

There is no proof that when he left Hong Kong he had not sufficient provisions for the usual voyage on which he was bound.

Denied.

He had the right to change from his course, by the way of the Cape of Good Hope, to by the way of the Horn.

Denied.

Malice means intentional wrongdoing, from hatred, revenge or a desire to injure.

Denied.

If defendant deprived the crew of food from good motives, with desire to husband his resources, the verdict must be, not guilty.

Denied.

Malice must be found by the jury on the part of the captain against the whole crew or the verdict must be, not guilty.

Denied.

The first mate is part of the crew.

Denied.

The captain was not obliged by statute or by law to furnish any vegetable food except peas, rice and barley.

Charged.

The fact that the captain has no pecuniary interest in decreasing the quantity of food is to be taken into consideration by the jury.

Charged.

The defendant was acquitted.

CAMPBELL PRINTING-PRESS & MANUFACTURING CO. V. DUPLEX
PRINTING-PRESS CO.

(Circuit Court, E. D. Michigan. January 17, 1898.)

1. PATENTS—SPECIFICATIONS.

Where the specifications describe the machine with particularity and detail, and the file wrapper, specification, and drawings contain no suggestion of any alternative arrangement of parts, and a studied repetition, to avoid conflict with prior constructions, of the phrases "substantially as described," etc., is appended to each claim, the patent is limited to the precise construction shown.

2. SAME—PRINTING PRESSES—INFRINGEMENT.

Where the horizontal stationary type beds of defendant's machine would not work in complainant's machine, nor the vertical type beds of the latter work in the machine of the former, without reconstruction, such interchangeability or noninterchangeability is an important test in determining the question of infringement.

3. SAME—EQUIVALENTS.

Complainant having made the position of his type beds and other arrangements relative to the web-feeding mechanism, and impression cylinders an essential feature of his press, he must be restricted to that construction, unless defendant's horizontal type beds or some other part of his machine are mere equivalents, substituted in an arrangement of parts in other respects a duplication. He cannot have the benefit of the doctrine of equivalents if either more or less than his combination is essential to the operation of defendant's machine.

4. SAME—PRESUMPTIONS.

The presumption from the granting of a later patent relating to the same subject-matter is that there is a substantial difference between the inventions, and this presumption is fortified by the success of the machines under the later patent, and the fact that the machines under the earlier one did not meet the requirements of the trade, so that the patent has remained moribund for nearly three-fourths of its term.

5. SAME.

Where the owner of a patent neglects for 10 years to reduce his invention to practice, or even to put his conception into a tangible form, it seems to be a mere disembodied idea, which, whatever its merit, is not entitled to equitable aid, or within the spirit of the patent system, which requires diligence in giving to the public the benefit of the improvement.

6. SAME.

Where other skilled workers in the art, working under the plans and specifications of complainant's claim, could not produce a printing press with type beds located as are defendant's type beds, the latter machine is not an infringement.

7. SAME.

The use of the phrases "substantially as described," and "substantially as and for the purposes set forth," restricts the invention to the mechanism described and designated by reference letters and shown in the drawings.

8. SAME—CONSTRUCTION OF CLAIMS.

While the specifications may be referred to, to limit the claim, they can never be made available to expand it.

9. SAME—KIDDER AND STONEMETZ PATENTS.

The Kidder patent, No. 291,521, for a printing machine, and the Stonemetz patent, No. 376,053, for a web-printing machine, construed, and *held* not infringed.

This was a suit in equity by the Campbell Printing-Press & Manufacturing Company against the Duplex Printing-Press Company for alleged infringement of two patents for improvements in printing presses.

Louis W. Southgate and Geo. H. Lothrop, for complainant.

T. H. Alexander, Arthur E. Dowell, and Dallas Boudeman, for defendant.

SWAN, District Judge. Complainant is owner of letters patent No. 291,521, granted January 8, 1884, to Wellington P. Kidder, for a printing machine, and No. 376,053, granted January 3, 1888, to John H. Stonemetz, for a web-printing machine. Its bill charges the defendant with infringement of both said patents by the manufacture and sale of a certain web-printing machine.

In January, 1895, a preliminary injunction was granted by this court against the defendant, restraining it from the manufacture and sale of the alleged infringing machine until the further order of the court, but directing that the injunction be stayed pending an appeal to the circuit court of appeals, so far as the same would affect the making, shipping, or selling of certain completed and uncompleted machines in defendant's possession upon the defendant filing a bond in the penal sum of \$7,000 to answer to the complainant for any damages or profits accruing by reason of the making or sale of said machines then completed or in course of construction. This injunction was granted out of deference to the decision of the late Judge Carpenter, in a suit brought July 11, 1892, by the complainant against Marden

& Rowell in the circuit court of the United States for the district of Massachusetts, wherein the validity of certain claims of the Kidder and Stonemetz patents was passed upon, and a preliminary injunction awarded against the defendants. An appeal was taken from the injunction order, which forbade the further use of the alleged infringing machine. Pending this appeal the suit was compromised by complainant and Marden & Rowell, and for that reason the appeal was dismissed, as there no longer existed any real controversy. While this appeal was pending Judge Carpenter entered a final decree for complainant, from which the defendant appealed. The circuit court of appeals of the Second circuit vacated the final decree made by Judge Carpenter, thereby depriving it of all effect as an adjudication upon the validity of the patents involved and the question of infringement thereof by the defendant. A supplemental bill filed before this last decision of the court of appeals has been voluntarily dismissed by the complainant because of that decision. The defendant admits that it sold, prior to July 11, 1892, the machine passed upon by Judge Carpenter in the suit against Marden & Rowell in Massachusetts, and that, after it was notified of complainant's claim that defendant's machine was an infringement of the Kidder and Stonemetz patents, defendant has continued to make and sell printing presses substantially like that it made and sold to Marden & Rowell. Complainant purchased the Kidder patent May 31, 1892, and the Stonemetz patent June 25, 1892, a few weeks before the suit brought in Massachusetts.

In addition to the letters patent put in evidence in the Massachusetts case, the record in this case contains three foreign patents,—the Senefelder English patent of 1891, the Baummayer French patent of 1845, and the Tannahill English patent of 1854, which were presented to the court, and were to some extent considered by the circuit court of appeals upon the appeal by defendant from the order of this court granting a preliminary injunction. In passing upon the propriety of that order the court of appeals said:

"We are to consider the correctness of the order from the same standpoint as that occupied by the court granting it, and if we find, after a consideration of the questions presented to that court for its action, that its legal discretion to grant or withhold the order was not improvidently exercised, we should not disturb its action. The judgment of the circuit court of Massachusetts is entitled to the same consideration in this court, as a reason for granting a preliminary injunction, as it had in the court below. * * * Upon a final hearing upon the merits, it would be different; for then considerations of comity might properly have weight with the court below, which we should not hesitate as an appellate court to disregard in finally settling the rights of the parties." 16 C. C. A. 220, 69 Fed. 252.

Again (page 225, 16 C. C. A., and page 255, 69 Fed.), Judge Taft says:

"We do not think, therefore, that on a hearing for a preliminary injunction the fact that the Massachusetts court did not have before it the Tannahill patent ought to affect materially its decree as a basis for preserving the status quo pending the hearing in the court below"—

And held that an adjudication of another circuit court, finding the validity of a patent and its infringement, is a sufficient ground, not only in the circuit court for an order granting a preliminary injunction, but also in the appellate court for affirming such order.

Again (page 226, 16 C. C. A., and page 256, 69 Fed.), Judge Taft says:

"We reach this conclusion without any intention of foreclosing the action of the court below or of this court upon any of the points so mooted when the case comes on for final hearing."

In view of these limitations put by the appellate court upon the effect to be given to its decree affirming the injunction order of the circuit court, and in view of the fact that the decision of Judge Carpenter was vacated and has ceased to be *res adjudicata* of the matters in controversy upon which he passed, this court is not only at liberty to pass upon the validity of the patents sued upon and the question of infringement, but is required to decide these issues upon its own views of the merits of the controversy, untrammelled by any expressions *arguendo* of the circuit court of appeals of this circuit.

