MERROW v. SHOEMAKER et al.

(Circuit Court, E. D. Pennsylvania. December 5, 1893.)

No. 13.

1. PATENTS—ANTICIPATION—CROCHETING MACHINES.
An invention of intermittent feeding mechanism, combined with a crocheting machine, to produce an ornamental scalloped border, is not anticipated by sewing machines having intermittent feed mechanism, which could not be made available for the purpose accomplished by the crocheting machine.

2. SAME—ESTOPPEL—INTERFERENCE PROCEEDINGS—STIPULATION.
A stipulation in an interference proceeding that the preliminary statement of one of the parties thereto should be accepted as evidence on the issue of priority, that no additional evidence should be received, and that the matter should be decided upon this evidence alone, without argument, is not an admission by the other party; and the matter having been decided against him, the claim involved stricken out, and a patent issued for what remained, he was not estopped from claiming priority therefor.

3. SAME—INFRINGEMENT.
In a crocheting machine, in which several stitches are to be taken in the same place, a construction which avoids useless horizontal reciprocations of the feed dog during the formation of each group of stitches, without affecting its function of advancing the material after the group is completed, does not avoid infringement.

4. SAME—PARTICULAR PATENT.
The Merrow patent, No. 428,508, for a crocheting and overseaming machine, is not anticipated, and is entitled to a liberal construction.

In Equity. Suit by Joseph M. Merrow against John Shoemaker and others for infringement of a patent. Decree dismissing certain defendants, and for complainant as to others.

Church & Church, for complainant.
Joseph C. Fraley, for defendants.

DALLAS, Circuit Judge. This is a suit in equity brought by Joseph M. Merrow against the several defendants named, for alleged infringement of letters patent No. 428,508, dated May 20, 1890, issued to the complainant, for "crocheting or overseaming machine." The object of the invention, as stated in the specification, "is to produce new and improved ornamental crocheted finish or border by machinery upon fabrics in general, but particularly upon knitted fabrics, which have heretofore been ornamentally finished by hand, * * * by means of the improvements, * * * consisting in new mechanism and new combinations of mechanism." The invention "relates to feeding mechanism, and new and useful combinations therewith." The only claims involved are as follows:

"(1) In a machine of the character specified, the combination of the following mechanisms: A stitch-forming mechanism provided with a thread carrier and a looper, the latter co-operating with the thread carrier to engage the thread on alternately opposite sides of the fabric, and draw loops thereof to or beyond the edge of the fabric, and interloop the ends of said loops, and an intermitting feed mechanism engaging the fabric to advance the latter only after the formation of two or more complete stitches by the stitch-forming mechanism, substantially as described. (2) The combination, in a machine such as described, and with a reciprocating thread-carrying

needle, a looper engaging the needle thread alternately on opposite sides of the fabric to draw and interloop said thread along the edge of the fabric, and a fabric-feeding device operating upon the fabric to advance the latter only after several reciprocations of the needle, of a system of driving mechanism, substantially such as described, connecting the needle looper and feeding mechanism in a manner to cause the feeding devices to operate upon the fabric to advance the latter after a series of stitches have been formed, and while the needle is withdrawn from the fabric, and a loop of the thread held by the looper. (3) In a machine such as described, and in combination with a stitch-forming mechanism comprising a thread carrier and a looper co-operating to form stitches around the edge of the fabric, a reciprocating feed dog held in inoperative relation to the stitch-forming mechanism during the formation of a series of stitches, and brought into operative relation with the fabric at intervals occurring between successive series of stitches, substantially as described. (4) The combination, in a machine such as described, and with a thread carrier and a looper co-operating therewith to form loops around the edge of the fabric and interloop said loops, of a reciprocating feed dog held normally from contact with the fabric during the formation of a series of loops by the thread carrier and looper, with mechanism for elevating said feed dog into contact with the fabric to feed the latter after a cluster of loops has been formed."

These claims are free from ambiguity. They are all combination claims. Stitch-forming mechanism adapted to form stitches around the edge of the fabric, and feeding mechanism adapted to advance the fabric only between successive groups of two or more stitches, are elements of each of them. In the first, the function of the intermitting feed is stated, in general terms, to be "engaging the fabric to advance the latter only after the formation of two or more complete stitches by the stitch-forming mechanism;" the second includes the first, and adds "a system of driving mechanism * * * connecting the needle looper and feeding mechanism in a manner to cause the feeding devices to operate upon the fabric to advance the latter after a series of stitches has been formed, and while the needle is withdrawn from the fabric, and a loop of the thread held by the looper;" the third limits the feeding mechanism to "a reciprocating feed dog held in inoperative relation to the stitch-forming mechanism during the formation of a series of stitches, and brought into operative relation with the fabric at intervals occurring between successive series of stitches;" and the fourth claim is limited to the combination with the stitch-forming mechanism of a feed dog reciprocating both horizontally and vertically.

