Case No. 656.

AULTMAN V. HOLLEY ET AL.

[11 Blatchf. 317² 6 Fish. Pat Cas. 534; 5 O. G. 3; Merw. Pat. Inv. 673.]

Circuit Court, S. D. New York.

Oct. 27, 1873.

PATENTS FOR INVENTIONS—INFRINGEMENT—NECESSARY PARTIES—CONSTRUCTION OF CONTRACT—REISSUES—EXTENT OF CLAIM—BROKEN MODEL—ABANDONMENT.

1. The reissued letters patent No. 2,608, granted to Philo Sylla and Augustus Adams, September 14th, 1867, and the three reissued letters patent Nos. 723, 724 and 726, granted to C. Aultman & Co., assignees of said Sylla and Adams, May 17th, 1859, each for an "improvement in harvesters," (the original patent having been granted to said Sylla and Adams, September 20th. 1853,) and which four reissued letters patent were severally extended for seven years from the 20th of September, 1867, are valid.

[Cited in Wheeler v. McCormick, Case No. 17,499.]

2. Under an objection that the reissued patent includes devices not shown or suggested in the record of the original, the proper tests to be applied, in considering whether a reissued patent is for the same invention as the original, stated and illustrated.

[Cited in Kerosene Lamp Heater Co. v. Littell. Case No. 7,724; Dederick v. Cassell, 9 Fed. 307.]

3. In a certified copy of the model on file, certified from the patent office, the precise construction, in the particular in dispute, was not shown, for the reason that parts were broken and other parts were missing. But the original specifications and drawings were not inconsistent with the construction necessary to sustain the reissue; and, in view of the necessity of the feature, and of evidence, that, before the model was filed, such necessity was understood and acted on, in practice, by the inventors, and of the fact that the patent office granted the reissue after referring to the model, on a question being raised before it as to the particular in dispute, it was *held* sufficiently proved that the model, as filed, contained the feature.

[Cited in Kerosene Lamp Heater Co. v. Littell, Case No. 7,724; Dederick v. Cassell, 9 Fed. 307.]

- 4. The question of infringement, considered. Abandoned experiments, commented on.
- 5. Devices contrived and employed in such experiments do not, on their abandonment, become, per se. public property, in such sense that they can be used to defeat the patent of a new and independent inventor.
- [6. The owners of conflicting patents entered into an agreement which defined their respective rights and provided a fund for maintaining the patents and for purchasing as joint property patents deemed necessary for their mutual protection. A patent which had been previously purchased by one of the parties was subsequently assigned to the original inventors and after having been extended was reassigned to the same party. *Held*, that the agreement operated at most as a license to all the parties to use the patent so owned by one of them and that the others were not necessary parties to a suit at law on the patent by its owner.]

[Cited in Wheeler v. McCormick, Case No. 17,499.]

[In equity. Bill by Cornelius Aultman against Henry C. Holley and Edwin H. Fittz] on reissues Nos. 723, 724, 726, and 2,608, of the patent originally granted Philo Sylla and Augustus Adams, September 20, 1853, [and numbered 10,038.] On May 17, 1859, the original patent was reissued to C. Aultman & Co., assignees, in six divisions, Nos. 721,

722, 723, 724, 725, and 726. No. 722 was afterward again surrendered, and reissued as No. 2,608, and on September 19, 1867, reissues 2,608, 723, 724, and 726 were extended for seven years. The suit was defended on various grounds, stated fully in the opinion, but the principal defense, and the one

most fully considered by the court, was that the reissues were not for the same invention as the original. It seems that the reissues all describe the ends of the finger-bar as free to vibrate perpendicularly, so as to conform to the undulations of the ground. The original specification and claims nowhere speak of the ends vibrating, but do frequently speak of the finger-bar as vibrating perpendicularly, and the drawing of the original shows a construction for allowing the whole bar to rise and fall perpendicularly. In the patent office model, the parts showing the connections of the finger-bar were broken and destroyed. It is moreover shown that the patentees were familiar with the need of a bar that would rise and fall at either end, and that the file-wrapper of the reissues disclosed the fact that the office, during the pendency of the reissues, pointed out to the applicants the fact that the specification and drawing of the original showed no manner in which either end of the finger-bar would rise without the other; whereupon the applicant referred to the model, and afterward the reissues were granted. The facts on this point, with quotations from the original patent and the claims of the reissues, are fully given in the opinion of the court. [Decree for complainant]

George Harding, for complainant.