The Kidder Patent.

This patent was issued January 8, 1884, in this country, and letters patent granted in England for the same invention for the term of 14 years on the 10th of October, 1882, and therefore, under section 4887 of the Revised Statutes, the term of the patent expired here October 10, 1896. The claims charged to be infringed by the defendant are Nos. 1, 2, and 7. These are, respectively, as follows:

"(1) In combination with a stationary bed and an impression cylinder traveling over it, guides for the web, one at each side of the impression cylinder, and a feeding device which feeds the proper length of web while the impression is thrown off, all substantially as described.

"(2) In combination, two stationary beds, two traveling impression cylinders, and a feeding mechanism, substantially as described, combined together and with suitable guides, substantially as described, and operating to print both sides of a web, as set forth.

"(7) The web perfecting press above described, consisting of the two stationary beds, the two traversing impression cylinders, the two sets of inking apparatus, the web-guiding mechanism, substantially as described, and the intermittently operating web-feeding mechanism, substantially as described, all operating together substantially as described."

The proofs show without contradiction that prior to the commencement of this suit but two presses were made under the Kidder patent and that only one of these was sold or used; that the utmost capacity of that press was 1,200 sheets per hour; that the press could not be operated with the type beds in horizontal position, or without the throw-off attachment to prevent the contact of the web with the type bed on the return movement of the impression cylinder; that running the press at a greater speed than 1,200 sheets per hour would break the web; that the two type beds are set between two upright frames; and that, if horizontally placed, would present one form upside down, and it would be impossible to bolt the plates on the bed, and the type would fall out of the upper form. The defendant's press is capable of running off from 3,500 to 4,000 sheets per hour. This, of itself, tends to show patentable invention over the Kidder press. *Ballard v. McCluskey*, 58 Fed. 880-882.

Kidder's was in no sense a primary invention. Its every element was old, and selected from prior patents and machines well known to the trade. His patent does not disclose a single original device which

enters into its combinations. From his file wrapper it appears that he laid claim to parts of his machine, but these were rejected by the patent office, and he submitted to its action; that his original first claim for an improved method of presenting the web to the form or impression cylinder was twice rejected, as anticipated by Cummings' patent of October 22, 1868, and this he also accepted as final. His original claims 2, 3, and 11 met the same fate for the same reason. Claim 2 of his original application read thus:

"(2) In combination with a form and impression cylinder, guides for the web, one at each side of the impression cylinder, and a feeding device which feeds the proper length of web, while the impression is thrown off, all substantially as described."

This, on the requirement of the patent office, he amended by substituting for the word "form" the words "stationary bed," and after the word "cylinder" the words "traveling over it," to avoid the Cummings patent, in which the cylinder is stationary and the platen is reciprocated; but this reversal of parts is not invention. *Many v. Jagger*, 1 Blatchf. 387, Fed. Cas. No. 9,055; *Hartshorn v. Barrel Co.*, 119 U. S. 664, 675, 7 Sup. Ct. 421; *Factory v. Warner*, 1 Blatchf. 278, Fed. Cas. No. 1,521.

With this amendment his original second claim became claim 1 of the patent as issued. A corresponding change was made in his original claim 3, by substituting for the word "form" the words "two stationary beds," and adding before "impression" the word "traveling," after which that claim became the present claim 2 of his patent, which is also qualified by the phrases "all substantially as described" and "as set forth," qualifying the words "operating to print" in the fourth line of claim 2 of the patent. His drawings and specification describe only a press having vertical and parallel stationary beds, between which the impression cylinders travel up and down. There is not a word in his specification or a line in his drawings that suggests any other position than the vertical for the type bed, whether one or two type beds are used. Figs. 3 and 4 of his drawings are simply illustrations of what he calls "this main feature of my invention, where only one form is used, instead of two forms, as in my perfecting press"; the word "form" being used as a synonym for "type bed." "This main feature" of his invention, so called, is the presentation of the web to receive the impression and the delivery of the printed sheet, the claim for which was rejected by the patent office. Figs. 5 and 6 he describes as "side elevations showing the impression cylinders in position to begin the impression stroke," and as "showing the opposite side and the impression cylinders after the impression stroke." In the first paragraph of page 1 of his patent he claims to have "invented certain improvements in printing machines, of which the following is a specification, reference being had to the accompanying drawings, showing a printing machine which is the best form of apparatus now known to me for putting my invention into practice. * * *" On page 3 of his patent, line 65, he says:

"I am aware of patent No. 83,471, of 1868, granted to Royal Cummings, and disclaim all that is therein shown; my mode of presenting the web differing

radically from his, in that in his mode the feed is simultaneous with the printing, while in my mode the feed takes place while the impression is thrown off."

It is the contention of the complainant that Kidder is entitled, under his patent, to claim, broadly, a printing machine having either vertical or horizontal type beds. Assuming that his combinations were patentable, which to me admits of some doubt, in view of the state of the art, and the facts that his machine is scarcely an improvement in the art, and certainly not a commercial success, that its capacity did not exceed that of presses then in use, and it failed to meet the demands of the trade for expedition and cheapness, while the defendant's machine has met with a large sale, and prints more than three times as rapidly as Kidder's, while but one of the latter has been put in use since the issue of the patent in 1884, a radical difference in operation and mechanism between the Kidder machine and that of defendant is strongly, if not conclusively, suggested. The idea of printing from a continuous web was confessedly old. It had been done by Tannahill in 1840, Montague in 1853, Smith and Orris in 1860, by Cummings in 1868, and by others. Kidder, therefore, could only patent the device by which such printing could be effected, and, as is said in *Wicke v. Ostrum*, 103 U. S. 469, "by his patent he appropriated to himself only so much of the field of invention which his idea embraced as was covered by the machine described in his specification and claimed in his application."

A fair test of the scope of his claims and the interpretation to be given to his specification and drawings to apprise the world of the extent and character of his invention would be the machine produced by a skilled mechanic, taking them for his guide in the work of construction. No such workman would proffer either a perfecting or nonperfecting press with horizontal type beds as satisfying the requirements of either claims, drawings, or specification.

It is argued for complainant that, by claims 1, 2, and 5, Kidder covered both the horizontal and vertical stationary beds, and that claims 1 and 2, by the use of the words "vertical" and "vertically" in claim 5, secure to Kidder horizontal type beds. Claim 5 reads as follows:

"(5) In combination, the two vertical stationary beds, their traversing impression cylinders, and the carriage reciprocating vertically between the beds, arranged together so that the type beds face each other, and the carriage reciprocates vertically between them, as set forth."

It is clear that the arrangement of the beds to face each other, "as set forth," is both an essential element of Kidder's machine, as the same is described and illustrated in the specification and drawings, and is also the same arrangement implied in claims 1, 2, and 7. *McCormick v. Talcott*, 20 How. 407. No skilled mechanic would regard the language of this claim as calling for any other arrangement of the type beds or the cylinders than such as set forth in the drawings and specification, which simply describe and portray more exactly, by the use of the words "vertical" and "vertically," the exact form and position of two of the elements of claims 1 and 2, as is made clear by the references to the specification and drawings contained in the words "substantially as described" and "operating * * * as set forth."

The use of the definite article in claim 5, preceding the words "vertical stationary beds," points only to "the stationary beds" mentioned in claims 1 and 2, and the specification and drawings to which the inventor has expressly referred in his patent, for none other are even hinted at in either. *National Meter Co. v. Yonkers Water Com'rs*, 149 U. S. 48-55, 13 Sup. Ct. 774, second paragraph; *Manufacturing Co. v. Ladd*, 102 U. S. 409, 410.