In support of the defense of anticipation, 14 patents have been placed in evidence, but only 6 of them are referred to in the defendant's brief; and to these latter, therefore, I have confined my attention. Taken separately or together, they do not disclose the invention covered by the patent in suit. As appears from the analysis which has been made of the claims in question, the gist of the invention claimed by the complainant is the combination of the stitch-forming mechanism, by which stitches around the edge of the fabric are made, with a feed mechanism operating to advance the fabric as, and only as, a series of stitches shall have been previously formed, so as to expand the outer ends of the stitches, and shape them into scallops properly spaced, whereby an ornamental border

upon the material operated upon is produced. By the means stated, the complainant attained this object; but in none of the patents set up are the same or equivalent means described, nor could the same, or substantially the same, result be achieved by any means which any or all of them disclose. The patent first mentioned in defendant's brief is that of William C. Hicks, No. 29,268, but upon examination it clearly appears that it does not conflict with that of the complainant. It is for an "improvement in sewing machines," a "mode of sewing or uniting cloth by a succession of differential chain stitches" to prevent ripping. The formation of an ornamental border around the edge of the fabric is not contemplated, and the feed movement occurs, not between groups of stitches, but after the formation of each and every separate stitch. With reference to the remaining five patents insisted upon, the defendants' counsel asked their expert to state what they "show to be old, in so far as the action of feed is concerned." He replied:

"The peculiarity of these feeds is that intermissions occur in their action, so that the sewing mechanism may make several stitches or loops without any motion of the fabric, and therefore locate more than one stitch or loop at the same point in the lengthwise direction of the fabric, and produce ornamental effects by such multiplication or duplication of stitches."

My own investigation does not incline me to accept the opinion embodied in this answer as wholly and precisely correct; but, be this as it may, neither the question nor answer covers the relevant matter. The patents referred to all relate to sewing machines, and not to crocheting mechanism; and the witness was not asked, and did not say, whether the intermissions which he testifies occur in the action of the feeds were, or could be made, available to produce the complainant's ornamental border. I am satisfied that they neither were nor could be, and the fact is that, in each instance, the only result attained or attainable is essentially different from that produced by the organism of his patent.

The answer alleges prior knowledge and use by a number of persons, but the argument upon this defense has dealt only with asserted use by Thomas P. Cope & Bros. and by George D. Munsing. It is not necessary to consider the question of the identity of the Cope-Morley machine or of the Munsing machine with that of the complainant. The point may be fully disposed of upon the question of priority of invention. The complainant contends that he disclosed his invention, and so described its details that it was fully understood by the persons to whom he disclosed it, prior to June 16, 1887. If so, he has established his date of invention as not later than that day, and the question of anticipation must be solved with reference thereto, provided that he was duly diligent in filing his application for a patent, and in constructing his machine. The subject of diligence, however, presents no real difficulty; and I may dispose of it at once by saying that the evidence is amply convincing that, if the date of his invention is as claimed by the complainant, he proceeded, with respect both to his application and the construction of his machine, as speedily as, under the circumstances

of the case, was reasonably practicable. As to the complainant's date, a fact which is indisputable, and quite important in its bearing, is that on June 16, 1887, his mill was destroyed by fire. There can be no doubt that for some time before this fire occurred he had entertained the thought of combining with the then existing plain crocheting machine some device to adapt it for making the scallop finish in imitation of and substitution for that class of border as theretofore produced by hand operation of the ordinary crochet needle. He had then, certainly, also conceived the idea of accomplishing this by advancing the fabric only after a group or series of stitches had been formed to or beyond its edge by the stitch-forming mechanism then in use. In brief, he had distinctly in mind at that time the end which, in his specification, he afterwards declared to be the object of his invention, and also the method which is carried on in its practice. But had he then conceived and perfected the means—the combination of the stitch-forming mechanism with the peculiar feed mechanism—for which he subsequently obtained a patent? I have carefully examined and considered the evidence bearing upon this question, and have arrived at the conclusion that it must be answered in the affirmative. The proofs are too voluminous to be referred to at length, but a few extracts will suffice to indicate their general tenor and effect. The complainant testified:

