the claim of the patent, this court said that the claim is for the precise organization of the old machine, namely, the manner of affixing and guiding the circular saw by allowing end play to its shaft, in combination with the means of guiding it by friction-rollers, so as to leave the centre entirely unchecked; adding, that there is nothing new in the combination, and assigning as the reason for the conclusion, that the improvement had long been known and used in the circular saw for sawing timber of smaller dimensions than ordinary saw-logs.

Enough appears to show that the machine in that case was larger than those of the kind which had preceded it; but the court remarked that that circumstance did not afford any ground in the sense of the patent law for a patent, for the reason that the ordinary mechanic was doing the same thing every day in making a working machine from the patent model.

In order to reach invention, say the court in that case, the patentee must carry his improvement further: he must contrive

the means of adapting the enlarged old organization to the new use, namely, the sawing of saw-logs, and claim, not the old parts, but the new devices by which he has produced the new results. *Phillips v. Page*, 24 How. 167.

Decisions by this court of later date have been made to the same effect; as, for example, the court decided that the claim of the patentee for making the cases of door-locks and latches double-faced, or so finished that either side of the case may be used for the outside, in order that the same lock or cased fastening may answer for a right or left hand door, was void, because the patentee did not show that he was the original and first inventor of the improvement, and intimated very strongly that the making of such a case, with two faces just alike, and so finished off in point of style that either side was fit to be presented outwards, was not a matter which could be patented, even if no locks with such cases had ever before been made. *Jones v. Morehead*, 1 Wall. 162.

Patented improvements which are not new and useful, or which did not require any invention or discovery to make the same, as compared with what existed or was in use before, may be declared invalid by the court in an equity suit. *Stimpson v. Woodman*, 10 id. 121.

Mere change in a machine of one material for another, as wood or wood strengthened with iron for iron alone, is not invention in the sense of the Patent Act, and therefore is not the subject of a patent. *Hicks v. Kelsey*, 18 id. 670.

Old processes are sometimes applied to new subjects, and where that was so, in a case which did not require the exercise of the inventive faculty, and without the development of any idea which could be deemed new or original in the sense of the patent law, it was held that the supposed improvement was not the subject of a patent, and that courts of justice may take judicial notice of a thing in the common knowledge and use of the people throughout the country. *Brown v. Piper*, 91 U. S. 38.

Proof of the state of the art is admissible in equity cases, without any averment in the answer touching the subject, and in actions at law, without giving the notice required when evidence is offered to invalidate the patent. It consists of

proof of what was old and in general use at the time of the alleged invention; and may be admitted to show what was then old, or to distinguish what is new, or to aid the court in the construction of the patent.

Meritorious inventors are entitled to protection; but it is settled law that a mere carrying forward of an original patented conception, involving only change of form, proportions, or degree, or the substitution of equivalents, doing the same thing as the original invention by substantially the same means, is not such an invention as will sustain a patent, even though the changes of the kind may produce better results. *Smith v. Nichols*, 21 Wall. 115.

Effective support to the proposition that nothing but invention or discovery will entitle an applicant to a patent is also found in the reported decisions of the circuit courts, as appears from the following citations. Judge Story held, many years ago, that the mere application of an old process, machine, or device to a new use was not patentable,—that there must be some new process or some new machinery to produce the result, in order that the supposed inventor may properly have a patent for the alleged improvement. *Howe v. Abbot*, 2 Story, 194; *Bean v. Smallwood*, 2 id. 411; *Glue Co. v. Upton*, 6 Off. Gaz. 842; 7 id. 648.

Conclusive support to the proposition that an applicant for a patent is not entitled to the public protection, unless the supposed improvement involves actual invention or discovery, is found in the oft-repeated decisions of all the English courts having jurisdiction in such cases; and it is safe to remark, that the courts of that country apply the rule more readily, and with a much closer scrutiny, than do the courts of this country exercising the like jurisdiction. *Ralston v. Smith*, 11 H. L. C. 223; *Harwood v. Railway Company*, 11 id. 654; *Jordan v. Moore*, Law Rep. 1 C. P. 624; *Kay v. Marshall*, 8 Cl. & Fin. 245; *Bush v. Fox*, 5 H. L. C. 707; *Tetley v. Easton*, 2 C. B. N. s. 706; *Horton v. Mabon*, 12 id. 437; *Ormson v. Clarke*, 14 id. 475; *Parkes v. Stevens*, Law Rep. 8 Eq. 358; s. c. Law Rep. 5 Ch. App. 36; *Envelope Company v. Seymer*, 5 C. B. N. s. 164; *White v. Toms*, 17 Law Times, N. s. 319; *Ralston v. Smith*, 11 C. B. N. s. 471; *Ormson v. Clarke*, 13 id. 337; *Ralston v.*

Smith, 9 id. 117; *Saunders v. Aston*, 3 Barn. & Ad. 881; *Seed v. Higgins*, 8 El. & Bl. 743.

For these reasons, we are all of the opinion that the claim of the improvement described as the employment or use of two deflecting plates, one placed on each side of the circular saw, for the purposes set forth in the specification, is void, because it does not constitute a patentable invention.