The words "vertical" and "vertically," in claim 5, are clearly implied in claims 1 and 2 by the phrases "all substantially as described," "substantially as described," and "operating to print both sides of a web, as set forth." The manifest purpose of claim 5 was not to expand the meaning of "stationary beds" in claims 1 and 2, but to secure to Kidder the combination of the only stationary beds described in the patent, the traversing impression-cylinders, and the reciprocating carriage, "arranged together, so that the type beds face each other, and the carriage reciprocates vertically between them, as set forth." The combination in claim 5 is not in terms covered by claims 1 and 2; yet it is clear that it is not an independent invention, or a machine complete in itself, but is designed for use with the combination embraced in claims 1, 2, and 7; for without the reciprocating carriage Kidder's machine would be inoperative, and his specification makes it an essential as the vehicle on which the cylinders are mounted and moved in his construction. The carriage could not thus be used in the combinations covered by claims 1, 2, and 7 of the patent, if these are held to include horizontal type beds not facing each other, for it could not be operated to print both sides of the web "as set forth," for the undisputed reasons stated in the proofs, nor could it reciprocate vertically between them, as specifically required by claim 5. Unless claim 5 be held auxiliary to the devices covered by claims 1, 2, and 7, and intended to co-act with their elements to a common end, it would be void, because "it would attempt to unite what could not be united in a single patent." *Densmore v. Schofield*, 4 Fish. Pat. Cas. 154, Fed. Cas. No. 3,809; *Hogg v. Emerson*, 6 How. 483. It is, of course, true that an inventor, after claiming a combination, may also claim for a combination of some of its parts, if such combination is new and subsidiary. *Roberts v. H. P. Nail Co.*, 53 Fed. 920.

It seems to me clear, from these considerations, the conspicuous absence of the adjective "horizontal,"—the most natural expression,—qualifying the words "stationary beds" in claims 1, 2, and 7, and in the specification, the fact that Kidder never constructed any other than a vertical bed, that the horizontal bed could not be used in his machine without reconstruction or invention, and that if, in claims 1, 2, and 7, the inventor had used the word "horizontal," before the words "stationary beds," it would be impossible to reconcile his claim, specification, and drawings, and in view of the precision which he has evinced in the description of his press and its method of operation (page 2 of patent, lines 24 to 57, inclusive), that the "stationary beds" in claims 1 and 2 are necessarily the "vertical stationary beds" mentioned in claim 5. The particularity and detail of the specification, the absence of suggestion in the file wrapper, specification, and drawings of any alternative arrangement of parts,

and the studied repetition, to avoid conflict with prior constructions, of the qualifying phrases appended to each claim, pointing to the designated construction, are to me convincing, in view of the state of the art, that Kidder had in mind only, and his press must be limited to, the precise construction shown in the patent.

Weir v. Morden, 125 U. S. 98, 104-108, 8 Sup. Ct. 869, presents a strikingly analogous question of the construction to be given to one claim of a patent where a subsequent claim is qualified by the phrase "substantially as shown." See, also, *McCormick Harvesting-Mach. Co. v. C. Aultman & Co.*, 16 C. C. A. 259, 69 Fed. 393, 394; *Washing Machine Co. v. Tool Co.*, 20 Wall. 342.

In *Deering v. Harvester Works*, 155 U. S. 286, 294, 15 Sup. Ct. 118, the suit was brought for the infringement of Olin's patent for an improvement in harvesters. The court say:

"The real question in this case, as between two devices, is whether the first claim of the Olin patent, describing a swinging elevator located upon the grain or ascending side of the main belt, pivoted at its lower end and movable at its upper end, can be construed to cover a similar device located upon the stubble side, pivoted at its upper end and swinging at its lower end. We are of opinion that it cannot."

This was held because the patent in suit was not for a pioneer invention, and because of the statements of the specification and the absence of suggestion of another location for the elevator, which was an element in all but one of the claims.

It is apparent that defendant's horizontal stationary type beds could not be made to work in the Kidder machine without reconstruction of the latter, nor could Kidder's vertical type beds operate in defendant's machine without an entire rearrangement of parts. This interchangeability or noninterchangeability is an important test in determining the question of infringement. *Miller v. Manufacturing Co.*, 151 U. S. 208, 14 Sup. Ct. 310. Mr. Livermore, complainant's leading expert, says upon this subject:

"Cross-Ques. 270. Is not the operation of respacing the web in the machine described and shown in the Kidder patent dependent on some means for throwing the cylinders away from the printing plane, in order to enable the web to be respaced as described in said patent, while the impression is thrown off? Ans. Yes; in the machine shown and described in the Kidder patent the operation of respacing the web is dependent upon the separation of the cylinders from the printing planes in their return stroke in order to secure the nonimpression interval in which the web is respaced. I think I have already stated this before in this deposition.

"Cross-Ques. 271. Could the Kidder press be arranged horizontally, and print from ordinary movable type? Ans. I suppose you refer to the perfecting-press of the Kidder patent. I should judge that it could not, for the reason that one of the type beds would face downward, and the type would be likely to be jarred out of the forms on the downwardly-facing bed in the operation of the machine. I believe there has been testimony to that effect before in this case on the part of those more familiar with the practical operation of this kind of apparatus than I am, and I see no reason to question the soundness of their statements.

"Cross-Ques. 272. Could the web be perfected by the cylinders, and transferred from one to the other, as described by Kidder, if the beds were not face to face and cylinders did not travel between the beds? Ans. The Kidder patent so describes these elements, and describes no other arrangement, so that the web could not be perfected as described in the Kidder patent, unless the arrangements suggested in the question were present.

"Cross-Ques. 274. Could a feed mechanism like Kidder's, which feeds the

proper length of web 'during the back stroke of the impression cylinder,' be usefully employed in defendant's machine without making other alterations? Ans. No; a feed mechanism which feeds the web during substantially the whole of one stroke of the machine, as does this specific feed mechanism of the Kidder patent, would not be operative in defendant's machine without further alterations in said machine."

Again:

"Cross-Ques. 167. You have said that Kidder's beds are vertical, parallel, and facing one another. Could they be otherwise in his perfecting press? Ans. That depends on what you mean by his perfecting press. In the specific press shown by him, I should say they could not depart materially from that position and arrangement and operate satisfactorily; but I think that other arrangements might be devised that would embody Kidder's invention,—I mean would embody what, in comparison with the prior state of the art, is in my opinion a novel combination of elements, combined and operating in a novel manner to produce a new result, as pointed out by me in answer to question 5 of my direct examination.

"Cross-Ques. 168. Is there any suggestion in Kidder's patent that the beds of his perfecting press might be arranged to face other than in opposite directions? Ans. No. The patent merely describes a single specific operative structure embodying the invention. There is no statement in the specification that the vertical arrangement, or that the face to face arrangement, of the printing beds is essential."

Cox and Stockbridge, for defendant, agree with Livermore (Cox's testimony) that the feeding mechanism of defendant's press cannot be used in Kidder's, and, vice versa, is amply sustained by the reasons which he gives, and is confirmed by that of Stockbridge. There is much other testimony in the record confirming the views of Livermore, Cox, and Stockbridge; but it is not needed to show what is obvious on the inspection of the machines.

Hoffheins v. Russell, 107 U. S. 132, 140-147, 1 Sup. Ct. 570, and Wicke v. Ostrum, 103 U. S. 461, 469, are instances of devices held not infringed because parts of one could not be substituted in the other without rearrangement. Kidder, therefore, has made the position of his type beds and other arrangement relative to the web-feeding mechanism and impression cylinders an essential feature of his press, and his rights under the patent must be restricted to the construction which he has chosen unless defendant's horizontal type beds or some other part of his machine are merely equivalents substituted in an arrangement of parts in other respects a duplication of Kidder's. He cannot have the benefit of the doctrine of equivalents if either more or less than his combination is essential to the operativeness of the defendant's machine. Water-Meter Co. v. Desper, 101 U. S. 332-337; Crawford v. Heysinger, 123 U. S. 589, 8 Sup. Ct. 399; Boyd v. Tool Co., 158 U. S. 260, 15 Sup. Ct. 837; U. S. v. Berdan Fire-Arms Mfg. Co., 156 U. S. 552, 555, 15 Sup. Ct. 420; Ney v. Manufacturing Co., 16 C. C. A. 293, 69 Fed. 405-407.