"As a result of my experiments in the development of the scallop method, I had devised mechanism for producing this result, and when, in the fore part of the year 1887, I concluded to build the scallop machine, (the plain machine having met with encouraging success,) I determined to adapt the scallop mechanism to the plain crochet machines we were then building; that is to say, I decided to utilize the principal parts of the plain crochet machine in building the scallop machine. * * * I discussed this matter with my foreman, William M. Stedman, and made sketches of several styles of feeding mechanism for this purpose. I took the drawings which I had made for my plain crochet machine, and from which I had built this machine, and drew upon them the mechanism which I had decided to adopt. Q. How long before the fire did you make the pencil additions to the old working drawings? A. I cannot at this time definitely fix the date, but it was but a short time,—a matter of a few days." "I thought that there would be considerable money in this machine. I had worked up a considerable trade in our plain machines, and I had got the special tools so far completed to build the plain machines with, and had designed my scallop machine so that the special tools which I had made would also be of use in building the scallop machine. I had taken the drawings which I had made to use in constructing the 1885 machine, and had drawn upon them the necessary changes that I had decided to make, or, in other words, the necessary parts for the scallop machine."

William H. Stedman testified, in part, as follows:

"Q. What, if any, steps were taken by Mr. Merrow during that period, before the fire, looking toward adapting the crochet machine to that kind of work? A. Conversations were frequently had as to the best mechanism to bring about a feed motion which would be adapted to the regular crochet machine, so as to make a scallop finish. Sketches were made of some plans, and freely discussed. Later on, Mr. Merrow, in putting in a new lot of castings, put in an extra number, as he said he wished to make a part of them into scallop machines. The drawings of the regular crochet machine were brought into the shop, and some parts of the scallop machine were penciled into this drawing to see about what changes were needed in the frame of

the machine to adapt it to a scallop machine. * * * The feed mechanism of the regular machine was constructed so as to move the fabric each time the needle was raised out of it, and it was clearly understood by Mr. Merrow and myself that in order to produce a scallop finish the feed should be intermittent,—that is, the fabric be fed along only after several stitches were formed,—and all mechanical motions which would bring about an intermittent feed,—that is, all that occurred to us,—were discussed, as to their relative merits, and their peculiar adaptation to the regular machine. * * * The drawing of the regular crochet machine was brought in, and parts which would be needed in applying an intermittent feed to the regular machine were penciled in on the drawing, which was in ink, and necessary changes in the frame of the machine were discussed; and Mr. Merrow concluded it would be better to use the regular frame for a few scallop machines, and attach the parts needed. Q. When did you last see the drawings, as well as the sketches referred to, exhibiting the feed mechanism of the scallop machine? A. I last saw the drawings of the crochet machine in the afternoon of June 15, 1887, which was the day before the shop was burned. I do not remember the date when I last saw the sketches of the feeding mechanism which had been made."

The foregoing testimony is supported by that of other witnesses, and there is nothing to occasion any hesitancy in accepting it, except a single circumstance, which, upon first impression, apparently conflicts with it in one important particular. The complainant and Stedman having said that the drawings which had been exhibited by the former to the latter before the fire, and which it destroyed, had shown the complete mechanism for the scallop machine, a "reproduction" of those drawings, made by the complainant after the fire, upon being put in evidence on his behalf, was found to represent a multiplication of projections upon the cam plate for lifting the feed dog, fitted only to produce, where all the projections are used, the regular or plain stitch. But this seeming discrepancy has been explained and reconciled. The plain machine had been a commercial success, and it was deemed desirable to so construct the feed mechanism for the new machine as to adapt it, as said by the witness Stedman, "to making any kind of crochet work." The complainant testified:

"These drawings represent the feed mechanism for the scallop machine, as designed before the fire, and reproduced after the fire, for the purpose of carrying out our plan for building scallop machines. * * * In the plain machine there was a circumscribed space for the feed mechanism, and this particular feed mechanism was especially prepared and selected from a number of others, as best adapted to occupy the limited space, and special form of the frame and other parts. * * * One of the principal objects I had in view in designing this feed mechanism was to make as much of it as possible applicable to both the plain and scallop machines which we were about to build, and in pursuing this plan I arranged the parts so that the cam plate, X, which governed the vertical motion of the feed dog, could be changed to raise the feed dog at each reciprocation of the needle, or after a series of reciprocations. In the drawings, Fig. B, the cam plate is shown as provided with five projections or cams, numbered 1 to 5, and represents the arrangement which would be employed for the plain stitch, and by omitting four of the projections, or substituting a cam plate with but one projection, the same mechanism was intended to serve for scallop work, in which case the feed dog would be raised but once while the main driving shaft was making five revolutions, and the stitch-forming mechanism was making five complete stitches."