B. F. Thurston and Henry Baldwin, Jr., for defendants.

WOODRUFF, Circuit Judge. On the 20th of September, 1853, Philo Sylla and Augustus Adams received letters patent from the United States, for an "improvement in harvesters." On the 17th of May, 1859, on a surrender of the said patent, new letters were issued to C. Aultman & Co. assignees, intended severally to cover different parts of the same invention, or different devices included in the original machine. These reissues were numbered respectively 721, 722, 723, 724, 725, and 726. Thereafter, reissue No. 722 was assigned to the original alleged inventors, was by them surrendered, and, on the 14th of September, 1867, new letters patent were issued to them, professedly for the same invention, which last named reissue is numbered 2,608. The several reissued patents numbered 2,608, 723, 724, and 726, were, on the 19th of September, 1867, extended for seven years from the expiration of the original terms, namely, to the 20th of September. 1874 and by assignment from the original patentees, the title thereto is vested in the complainant in this suit, who charges the defendants with an infringement of these extended reissued patents. The defendants have raised the preliminary objection, that the suit is defective for want of necessary parties; and, on the merits, they insist upon varous objections to the relief sought, the chief of which are, that the reissued patents are void, because they "are not for the same invention as the original patent from which they have sprung, but claim substantial and material matters not Indicated, suggested, or described in that original patent;" that, if the reissued patents embrace no devices but such as are shown or suggested in the record of the original, or if they can be sustained so far as to embrace what is shown in such original and nothing more, then the defendants'

machine is no infringement; and, finally, that the invention shown or indicated by the original patent, its specification and model, in any particular in which the defendants can be deemed to use any device or devices shown therein was not new when such original patent was granted.

 $\frac{2}{1}$ [1. The objection that the suit is defective for want of necessary parties (then considered by the court and overruled) is founded upon a certain agreement entered into on the 27th of December, 1860, by and between Cyrenus Wheeler, Jr., and several others of the first part, and this complainant and others, (composing the firm of C. Aultman & Co.,) and Sears, Adriance & Platt of the second part, which recited the ownership of sundry patents for improvements in grain and grass harvesting machines by Wheeler, and the interest of others of the parties of the first part therein, and the ownership of the original patent hereinabove mentioned and the reissues thereof, and of sundry other patents by C. Aultman & Co., and that they have assigned exclusive rights in certain territory within the United States to Sears, Adriance & Platt The agreement then proceeds to declare that each party licenses the other party for the term of ten years from January 1, 1861, to make, vend, and use the respective patented improvements, and to license others to make, vend, and use their respective separate machines, but only such machines as correspond with an agreed sample of the machines of each, each party reserving to themselves and to their licensees the right to make their own machines, illustrated by such sample, and not to make or license others to make, vend, or use machines corresponding substantially to the sample of the other party. Among other things there-inafterward following, they fix the minimum license fee which each party shall charge licensees for each machine licensed corresponding with such party's sample machine; they provide for the payment of one dollar to a common agent for each machine sold by either party or by the licensees of either party as a common fund. Certain outstanding contracts with other parties are then recognized and affirmed. It is then declared that any persons selling machines other than the specified sample machines, and using any of the patents of either party, are to be deemed infringers. The agreement, then, ninthly, declares that any patents which shall

be deemed necessary by the parties hereto for the protection of either machine, upon joint consent, may be purchased, the expense being borne equally by the parties of the first and second part * * * The special agent Is to be paid the one dollar for each machine above mentioned, and all sums received for infringements are to be paid to him; he is to be the general agent of both parties to settle claims for infringements, and to do such other acts as the parties see fit to authorize him to do, the parties to report to him the number of machines built by them, the names, &c, of their licensees, and the number of machines made by the latter, respectively. The common fund to be paid into the hands of the agent is to be used for expenses in transacting any business provided for in the agreement, and in defending and maintaining the patents of either party, and if there be any surplus it shall be divided. "Thirteenth. The title to the patents now owned by either party shall remain as now vested, and such as shall hereafter be acquired shall become the joint property of the parties hereto, subject only to such transfers as may be hereafter made by mutual consent.