Of course, if Kidder's were a pioneer invention, no mere change of the position of any of the parts, not necessitating a reconstruction of the machine, and obviously evasive, would relieve an infringer; but we are dealing with a patent without a single novel element. It is sought to expand its claims to cover a construction which complainant's own expert, Wood, admits was unknown

to the art before Cox devised it. In cross-question 226 Wood is asked:

"Did the art show at the date of Kidder's application a web-perfecting press containing two stationary beds, one above the other, so arranged that the printing forms, when laid on those beds, were horizontal one above the other, and facing in the same direction, in combination with impression cylinders traveling over said beds? Ans. To the best of my knowledge and belief, it did not.

"Cross-Ques. 227. Where do you first find in the art the structure or mechanism described in the last question, No. 226? Ans. In United States patent No. 459,813 of September 2, 1891, to J. L. Cox."

Wood repeats this admission.

Complainant's expert, Livermore, says:

"At the date of Kidder's application, was a feed mechanism like that employed by defendant known? Ans. To the best of my knowledge and belief, it was not."

It may be here remarked that, in form and relative position of the type beds and impression cylinders, Kidder's press has its prototype in Kerr's patent of 1870. There are other differences, however, between Kidder's and defendant's machines, equally pronounced. It is an element of Kidder's first and second claims that the feeding mechanism "shall feed the proper length of web while the impression is thrown off." This implies, of course, if it does not in terms require, a throw-off mechanism, and is effected by such mechanism described in lines 43 to 49, page 2, of Kidder's patent, and is the subject of his sixth claim, which the complainant does not assert to be infringed. Such is not the mechanism nor the operation of Cox's machine. It has no throw-off,—to use the language of Wood, complainant's vice president, no "auxiliary cylinder manipulating device." Wood says:

"In the Kidder machine, however, there is an auxiliary cylinder manipulating device which operates as in my answers to cross-questions 205, 206, etc. * * * In the Cox machine and the Cox model referred to I do not find this auxiliary cylinder manipulating device. The web-feeding device is so arranged in the said Cox devices that all the proper length of web may be fed while the cylinder is completing one reverse when off the impression, and the auxiliary device referred to is therefore not necessary."

Notwithstanding Wood's error in stating that the web is fed in Cox's machine "when off the impression," this is a direct concession of a vital difference between Kidder's and Cox's combinations. Wood also admits that the auxiliary cylinder manipulating device or throw-off mechanism is necessary to the Kidder press, and without it the web could not be fed.

The difference between the Kidder and Cox feeding mechanisms is well stated by A. P. Warner, an experienced printer and pressman, in answer 8, Detroit record, pages 292, 293. He defines the throw-off mechanism to be "a mechanical device whereby the cylinder may be moved away from the type and bearer line, so that no impression will be taken as the bed passes under the cylinder or the cylinder over the bed." And in answers 9 and 12, Detroit record, pages 292, 293:

"I should say that Kidder's object in providing these throw-off devices was that he might throw the cylinders from their forms in their return stroke, which would

give him an opportunity to feed the proper length of web while the impression was thrown off mechanically. * * * As Kidder has only provided an intermittent feeding device, he must feed his paper while the impression is thrown off, and consequently has provided the throw-off device for that purpose."

In answer 13 he says:

"There are no such devices used or required in defendant's press; on the contrary, the feed used on defendant's is a rotary and continuous one, and the impression cylinders are never thrown off, but remain on the type line."

Many practical printers and pressmen familiar with the operation of the machines corroborate Warner upon this point, and demonstrate beyond doubt the correctness of his testimony. Cox emphasizes the same fact in his patent of 1892, page 4, line 25, in the statement therein that "the web is being all the time fed into the press by the calendars, even during the taking of the impression." See, also, lines 85 to 155, where the statement is repeated; also, claim 9, that the web "can be fed into and delivered from the press continuously, and yet have portions thereof stopped during the taking of an impression thereon, substantially as specified."

The intimation of the court of appeals (16 C. C. A. 225, 226, 69 Fed. 254, 255) is that the Tannahill patent of 1854 "would confine the scope of the Kidder invention to the particular form therein shown of moving a cylinder in a moving fold of a web," and adds, "But that particular form seems to be shown in the defendant's machine." This, though not expressed as a final conclusion, clearly disapproves Judge Carpenter's view that "the substance of the Kidder patent in the original patent and the improvement of Stone-metz seems to be a production of a device which shall print a web of paper stationary at the two ends thereof, by means of an impression cylinder moving in the moving fold of that web." The court of appeals held that the Tannahill machine, if operative, would so print by means of such a cylinder so moving. The correctness of that conclusion is demonstrated by the actual working of the model of the Tannahill machine, which was not before that court. Inspection of it and its operation discloses no patentable difference between it and the combinations of claims 1 and 2 of the Kidder machine. It can scarcely be claimed that the fact that one end of Tannahill's web is not exactly stationary would excuse Kidder, if the Tannahill patent were in force, from the charge of infringement. If Tannahill anticipated Kidder's claims 1 and 2, Kidder would certainly be limited to his specific construction. The court of appeals, however, rather intimate that the guides in claim 1 of Kidder's patent "are not present in the Tannahill patent in such a way as to be effective as such." If, as it seems to me, Kidder, for the reasons above given, should be confined to his specific construction, which in other respects is not invaded, it is perhaps superfluous to discuss this intimation; but with deference it is suggested that the function of the guides in both Tannahill's and Kidder's devices and their arrangement is substantially the same,—namely, to lead the web into the proper position between the impression cylinders and the type bed. There seems to be no defect in the performance of that function by Tannahill's guides.

Whether Kidder took his guide from Tannahill or not is immaterial, for he disclaims all that is shown in the Cummings patent of 1868, and his attorney, after failing to cover the functions of the guides, canceled the claim therefor and admitted that "the paper-feed rolls of Cummings undoubtedly perform all the functions performed by the applicant's guides excluding register guide, h⁴;" while Livermore, as shown supra, supports the novelty of Cox's feed mechanism.

In the seventh claim of his original and amended applications Kidder attempted to include register guide, h⁴; but the examiner held this anticipated by patent No. 209,674, to Grimshaw, of November 5, 1878. There are other noticeable differences between the register in Kidder's and defendant's machines. In Kidder's, the register guide, h⁴, is an adjustable shaft, under which the paper, after leaving impression cylinder, d, must be carried, "in order to obtain a correct register of any desired length of sheet to avoid the need of any exact relative adjustment of the types in each form." In defendant's machine, the patentee says, "all that is necessary to make a perfect register is to adjust the position of the roller, m', without requiring any adjustment of the paper feeding or delivering rolls or the impression cylinders." Considering that registers were old devices, and their forms were innumerable, it does not seem that the reservation of the register guide, h, from the admission that Cummings' feed rolls perform all the functions of Kidder's guide, adds any strength to Kidder's claims. He certainly renounced all claim to that guide by submitting to its rejection by the patent office. If Kidder has not taken the Tannahill guides, he has certainly appropriated Cummings', which his patent disclaims. Examination of the guides of Bold, 1822; Carr and Smith, 1840; Montague, 1853; Tannahill, 1854; Cummings, 1868; Kerr, 1870; and Cox, 1878, 1879, 1882,—shows only formal variations between them and Kidder's. Cox's patent of 1879 shows rollers performing the same functions in substantially the same way, with "guides, one on each side of a stationary impression cylinder, and a feeding device which feeds the proper length of web intermittently," which is what Kidder uses.