Suppose that is so, still it is insisted by the complainants that the decree of the Circuit Court should be affirmed in respect to the second and fourth claims of the patent.

Clamps are employed or used by the complainants, arranged as shown, so as to have a lateral elastic movement, independent of the roller-beds to which the clamps are attached, for the purposes set forth in the second claim. Admit that the claim is a valid one, still it is insisted by the respondents that they do not infringe that part of the patented invention, and, consequently, that the decree of the Circuit Court should be reversed.

Four adjustable feed-rollers are shown in the machine of the respondents, and in front of them there is a pair of clamps, of peculiar construction, the object and only practical effect of which, it seems, is to hold the upper edge of the stuff to be sawed in proper position while it is in contact with the saw. Evidently they differ in form, method of attachment, purpose, and use from those described in the specification of the complainants. Instead of that, the clamps described in the complainants' patent are attached to the inner ends of the roller-beds, so that there are two journals at the back part of each clamp, which fit in boxes, and work or slide in recesses in the top and bottom pieces of the roller-beds.

To that it may be added, that the action of the clamps in the complainants' machine is governed by the set-screws which bear against rubber springs back of the boxes, the distance of the lateral vibration of the clamps being regulated by the stops, which are arranged to pass through the top pieces, the object of the arrangement being to give the clamps the ability to have a lateral elasticity and vibratory movement independent of the roller-beds, for the purpose, as stated in the claim, of compensating for the varying thickness of the different pieces of stuff,

and to keep the stuff to be sawed in a proper relative position to the saw.

Competent experts testify that the clamps in the machine used by the respondents have no lateral elastic or vibratory motion independent of the roller-beds, and that they cannot perform the functions of the clamps described and claimed in the patent set forth in the bill of complaint; and the court is of the opinion, from an examination of the models exhibited, that the testimony of the expert is correct.

Keeping in view what has already been remarked, a few additional observations will be sufficient to dispose of the questions arising under the fourth claim of the specification, in which the complainants claim the employment of an adjustable bed, with clamps as described, in combination with the saw, when the saw has a stiffening plate in line with the adjustable bed, by which the stiffened or rounded side of the saw is made the line side.

Taken as it reads, the fourth claim does not include a deflecting plate, and only a stiffening plate on one side of the saw; and, if not, it is difficult to see how the devices claimed in the combination will permit the stiffened or rounded side of the saw to be made the line side, unless the deflecting plate is added to the claimed combination. Add the deflecting plate to the combination, and it is quite clear that the claim may include parts sufficient to be operative; but when such stiffened side is thus made the line side, and the clamps embrace the saw as described, it is quite essential that the clamp on the line side should have a lateral elasticity with respect to the bed, and also the described swinging motion. Neither the clamp on the line side or the one on the opposite side in the respondents' machine have any lateral elasticity with respect to the roller-bed, or a swinging motion, and the one on the line side of the saw has no lateral motion whatever when the machine is in operation.

Differences of opinion may possibly exist upon that topic, but all must agree that the claimed combination includes the clamps, and that infringement is not proved, unless it appears that the respondents use the entire combination. Having already decided that the respondents do not use the clamps of

the complainants, it is unnecessary to pursue the inquiry, except to say that it is settled law, that, where the respondent in constructing his machine omits one of the ingredients of the complainant's combination, he does not infringe the complainant's patent. *Gould v. Rees*, 15 Wall. 194; *Prouty v. Ruggles*, 16 Pet. 341; *Vance v. Campbell*, 1 Black, 427; *Gill v. Wells*, 22 Wall. 28.

Suffice it to remark, that, in view of these conclusions, it becomes unnecessary to examine the errors assigned in respect to the rule of damages.

Decree reversed, and cause remanded with directions to enter a decree dismissing the bill of complaint.

COMMISSIONERS OF JOHNSON COUNTY v. JANUARY.

1. Where, upon the performance of certain conditions precedent, the issue of bonds to a railroad company by the board of commissioners of a county in Kansas is authorized by law, the bonds, when issued, if they recite such performance, are, in the hands of a *bona fide* holder for value, binding upon the county.
2. The acceptance and holding by the county of the certificate of stock of the company, the issue and delivery of the bonds to the company, and the payment of interest on them for a time, cured the defects, if any existed, as to the order for submitting the question of subscription to a popular vote, and authorized a *bona fide* taker of the bonds to presume that every thing necessary to their validity had been properly done.
3. The fact that the act under which the bonds were issued is erroneously referred to in their recitals does not render them void.

ERROR to the Circuit Court of the United States for the District of Kansas.

The case is stated in the opinion of the court.

Mr. Nelson Cobb for the plaintiffs in error.

The bonds in question derive no validity from the act of Feb. 25, 1868, as it was expressly repealed by the fourth section of the act of Feb. 27, 1869, without any saving clause as to pending proceedings. The election, ordered when the former law was in force, not having been held until after the last law took effect, was, with all the subsequent action to which it