"This contract shall be in force and continue to the full end of ten years from the first day of January, 1861, unless otherwise dissolved by mutual consent." The claim that the parties to the agreement are necessary parties is mainly founded upon the provision therein that such patents as should thereafter be acquired should become the joint property of the parties. The extension of the patents originally granted to Sylla & Adams was made to the original patentees, and was assigned to Cornelius Aultman after the making of this agreement But I am satisfied, upon a consideration of the design and object of the agreement and an examination of all its details that such extension of one of the patents, owned by one or some of the parties when the agreement was made, and the acquisition thereof by assignment from the patentees, was not intended by the clause in question. It was not the purpose to change the title of the respective parties, but to bring the machines manufactured by either party or by their licensees, corresponding with the respective samples, under the operation of the agreement, and so to prevent competition among themselves, and provide a common fund, which might be availed of by either, to maintain their respective patents. The party of the second part was, perhaps, bound to treat all machines, made substantially like the sample machine during the ten years, as within the scope of the agreement, and could not avail themselves of the extension as a ground for withdrawing such machines therefrom. That was, in respect to the extension and the assignment to the complainant, the extent, at most, to which the other parties to the agreement could assert any interest in the extension. Besides, the patents which were to become joint property were only those the purchase of which was warranted by the agreement itself. Those were described in the previous ninth clause of the agreement-viz., patents deemed necessary for the protection of either machine, purchased upon joint consent, the expense thereof being borne equally by the parties of the first and second part. It

was to those patents that the thirteenth clause referred. It was not placed in the power of each and any person included among the parties to the agreement to purchase any patents he might choose with the joint funds, and there was nothing to prevent his purchasing any patents he might choose for his own benefit, subject, at most, to the right of all who were parties to the agreement to make their respective sample machines during the ten years, and to treat all machines during that time made by the others corresponding with such samples as within the provisions or the agreement And it is by no means clear that if the parties of the first part to the agreement departed from their sample machine and made machines corresponding with the sample machine of the other party, using therein the inventions whereof the latter, or one of them, owned the patents, such last named patentee, although a party to this agreement, might not treat the former as an infringer, and maintain an action at law for such an infringement. As to the influence of this socalled consolidation agreement generally, upon the question of parties to a suit for the infringement of a patent acquired by one of the individuals included within one of the parties, even conceding, as above hypothetically assumed, that his ownership subjected the machines made under it during the ten years to the operation of the agreement, it was not the intent or effect of the agreement to affect the title to the patents or the right to sue thereon. The agreement operated as a license among the parties, and placed the parties themselves under contribution for mutual support and defense. The most that can be claimed is that in the prosecution of suits for the infringement of either patent, the party holding the title thereto was quasi trustee for all in respect of the proceeds of recovery. And the suggestion that these defendants need protection against any suit by the other parties, and so have a right to insist that they be brought in as parties is answered by the fact that such other parties could not sue on the complainant's patent, and any equitable interest of theirs is fully represented by the complainant. If, on the other hand, the complainant be deemed to hold the extension as a new grant, not included in the provisions of the agreement, then, of course, the objection that the others should be parties, is wholly groundless. The suggestion is further made that it appears by the recitals in the agreement that Sears, Adrlance & Platt were, when the agreement

was made, the assignees of exclusive rights in certain territory within the United States, from C. Aultman & Co., then owners of the original patent to Sylla & Adams; that it also appears by certain bills of complaint filed by Sears, Adriance & Piatt, in suits begun by them, that the territory thus referred to included New York, within which the infringement now in controversy was committed. Hereupon it is argued that, if the objection already made that all the parties to the before-mentioned agreement should be parties to this suit do not prevail, then the complainant has no right to sue at all; that in respect to the state of New York, Sears, Adriance & Platt are assignees of the patent, and suits for an infringement within that state should be brought by them. Besides the consideration that the declarations of Sears, Adriance & Platt are not evidence against this complainant, and that without such declarations it does not appear that they ever had any exclusive territorial rights which included New York, it is not shown that any interest held by them gave them title, legal or equitable, beyond the term of the original patent; and if not, they have no title to the extension and no interest in this suit, as the result of any prior assignment. These considerations require that the objection above stated, that the persons who entered into the so-called consolidation contract, and those who, by supplemental agreement, became parties thereto, are necessary parties to this suit, be overruled.]