In view, therefore, of the state of the art, while Kidder might be entitled to claim the combinations he has set forth, although each element thereof is taken from prior machines, and in some, notably Tannahill's, Carr and Smith's, and Cummings', and others, two or more of the elements claimed by Kidder are found in combination, it must necessarily follow, as it seems to me, that Kidder should be restricted to the "form of apparatus for putting his invention into practice" delineated in the drawings and described in the specification, to which he refers, and defendant has not infringed claims 1, 2, or 7 of Kidder's patent. Of course, the defendant must also be acquitted of infringement of the seventh claim if it has not infringed the first or second. The second claim is simply a duplication of the elements of the first, with the addition of the guides. The presumption from the granting of Cox's 1892 patent, in view of the issue of the Kidder patent, is that there is a substan-

tial difference between the inventions and that the latter is not an infringement of the earlier patent. *Boyd v. Tool Co.*, 158 U. S. 260, 15 Sup. Ct. 837; *Ney v. Manufacturing Co.*, 16 C. C. A. 293, 69 Fed. 405-408. That presumption is fortified by the success of the defendant's machine, and the fact that Kidder's has not met the requirements of the trade, nor justified its manufacture, and has remained moribund for nearly three-fourths of its term. This consideration is regarded by the courts. *Hoyt v. Horne*, 145 U. S. 308, 12 Sup. Ct. 922, second paragraph.

Complainant's argument that the throw-off device of the Kidder press should not be held an element of Kidder's first claim is not sustainable. He has made it material, and cannot now discard it; but, if it were discarded, it would not aid the case of complainant under the testimony of its own expert, Mr. Livermore. Complainant would then be confronted with the defense of prior use, which, to say the least, is supported by a strong array of intelligent, unimpeached, and uncontradicted witnesses, some of whom are practical machinists. These testify in varied language substantially that in 1877-78 Cox made and used in his business as a printer at Lafayette, Ind., a web-printing machine in which the impressions were made on the web by means of a reciprocating or locomotive impression cylinder, which was moved back and forth on a stationary form of type by pitmen connected to wheels. This printed but one side of the web. After each impression, and while the cylinder was reversing its movement at the end of the stroke, the web was pulled forward over the bed, thereby removing the printed sheet and drawing a portion of the unprinted web forward to be printed while the printed sheets were cut off the web by automatic shears. Defendant's "Exhibit Cox Model A," which was used on the Cox-Eckerson interference hearing before the patent office in 1890, illustrates his Lafayette press. Speaking of the effect of the elimination of Kidder's throw-off mechanism as an element of his first claim, Livermore, in reply to cross-question 477:

"What element, called for in the combination recited in Kidder's first claim, if the throw-off device for removing the cylinder off the printing plane is not an element of said combination, is not represented in said model?"

—Answers:

"There are none. In my opinion the mechanism in said model clearly embodies the combination shown and described in the Kidder patent, and referred to in claim 1 thereof."

While defendant has produced 34 witnesses in support of this defense, many of them do not speak with such definiteness as to the anticipating device as to entitle their testimony to much weight. There are, however, 13 or 14 whose testimony is not open to this criticism, all or most of whom saw it in operation in 1878 or 1879 at the Curtis Block in Lafayette, Ind., and describe its working so as clearly to identify it as possessing the features claimed for Kidder. These are King, who had work done upon it; Smith, a printer, who witnessed its actual operation; Crapp, a manufacturer of woodenware, who assisted in its construction; Paul

F. Cox, a pressman and brother of the inventor, who operated the press in 1879 and describes fully its working; Lovelass, a salesman, who recollected as a particular feature of the press that it stopped feeding when the impression was made; Philbin, a jeweler, who gives a general description of it; Rice, foreman of the Daily Call newspaper, who describes with much particularity the mechanism and operation of the press, and characterizes it generally as "a fully-developed printing press with many new devices"; Vaughn, an implement maker, who also recalls its improvements over prior presses and the movement of the cylinder and of the web, having frequently seen it in operation. Dr. J. M. Smith is equally positive and descriptive from observation of its operation. Johnson, editor of a newspaper, and Townsend, a newspaper publisher of Lafayette, Ind., describe clearly the features and working of the press. Joseph L. Cox, its inventor, is more elaborate and exact in his description. Some of these witnesses testified in the interference between Cox and Eckerson in the patent office, where the evidence established to the satisfaction of the examiners Cox's use of this press at Lafayette in 1878-79.

There is no testimony opposing that of these witnesses. In point of numbers, and definite and positive averments, their evidence more than meets the rigid requirements necessary to this defense. In *Coffin v. Ogden*, 18 Wall. 120-125, it was held that the testimony of five witnesses to prior use brought the proofs within the severest legal tests which could be applied to them, and that defense was held "fully made out." The want of opposing testimony, in addition to the apparent credit to be given to these witnesses, is a feature which distinguishes the case at bar from that of the Barbed Wire Patent, 143 U. S. 275, 12 Sup. Ct. 443, 450, where on a like issue a large number of witnesses were sworn on each side. There is no conflict between the latter case and *Coffin v. Ogden* (which it cites) as to the degree of proof required to establish prior use. Certain it is that if after the lapse of two years from Cox's open use of this Lafayette machine he had sought a patent for it the testimony here adduced would have sufficed to defeat his application, although the only use proved was that made by himself in his own business. *Smith & Griggs Mfg. Co. v. Sprague*, 123 U. S. 249, 257, 258, 8 Sup. Ct. 122. The quantum and quality of evidence adduced by defendant on this point exceeds that offered in *Standard Cartridge Co. v. Peters Cartridge Co.*, 10 Wall. 630, 636, on the question of invention, for in that case the evidence was conflicting.

The Stonemetz Patent.

This was issued January 3, 1888, for a web-printing machine. Thus far it has proved utterly sterile,—an unproductive conception rather than an invention,—no machine having been built under it, as is admitted by Wood, complainant's vice president. It is claimed in explanation of this fact that the Stonemetz Company was advised by three patent lawyers that its patent was tributary to Kidder's and would be pursued as an infringement if made. The testimony cited to this statement is that of Wood, who says that Mr.

Vorhees, a patent lawyer of New York, employed by complainant in 1890 or 1891, gave an opinion "for the benefit of the Stonemetz Company * * * that it would not be clear in view of the Kidder patent * * * in building a press under the Stonemetz patent," and that "early in 1892 L. W. Southgate, patent lawyer and expert employed by the Campbell Printing-Press & Manufacturing Company, gave an opinion for the benefit of the Stonemetz Company to the effect that if it did build under the Stonemetz patent * * * it would infringe patent to Kidder," and that at some time not stated J. C. Sturgeon, Esq., of Erie, patent lawyer, gave the Stonemetz Company an opinion to the same effect, as he (Wood) was informed by Sturgeon and members of the latter company. Wood does not say that either Vorhees or Southgate advised the Stonemetz Company, and his testimony as to statements of the members of that company and of Mr. Sturgeon as to the latter's opinion are hearsay and incompetent. Perhaps the acquisition of the Stonemetz patent by complainant and the near approach of the expiration of the Kidder patent has thrown a stronger light on Stonemetz's press, and modified the opinions imputed to counsel by Mr. Wood. Now that the patent has become the property of a corporation which manufactures presses, a more charitable view of its imperfections is taken. The effect of such change of ownership is not unnoticed by the courts. *Manufacturing Co. v. Ladd*, 102 U. S. 411.

Stonemetz's file wrapper shows that J. C. Sturgeon was Stonemetz's attorney to prosecute the application for his patent, and had his attention specially called to Kidder's patent, to avoid which he amended Stonemetz's application. Evidently Mr. Wood misapprehended Mr. Sturgeon's statement. It is significant that neither Mr. Sturgeon nor any member of the Stonemetz Company was called as a witness to excuse the failure to manufacture his press. It would be true that, if these opinions of counsel had eventually proved correct, they would have been "for the benefit of the Stonemetz Company"; but this guarded phrase is far from asserting that that company ever heard of or acted upon the opinion, and is in marked contrast with the direct statement imputed to Sturgeon. It seems highly improbable that the owner of a patent would renounce his rights under it on the advice of counsel employed by the owner of an alleged conflicting patent, especially as the Stonemetz patent was not acquired by complainant until June 25, 1892, a few weeks before the suit against Marden & Rowell. It is significant, as bearing on the defense, that Stonemetz's press is inoperative; that the proofs show that the construction of a press ostensibly under Stonemetz's patent was begun by complainant in 1892 and has not yet been completed. Mr. Wood declined to state whether that press was being constructed strictly under the Stonemetz patent or varied from it. He admits that the machine he mentions in answer to cross-questions 689, 690, as built under the Stonemetz patent, is the same machine mentioned in his answers to cross-questions 641-643 of record, where he testifies that it is built under the Kidder patent. He declined to permit defendant's counsel or ex-

perts to examine the alleged Stonemetz machine, "as the machine * * * contains many improvements, the same being inventions which are not yet secured by patent," etc., and admits that the inking device and the web-manipulating devices were improvements, and that the web-feeding devices were different in the uncompleted press from those in Stonemetz's patent, and that the drawings were not precisely like the machines, illustrated in the exhibit, "you [defendant's counsel] mention, but contain improvements which are inventions."