Thus, and from other evidence, it appears that the cam plate exhibited upon these drawings, and which was designed with especial

reference to the scallop machine, was intended to be and was so constructed that it might, by retention of all of the projections shown, be employed for making the plain stitch, and, by omitting all but one of them, be used for forming the scallop stitch. This was precisely understood by Stedman. He says, "I think this particular drawing was made in this way to show that it might be adapted to both kinds of work." I conclude that the drawing exhibited to William H. Stedman before the fire, and the reproduction thereof made after that event, did in fact disclose the new scallop machine, as distinguished from the old plain machine; and, upon all the evidence, I am satisfied that the complainant's date of invention, in the sense of the law, should be taken to be as of a few days prior to June 16, 1887. This disposes of the allegation of anticipation by the Cope-Morley machine, for there is nothing in the case which would warrant the finding of a date for it earlier than in July or August of the same year.

With reference to the alleged Munsing anticipation, the defendants rely upon certain conduct of the complainant as concluding him upon the question of priority. The points raised by the defendants under this head are thus stated in their supplemental brief:

"Defendants now assert that this conduct of the complainant amounts to (1) an admission against interest; and (2) that this admission rises from the rank of evidence to the rank of an estoppel in pais."

It is not necessary to extend this opinion by attempting to follow the long and interesting arguments of counsel upon this matter over the whole field of patent-office procedure in interference cases in general, or through all the details of the particular proceeding which they have especially discussed. I will content myself with stating what seem to me to be the only facts which are essential to a proper understanding of the points presented: An interference was declared upon three applications,—one of Munsing, one of the defendants, and one of the complainant. Upon the latter the patent in suit was granted, under the circumstances hereafter to appear. The issue in this interference was thus stated:

"In a machine substantially such as described, for forming a scalloped or shell-like border upon the edges of fabrics, the combination of the following co-operating parts or mechanism: A stitch-forming mechanism having a thread carrier and a looper co-operating to form stitches around the edge of the fabric, a finger located adjacent to the edge of the fabric around which the stitches are formed, and a feeding mechanism operating upon the fabric to advance the latter after a series of stitches have been completed by the stitch-forming mechanism, whereby a series of stitches are formed from a given point around the edge of the fabric while the latter is stationary, and the fabric is then fed a suitable distance to draw or expand the series of stitches, and cause them to assume a shell-like form; being claim 2 of Merrow's application, and including claim 6 of the application of Holton and Malsch, [the defendants,] and also including claim 11 of Munsing's application."

There was an adjudication against the defendants, founded upon the insufficiency of their preliminary statement, and thereafter the case proceeded as between Munsing and the complainant only. The following paper, signed by their respective attorneys, was filed:

"It is hereby stipulated and agreed by and between the parties hereto that the sworn statement of George D. Munsing, executed on the 20th day of September, 1889, and filed for record in this cause September 24, 1889, be received and accepted as evidence in his behalf on the issues of priority of invention now pending between the parties hereto, with the same force and effect as though regularly taken upon notice, and duly filed in this case; that no further or additional evidence shall be taken or received; that the case shall be taken up and decided at the earliest possible moment by the examiner of interferences without argument, and upon the evidence contained in said sworn statement."

The "sworn statement" referred to in the foregoing stipulation is as follows:

"Preliminary Statement. Case B.

"State of Minnesota, county of Hennepin—ss.: George D. Munsing, being duly sworn, deposes and says that he is a party to the interference declared by the commissioner of patents between the application of George D. Munsing, filed October 17, 1888, (serial No. 288,301,) for improvements in crocheting machines, and the application of Joseph M. Merrow and Thomas J. Holton & Frank Malsch; that he conceived the invention set forth in the declaration of interference on or about the 1st day of December, 1882; that on or about the 1st day of June, 1883, he made drawings of the invention; that on about the 1st day of June, 1883, he first explained the invention to others; that on or about the 15th day of July, 1883, he began work on a full-sized machine embodying such invention, which machine was completed about the 10th day of November, 1884; and that on or about the 10th day of November, 1884, he successfully operated said machine, and that he has since built other machines embodying said invention, and has used the same; that he has made no models, except full-sized working machines."