There is evidently nothing in Wood's testimony repelling the charge that Stonemetz's press is inoperative. The inferences from it are strongly to the contrary. The testimony of Mr. Quimby, defendant's expert, is reasoned and positive that the Stonemetz press cannot be made to work profitably. Certainly, if its feeding mechanism is so defective that, as he says, "there can be no certainty that its imprint upon opposite sides of the web will always be opposite each other," its utility is questionable, and the dormancy of the machine is fully explained. Mr. Cox, whose interest in defendant's device is akin to that of Vice President Wood in Kidder's and Stonemetz's, is a press builder, inventor, and operator of printing presses of many years' experience. His reasoning against the utility and practicability of Stonemetz's press is not met by anything in complainant's proofs and is apparently unanswerable. Mr. Livermore, complainant's expert, frankly disclaims "sufficient experience with the actual running of machines of this character to form any judgment" upon the question:

"Do you think that any feed which depended in any degree upon the momentum movement of a looping roller to shift the web would be a reliable and satisfactory operative feed mechanism?"

Mr. Livermore says: "I really do not know anything about it." This detracts materially from the weight of his opinion against the operativeness of the Tannahill press.

Stockbridge, defendant's witness, who served in the patent office for 15 years as assistant examiner on the appeal board and assistant commissioner of patents, speaking of the tenth claim of Stonemetz's patent, affirms his belief to be that:

"No machine has been or can be made which would be practically operative according to the organization and combination disclosed in the Stonemetz patent, which includes what I call the loop-forming device, which consists in the roller, W², and the means of operating it."

The least effect which can be given to this testimony is to discredit the presumption of utility arising from the patent, and if, upon a jury trial, a verdict adverse to Stonemetz were rendered, it could not be set aside upon this record for want of evidence in its support. It is to be regretted that no model accompanied the application for the patent, that the machine has not been exemplified or its operativeness tested, and that neither Stonemetz nor any practical pressman has been called in to defend it.

In *Deering v. Harvester Works*, 155 U. S. 295, 15 Sup. Ct. 118, it was held, in view of prior devices, that the fact that an inven-

tion was of doubtful utility, and never went into practical use, negated a broad construction of the patent, "which would operate rather to the discouragement than the promotion of inventive talent."

In *Clark Thread Co. v. Willimantic Linen Co.*, 140 U. S. 489, 11 Sup. Ct. 846, the failure of Conant to put his alleged invention into visible form in the shape of a machine of itself determined the controversy on the question of infringement. The court there said:

"It is evident that the invention was not completed until the construction of the machine. A conception of the mind is not an invention until represented in some physical form, and successful experiments or projects, abandoned by the inventor, are equally destitute of that character. These propositions have been so often reiterated as to be elementary."

This test is fatal to Stonemetz's claim of invention. During the 10 years of inactivity of the owners of the Stonemetz patent the defendant has been making and selling as many as 60 of Cox's presses per annum. The presumption of the utility of Stonemetz's press is not supplemented even by effort toward its manufacture or sale, nor does it appear, save by the assignment of the patent to complainant, that it has attracted capital, investment, or the faith or interest of the trade. The later patent to Cox creates an equally strong presumption of the novelty and utility of his construction. *Ney v. Manufacturing Co.*, 16 C. C. A. 293, 69 Fed. 405. And this presumption is verified by its successful working and its favor with the craft. Because of these considerations,—notably the neglect of Stonemetz and his assigns for 10 years to reduce his invention to practice, or even to put his conception into a tangible form,—the Stonemetz press, though covered by a patent, seems to me a mere disembodied idea, which, whatever its merit, is not here entitled to equitable aid, nor within the spirit of the patent system, which requires diligence in giving to the public the benefit of his improvement. *Christie v. Seybold*, 5 C. C. A. 33, 55 Fed. 69, 75. On this ground Judge Blodgett refused an injunction, both on motion and on interlocutory decree. *Hoe v. Knap*, 27 Fed. 212.

Upon the uncontradicted testimony of the experts and because of the failure to manufacture it even by its present owners, who, holding both the Kidder and Stonemetz patents, are yet unwilling to put it in competition with other machines or to invest their money in its production, I am of the opinion that Stonemetz's press fails to meet the end for which it was designed, is uncertain and defective in operation and without merit. Three years of effort have been spent upon the production of a single press without result, although supposed improvements were added to it; but neither the patented construction nor its additions have yet seen the light. Whether styled an abandoned patented experiment, or an inoperative conception, there is no evidence which establishes its utility except the issue of the patent, the prima facie effect of which is overcome by the proofs. The later patent to Cox, which has demonstrated its utility, ought not to be held an infringement of a mere paper design.

Detailed examination of Stonemetz's claims equally fails to sustain the charge of infringement. The claims alleged to be infringed are Nos. 5, 7, 10, 12, and 17. Judge Carpenter ruled that defendant did not infringe claims 5, 7, 10, and 17, and that claim 8 was void for want of invention, but that claim 12 was infringed. Complainant has since disclaimed claim 8. In order to an understanding of the scope of Stonemetz's invention, recourse must be had to the file wrapper for the action of the patent office upon his application. He says in his original application:

"My invention consists principally of a web-printing machine, having stationary fiat type beds secured to the frame of the machine and a traveling carriage carrying impression cylinders and inking rollers back and forth from type forms on the stationary type beds and mechanism for carrying a web of paper through the machine."

This was erased by the patent office. This application contained 34 claims. November 23, 1886, the patent office rejected 25 of these as anticipated by prior patents. Thereupon Stonemetz's attorney on June 30, 1887, filed an amendment withdrawing the statement of invention quoted and all the original claims, in lieu of which he substituted 25 claims, in support of which he called "the attention of the examiners to the facts that the impression cylinders operate in contact with the type on the type beds, both in their forward and backward movements," and that "the type beds are located substantially on the same horizontal plane, end to end," claiming for this arrangement great superiority over Kidder, and added: "I have endeavored so to amend applicant's claims as to limit him to his construction, and trust they will prove satisfactory." These amendments, it will be observed, greatly narrowed the original claims by the words "substantially in the same horizontal plane, end to end," which were not contained in any of the original claims. The second and fifth amended claims for "the combination, in a printing machine, of stationary type beds with traveling impression cylinders and inking rollers," etc., operating on the type beds both in their forward and backward movement, —a special feature to which the examiner's attention was called, as above stated,—were rejected as anticipated by Kidder's inking rollers. Stonemetz acquiesced in this ruling. Claim 7 of the substituted claims was claim 9 of the original claims. Limited by the words "located on the same horizontal plane," after the word "type beds," it became claim 5 of the patent as allowed. Substituted claim 3, limited by the words "located on substantially the same horizontal plane of the frame of the machine," became claim 10 of the patent. This limitation made the plane and relative positions of the type beds necessary elements in the press, and, these claims having been allowed on Stonemetz's application as differentiating his construction from Kidder's, complainant cannot be heard to say that parallel type beds located in different planes infringed the specific device and mode of operation described in the patent and restricted by the final clause of claims 5 and 10. *Jeffrey Mfg. Co. v. Independent Electric Co.*, 27 C. C. A. 512, 83 Fed. 200.

In the introductory paragraph of his specification Stonemetz declares "the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, forming part of this specification." "Others skilled in the art," working under the plan and directions of the specification and drawings thus emphasized, could never produce a printing machine with its type beds located in different planes or dream that a press having one type bed above and parallel to the other could by any stretch of imagination be evolved from a plan which specified and delineated a structure having its type beds located in the same horizontal plane. If Stonemetz had been a pioneer in this line, and defendant's machine differed from his in no other particular than the position of its type beds, the doctrine of equivalents would probably hold defendant's press an infringement; but Stonemetz was treading on well-beaten ground and closely in the footsteps of many predecessors. There is certainly as wide a difference between his press and defendant's as between his and Kidder's, and this is a circumstance against Stonemetz's broad claims. *Pope Mfg. Co. v. Gormully & Jeffery Mfg. Co.*, 144 U. S. 242, 12 Sup. Ct. 637.

It must be admitted that complainant's vice president, Wood, in answer to cross-question 333, maintains otherwise. He is asked:

"If the claims of the Stonemetz patent are limited to a mechanism containing type beds located on substantially the same plane, giving these words their ordinary meaning in mathematics or mechanics, would you say that the Cox machine contained stationary type beds located in substantially the same horizontal plane in the sense of those words? Ans. You say 'giving those words their ordinary meaning in mathematics or mechanics.' I should therefore, by virtue of the word 'substantially,' consider that the Cox machine contained stationary type beds located on substantially the same horizontal plane in the sense of those words."

While there is nothing in mechanics or mathematics which anticipates the discovery or invention disclosed in this answer or the novelty of its conclusion, it lacks utility. In reply to cross-question 341 the same witness says:

"I do not think that they [the type beds] can be in the same horizontal plane, but I think that as Mr. Stonemetz has used the words 'substantially the same horizontal plane' with respect to his device, they can be considered as substantially the same horizontal plane."

No weight can be attached to such testimony, given with evident knowledge of the action of the patent office on Stonemetz's application, and his attorney's insistence in support of the substituted claims that the location of the type beds "on substantially the same horizontal plane, end to end," distinguished Stonemetz's press from Kidder's, and his concession that Stonemetz was limited to his construction. Stonemetz's references to "the accompanying drawings, and to the letters of reference marked thereon, forming part of this specification," of themselves exclude the broad construction now asserted for claims 5 and 10, and evidence beyond mistake his conception. While he states that "many other mod-

ifications may be made in the mechanism of his machine without departing from the spirit of his invention, * * * therefore I do not desire to limit myself to the exact construction shown," that clause is a mere relic of his original application, and must be confined to the construction and claims there set forth, all of which were withdrawn, and manifestly is no answer to his consent to be limited to the construction shown, nor would it add anything to his invention. The law so interprets his claims as to protect him against colorable evasions. *Winans v. Denmead*, 15 How. 330. "Such a statement does not assist to construe a patent unless it is first determined whether the patent relates to a substantial advance in the state of the art or concerns only improvements in mere details." *Hart & Hegeman Mfg. Co. v. Anchor Electric Co.*, 82 Fed. 912. The patent office defined his invention in the substituted claims, at his request, by incorporating the limitation which he suggested to escape prior patents. *Burns v. Meyer*, 100 U. S. 671; *Yale Lock Mfg. Co. v. Sargent*, 117 U. S. 373, 6 Sup. Ct. 931. Both claims 5 and 10 are also carefully limited by the use in each of the phrases "substantially as described" and "substantially as and for the purposes set forth." This restricted him to the mechanism described and marked by reference letters and shown in the drawings. *Brown v. Davis*, 116 U. S. 251, 6 Sup. Ct. 379; *Sargent v. Burgess*, 129 U. S. 19-26, 9 Sup. Ct. 220; *Pope Mfg. Co. v. Gormully & Jeffery Mfg. Co.*, 144 U. S. 248, 252, 12 Sup. Ct. 643. Any construction which would enlarge either claim 5 or 10 to cover a press whose type beds are not substantially in the same horizontal plane restores to Stonemetz all that he asked by his original claims 9 and 15, both of which were rejected. Volume 3, pages 392 and 393, show the original claims, and pages 397 and 398 the action of the patent office and Mr. Sturgeon's letter assenting to the limitation clause.

Stonemetz's seventh claim reads as follows:

"(7) The combination, in a printing machine, of stationary type beds secured to the frame of the machine, and a traveling carriage carrying impression cylinders and inking rollers and web-carrying rollers thereon, a vertically moving roller for taking up the slack of the web as it is unwound from the web roll, and the vertically moving roller for drawing the web forward, substantially as and for the purpose set forth."

Whatever of merit the feeding device here mentioned may have is limited strictly to the improvements described by the patentee. Lake's patent (English) of May 6, 1883, as well as Cox's patent, No. 332,138, of December, 1885, both show mechanism which performs in substantially the same way the function of Stonemetz's vertically moving rollers, one of which is positively actuated and the other by gravity. Defendant's rollers are both positively actuated. A like difference repelled the charge of infringement in *Joyce v. Foundry*, 127 U. S. 557, 8 Sup. Ct. 1311, and differentiated a pawl actuated by a spring from one which acted by gravity. See, also, *McCormick v. Graham's Adm'r.*, 129 U. S. 1, 9 Sup. Ct. 213.

In Stonemetz's device there is admittedly a slack in the web, which it is the function of the gravity roller to meet and overcome.

Defendant's press carries no slack, and neither has nor needs the vertically moving roller. Neither has defendant used the vertically moving roller for drawing the web forward, operated one way by the web as it is drawn out, for in his machine the looping rollers are not operative either way by the web, but are journaled in a vertically guided frame which is mechanically reciprocated by cams, and the looping rollers are thus made to co-operate with a continuous rotary web feed and delivery. Complainant's expert, Livermore, admits the difference in mode of operation of the web-feeding mechanism of Stonemetz and Cox. Quimby, defendant's expert, corroborates Livermore. Again, Stonemetz's feed is intermittent, while defendant's is continuous and employs a totally diverse mechanism. Without adverting to other differences, there is no invasion of Stonemetz's seventh claim. This was the conclusion reached by Judge Carpenter. This construction of the claim is also evidenced in the qualifying phrase, "substantially as and for the purpose set forth." "The purpose set forth" and the described method of its accomplishment are obviously the taking of the slack web and drawing it forward by the means described, —namely, vertically moving rollers, one of which is actuated by gravity. The absence from defendant's press of this feature alone repels the charge of infringement, even if the claim is not restricted to the exact mechanism described. The phrase quoted confines the invention within the purposes and operation therein specifically named. 2 Rob. Pat. p. 131, § 517.

The seventeenth claim of Stonemetz's patent is not infringed for the reasons stated in the discussion of the seventh claim. Defendant's machine does not have the roller-supporting arms, w, w, nor yet the cutting cylinders, s, s', but has the discharge rollers of Cox's patent, No. 332,138, of December 8, 1885.

Stonemetz's twelfth claim reads as follows:

"(12) The combination, in a printing machine, of the side frames, A, A', the stationary type beds, B, B', with the traveling cylinder carriage, I, carrying the impression cylinders, E, E' (which operate both forward and backward on said type beds), substantially as and for the purpose set forth."

This is his original rejected claim 20, with the addition of the words in parentheses. The structure to which we are referred by the letters of reference in the claim and the preamble to the specification in appearance and parts has not the least resemblance to defendant's machine, which has many more parts, differently arranged and more complicated. Defendant has retained the form and general features of his Grand Rapids press of 1885. The type beds, B, B', in Stonemetz's drawings are horizontal in position and located in the same plane. The traveling carriage, I, carries the impression cylinders, E, E', which bring the web into contact with the type beds. In the English patent to Smith, No. 6,793 of 1835, is shown a machine with corresponding side frames, type beds arranged in the same horizontal plane, end to end, a traveling cylinder carriage like Stonemetz's carriage, I, and impression cylinders which operate both backward and forward on the type bed. The Winch English patent and Bold English patent of 1822 show a

combination in all material elements anticipatory of Stonemetz. The machines shown in these patents were intended to print on sheets and not upon continuous web. This difference, however, is immaterial on the question of anticipation. Mr. Livermore, complainant's witness, concurs with Stockbridge. He says:

"What language, in Stonemetz's claim points out their relations [of the elements] by which they can be distinguished from the prior art? Ans. There is none. That is substantially what I meant to say in the last part of my answer.