Upon this deposition the examiner of interferences gave judgment in favor of Munsing, and thereupon the complainant struck out of his application the claim involved. The patent in suit was then issued to him, and he accepted a license from Munsing for the only distinctive subject-matter of the canceled claim,—"a finger located adjacent to the edge of the fabric around which the stitches are formed."

Recurring now to the defendants' statement of their position with reference to these proceedings, the first question is whether the complainant did, by his stipulation that Munsing's preliminary statement should be "received and accepted as evidence in his behalf on the issues of priority of invention;" "that no further or additional evidence should be taken or received;" and that the case should be decided "without argument, and upon the evidence contained in said sworn statement,"—do that which amounted to an admission of the fact of priority of invention, in conflict with the position which he now claims to occupy. He certainly made no express admission; and as it seems to me, in what he did do, he meant to, and did, guard against any possible implication that an admission of any character was involved. Nothing could have been simpler than a direct acknowledgment by the complainant of the priority of Munsing, but he carefully avoided making such acknowledgment. The course pursued could have had no other object. That he abandoned the contest, and this under an agreement that upon adjudication in favor of Munsing—which was, of course, contemplated—the complainant would become Munsing's

licensee, is indisputable. But forbearance of litigation, though coupled with a compact of peace, does not necessarily imply an admission of the facts asserted by the party to whom concession is made, and in this instance, though the complainant "did have some apprehension at the time that Munsing might turn out to be the prior inventor," it nowhere appears that the complainant ever stated that such was the fact, or that he ever conducted himself in such manner as would justify an inference that it was; and the evidence is, to my mind, conclusive that he was induced to relinquish the interference proceedings by business considerations which outweighed, in his estimation, any advantage to be derived from pursuing them, even if their determination should ultimately be in his favor.

The defendants insist that the course pursued by the patent office in connection with this whole matter worked injustice to them; but they do not suggest what was done, if anything, which requires, or would entitle, this court to declare that the patent which was issued to the complainant is invalid. I do not understand that fraud upon the office is imputed to the complainant, and I perceive no ground upon which such an imputation, if made, could rest. The defendants disclaim any intention to assert that the preliminary statement of Munsing in the interference case should be received "as in itself a deposition in this suit," or "that the decision by the patent office has the effect per se of res adjudicata." The whole contention, therefore, seems to amount to this: That in the interference case the complainant did something which estops him from setting up a patent which, apart from this supposed operation of the doctrine of estoppel in pais, is at least prima faicie valid. That he did not, in advance of its issue, acknowledge the invalidity of his grant by admitting lack of priority in invention, has already been shown. What, then, did he do or say, or, in violation of any legal duty, abstain from doing or saying, by which he intentionally caused the defendants or the public to believe that his invention had been anticipated by Munsing; and what action, or abstention from action, on the part of the defendants, or of any other person or persons, was occasioned by such belief, if existent, and caused by the conduct of the complainant? He merely withdrew from contention in a litigated proceeding, and permitted it to be decided upon the sworn statement of the other party to it. This was all he did, and in this there certainly was nothing intended which, when related to the circumstances, was calculated to induce belief that the Munsing invention was anticipatory of his own; and I find nothing in the evidence to indicate that any person was misled by it, or took or refrained from taking any action in consequence of it. The complainant's settlement of the interference proceeding affected no one but himself. It left his patent, subsequently issued, still open to attack on the ground of anticipation; but on that issue the burden rests upon him who assails it, and the defendants, who concede that the Munsing preliminary statement is not competent evidence of the truth of the facts stated in it, have wholly failed to discharge themselves of that burden.

The defense of noninfringement is based upon certain differences between corresponding parts of the feed mechanism of the defendants and of the complainant. The defendants' expert refers to and explains these differences as follows:

"In the complainant's machine there is a reciprocating feed dog, with a toothed or serrated upper surface to engage the cloth, which reciprocates, in the intervals between each stitch, horizontally, but does not engage in the fabric or cloth, but remains below it until it is lifted by a cam attached to a wheel, which rotates but once during several rotations of the main shaft of the machine, and an equal number of reciprocations horizontally of the feed dog. So there are several ineffectual and useless reciprocations of the feed dog horizontally between a single and usefully operative reciprocation thereof in engagement with the fabric. In the exhibit marked 'Complainant's Exhibit Defendants' Infringing Machine,' there is no horizontal reciprocation of the feed dog by a cam on the main shaft of the machine, but all of the functions of the feed dog, both of horizontal reciprocation and vertical motion to engage and disengage it from the fabric, are performed by cams, or a cam and roller, turning upon a wheel propelled by a pinion and spur wheel, with but one rotation during the formation of the cluster of loops which form a single scallop. The action of this cam is continuous, whereas the action of the cam upon the complainant's machine is intermittent, and there are no useless reciprocations of the feed dog in the Exhibit Defendants' Infringing Machine. 58 Q. Are these differences material ones? A. They are, to my mind, material. 59 Q. Why? A. I consider them material because they are less complicated, involve less wear of parts, and fewer parts, avoid the quick action of a cam, whose whole work occurs during a small portion of its revolution, and permit of a convenient and compact form of machine."