"Cross-Ques. 422. Are there no other patents than Smith's which embody the combination of the side frames, stationary beds, and a carriage carrying impression cylinders and inking rollers back and forth over the beds? Ans. I should say that the British patent to Bold, No. 4,690 of 1822, contains a combination including the elements in question. I do not think now of any other."

Quimby testifies for defendant to the same effect. Wood makes substantially the same admissions:

"Cross-Ques. 280. Was there not known in the art, for more than two years prior to the date of filing the application for the Stonemetz patent, a press in which were two flat form beds arranged end to end in substantially the same horizontal plane and two reciprocating impression cylinders traveling thereon and co-acting therewith? Ans. There was. British patent No. 6,793 of 1834 to Andrew Smith shows a device which contains the parts you mention operating to print upon sheets of paper."

In answer to cross-question 281 he adds:

"In British patent No. 4,464 of 1820 to Robert Winch is shown such a device, and also in British patents No. 4,690 of 1822 to John Bold and No. 243 of 1866 to William Clark. In all of these devices the mechanism was shown as adapted to print upon sheets."

So far, therefore, as the novelty of the general combination set forth in claim 12 is concerned, it was long anticipated. The feature claimed for Stonemetz's press as novel was in feeding the web between the forward and backward movement of the cylinders and between their backward and forward movements, thereby doubling the capacity of the press, as his attorney claimed to the patent office. This was accomplished by Cox's Grand Rapids press in 1885, in which the type beds moved instead of the cylinders. Tannahill and Kidder had long anticipated this reversal of the movements of the type beds and cylinders. The express references to the construction and parts shown in the drawings and specification and the final clause of the claim, "substantially as and for the purpose set forth," also negative a broad construction of the claim. *Weir v. Morden*, 125 U. S. 98, 8 Sup. Ct. 869; *Muller v. Machine Co.*, 23 C. C. A. 357, 77 Fed. 627.

Stonemetz, like Kidder, designates by the definite article each of the four elements of this claim. In view of Smith's, Bold's, and Winch's machines the drawings and references thereto and the final clause were limitations forced upon Stonemetz's acceptance as a condition of his patent. Whatever of novelty Stonemetz's press possessed as a whole is not found in the combination of claim 12. His original claim 8 contained the identical parts, with the addition of the inking rollers, and was rejected by the patent office. If there is any invention in claim 12 over Bold, Smith, and Winch, which is very doubtful, it must consist in the specific ar-

rangement of the parts designated with so much particularity and qualified by the final clause to save it from anticipations. Mr. Livermore, complainant's expert, when asked, "What element or elements is recited in Stonemetz's twelfth claim that is and are not recited in the third and fourth claims?" answered, "The side frames, A, A'." These side frames are mere formal variations from Bold's side frames, a, a, and there is nothing new or useful in the form of Stonemetz's frames. The bill does not charge infringement of either claim 3 or 4.

Again, Livermore says:

"* * * Considering merely the elements that are recited in claim 12 apart from their relations by which they constitute a definite combination in the machine of the patent, I should say there is nothing in the phraseology of the claim that distinguishes the combination there referred to from other and different combinations of the prior art containing the same elements, but having substantially different operative relations, so that the combination as a whole into which they enter is different from the combination of the Stonemetz machine referred to in the twelfth claim of the patent."

To accord, therefore, to the claim in question a broad scope, is not only to give Stonemetz what he expressly renounced by insisting on the fact that his type beds are "located on substantially the same horizontal plane, end to end," and therein differ from other constructions,—a limitation which I think was meant to apply to all his claims as a condition of his patent,—but also requires that there should be implied or read into the twelfth claim inking mechanism, a web feeding and delivery device, web guide rollers, and a web-moving mechanism. Judge Carpenter, for the purpose of charging defendant with infringement, held that the words "substantially as and for the purpose set forth" implied a perfecting press. In *McCarty v. Railroad Co.*, 160 U. S. 110, 116, 16 Sup. Ct. 240, the right to thus simplify a claim is emphatically repudiated, the court saying:

"We know of no principle of law which would authorize us to read into a claim that which was not present, for the purpose of making out a case of novelty or infringement. * * * It might require us to read into the fourth claim the flanges and pillars described in the third. This doctrine is too manifestly untenable to require argument."

To the same point is *Adams Electric Ry. Co. v. Lindell Ry. Co.*, 23 C. C. A. 223, 77 Fed. 432, 449.

The principle of these rulings is stated in *White v. Dunbar*, 119 U. S. 47, 7 Sup. Ct. 72, where the court say:

"The claim is a statutory requirement prescribed for the very purpose of making the patentee define precisely what his invention is, and it is unjust to the public as well as an evasion of the law to construe it in any manner different from the plain import of its words."

The claim is the measure of his (the patentee's) right to relief, and, while the specification may be referred to, to limit the claim, it can never be made available to expand it. *McClain v. Ortmayer*, 141 U. S. 424, 12 Sup. Ct. 76. To the same effect is *Brown v. Stillwell & Bierce Co.*, 67 Fed. 731, 740.

As the prior art negatives the novelty of the general combination, and the claim fails to distinguish the arrangement of its parts from

prior devices, the broad construction asked for would invalidate it. *Mathews v. Machine Co.*, 105 U. S. 58, 59; *Jeffrey Mfg. Co. v. Independent Electric Co.*, 27 C. C. A. 512, 83 Fed. 192-201.

If there could be implied into this claim the parts necessary to organize it into a perfecting press, complainant has not met the burden of showing a combination infringing the completed machine. In view of the success of defendant's press, the utter failure of that of Stonemetz, and the differences in parts and construction between the two, the language of the court in *U. S. v. Berdan Fire-Arms Mfg. Co.*, 156 U. S. 565, 15 Sup. Ct. 420, is not inapt:

"For where several elements, no one of which is novel, are united in a combination which is the subject of a patent, and these several elements are thereafter united with another element into a new combination, and this new combination performs work which the patented combination could not, there is no infringement."

The language of the court in *Consolidated Safety-Valve Co. v. Crosby Steam Gauge & Valve Co.*, 113 U. S. 157, 179, 5 Sup. Ct. 513, in speaking of the Richardson valve, is equally applicable to Cox's machine:

"Richardson's invention brought to success what prior inventors had essayed and partly accomplished. He used some things which had been used before, but he added just what was necessary to make the whole a practical, valuable, and economical apparatus. The fact that the known valves were not used, and the speedy and extensive adoption of Richardson's valves, are facts in harmony with the evidence that his valve contains just what the prior valves lack, and go far to sustain the conclusion at which we have arrived on the question of novelty."

There are several patents to which no reference has been made. To discuss these and the many other questions presented by the record would extend this opinion to a still more unreasonable length, although it would, in my judgment, confirm the conclusions here reached. For the reasons stated, the defendant has not infringed either the Kidder or Stonemetz patent, and complainant's bill should be dismissed, with costs.

OVERWEIGHT COUNTERBALANCE ELEVATOR CO. v. CAHILL &
HALL ELEVATOR CO. et al.

(Circuit Court, N. D. California. April 4, 1898.

No. 12,521.

PATENTS—PRELIMINARY INJUNCTION.

Where complainant was not manufacturing the patented machine, but had established a regular license fee, and defendants were solvent, and able to respond in damages to the amount of such fee for each machine made by them, *held*, that a preliminary injunction would be denied.

This was a suit in equity by the Overweight Counterbalance Elevator Company against the Cahill & Hall Elevator Company and others for alleged infringement of a patent for an improvement in elevators. The cause was heard on a motion for a preliminary injunction.

S. C. Denson and W. H. H. Hart, for complainant.

John H. Miller, for defendants.