With this statement accepted, it would not necessarily follow that the two feeding mechanisms are substantially different, in the sense of the patent law. Nor is the true test of the materiality of differences that which is suggested by this witness in his answer just quoted, for it cannot benefit the defendants that their mode of operating the feed dog is better than the complainant's, as that cannot give them any right to make, use, or vend what is patented to another. The avoidance of useless horizontal reciprocations of the feed dog, which seems to be the principal advantage claimed to be secured by the defendants' arrangement, does not affect its performance of the function assigned it in both machines, —of advancing the fabric only after a group of stitches has been formed. The cams and other driving or lifting parts of the respective machines, separately considered, are not identical; but this is unimportant, because they have the same purpose in the combination,—to intermittingly advance the fabric,—and this purpose they accomplish in substantially the same manner. With regard to the combination, which is comprised in both machines, the corresponding parts of the mechanism, though not, individually, exactly the same, are equivalents. Marsh v. Seymour, 97 U. S. 359; National Cash-Register Co. v. American Cash-Register Co., 3 U. S. App. 357, 3 C. C. A. 559, 53 Fed. 367. Moreover, the complainant is the person who first succeeded in producing an automatic machine for forming a border of the kind in question upon fabrics, and therefore he is entitled to a liberal construction of the claims of his patent. "He was not a mere improver upon a prior machine capable of accomplishing the same general results,

in which case his claims would properly receive a narrower interpretation." Sewing-Mach. Co. v. Lancaster, 129 U. S. 273, 9 Sup. Ct. 299.

Counsel have united in the statement that as to the defendants Wallace H. Jenkins, John Grist, and John Grist, Jr., who compose the Belmont Knitting Mills, Limited, the bill should be dismissed. Therefore, as to those defendants, a decree will be entered accordingly; but against the remaining defendants a decree in favor of the complainant, in the usual form, may be prepared and submitted.

LEWIS v. PENNSYLVANIA STEEL CO.

(Circuit Court of Appeals, Third Circuit. November 21, 1893.)

No. 19.

1. PATENTS—INFRINGEMENT—ROLLING MILLS.
A patent for a turn-over device for use in rolling mills, consisting of a combination, with a set of stationary abutments, of laterally adjustable carriages, having a tilting support arranged transversely to the same, and provided on their under sides with a bulge or projection, adapted to be struck by the abutments when the carriage is shifted, for the purpose of turning over the rail, being a mere improvement in the art, the claim of which is by its terms confined to the particular construction operating in the defined way, is not infringed by a turn-over device, mounted on vertically moving tables, without tilting support, the rail being sustained entirely by the table rolls, the grooves of which act as a stop to prevent lateral movement, and in which the turn-over finger is positively controlled and actuated at all times through an intermediary sway bar. 55 Fed. 877, affirmed.

2. SAME.
The fourth claim of patent No. 247,665, for a turn-over device for continuous rolling mills, construed, and *held* not to be infringed.

Appeal from the Circuit Court of the United States for the Eastern District of Pennsylvania.

In Equity. Suit by Christopher Lewis against the Pennsylvania Steel Company for infringement of a patent. Bill dismissed. 55 Fed. 877. Complainant appeals. Affirmed.

Henry N. Paul, Jr., for appellant.
Philip T. Dodge, for appellee.

Before ACHESON, Circuit Judge, and BUTLER and GREEN, District Judges.

ACHESON, Circuit Judge. This was a suit in equity, brought by Christopher Lewis, here the appellant, against the Pennsylvania Steel Company, for the alleged infringement of letters patent No. 247,665, dated September 27, 1881, granted to the plaintiff for an improvement in mills for rolling rails, girders, plates, etc. The invention described in the specification contemplates the taking of the bloom from the furnace, and entering it between the first pair of rolls, whence it proceeds on through the machine without handling, and comes out a perfect rail. The improvement consists in a series of two-high rolls, arranged alongside of each other,