2. The claim that the reissued patents on which this suit is founded are void, because they are not for the same invention as the original, but claim substantial matters not included in the former, nor shown, suggested, or described in the original record, is most urgently pressed, and is sustained by very able, elaborate, and greatly extended arguments, by the distinguished counsel representing the defendants on the hearing. The legal proposition, that a party cannot, by the surrender of a patent and the reissue thereof, obtain an exclusive right to devices not shown or claimed in the specification, drawings, or model of the original patented invention, is not disputed. But the application of that rule of law to the present case is resisted, and the controversy thereupon embraces the disputed question of fact, as to what was disclosed by the record of the original patent, including therein the specification, drawings, and model; and, next, the question, whether the reissued patents here sued upon do embrace devices not thus shown. I cannot hope to do more, than to make these questions, hi their relation to the case, intelligible, and to state my conclusion thereon. To follow the arguments of counsel through all their details, and attempt, satisfactorily, to answer those arguments, however gratifying and, possibly, useful, in the future history or progress of the case, as a vindication of my conclusion, must be left to greater leisure and to the duty of arguing rather than deciding.

It is always to be borne in mind, in considering the validity of a reissued patent, in the face of the objection before us, that the object of a reissue, and the purpose of the law in permitting the surrender of a patent and a reissue thereof, are, to correct, or rather perfect, a defective or insufficient description or specification, including the claim which

the patentee makes to the devices described and which he alleges are his invention. The reissue is, therefore, not to be tested by the mere language of the original specification, for, the fact of reissue proceeds upon the ground, that such language is defective or insufficient. So, also, something is due to the fact of reissue itself, as presumptive evidence of the facts justifying the reissue in manner and form in which it is granted. Indeed, this alone has been held, in some cases, conclusive, unless there be a clear excess of authority, or there appears to be fraud therein, (Allen v. Blunt, [Case No. 216, Id. 217;] Battin v. Taggert, 17 How. [58 U.S.] 74;) while, on the other hand, it is agreed, that the reissued patent must be for the same invention, and the patentee cannot thereby secure to himself a new or different subject of patent, even though it be, in truth, his own invention. In the original specification annexed to the patent granted to Sylla and Adams September 20th, 1853, [1873,]³ they state, that the nature of their invention "consists in fastening the sickle-bar or stock" (elsewhere and often called the "cutter-bar" and "finger-bar," it being the bar which supports the knives, and on which they slide, in cutting grass or grain) "to the ends of two levers, so as to allow it to vibrate perpendicularly, and accommodate the sickle to uneven ground, in cutting grass, the weight of the sickle-bar being properly counterbalanced by weights upon the opposite ends of the levers, which levers may be made permanent, by bolts or otherwise, when cutting grain, the sickle-bar being connected to the carriage frame by a strong link, which Is hinged to the sickle-bar and to the carriage near the crank shaft, so as to allow the bar to vibrate perpendicularly and to prevent it from being traversed longitudinally by the motion of the sickle." And, in describing the construction of the machine, it is said, "the bar B" (part of the frame near the crank shaft) "being connected to the sickle-bar * * * by the link, * * * which link is hinged to both bars by strong staples, so as to allow the sickle-bar * * * to vibrate perpendicularly and accommodate itself to uneven ground, in cutting grass, and to prevent it from being traversed endways by the motion of the sickle * * * and the action of the grass or grain, as it is pressed against the sides of the fingers, * * * as it is severed by the sickle. * * * The sickle-bar

* * * is fastened to the levers, * * * which are hung so as to vibrate freely, * * * and the weight of the sickle-bar and sickle are counterbalanced to the extent required, by the weights * * * fastened to the rear ends of the levers, when cutting grass, and, when cutting grain, the rear end" may be fastened, so as to carry the cutter-bar at a proper elevation. The patentees claim, 1st, "The weighted levers, * * * or their equivalents, substantially as described, which carry the sickle-bar and sickle, and allow them to vibrate perpendicularly and accommodate the sickle to uneven ground, in cutting grass, which levers may be made permanent, when cutting grain, substantially as described and represented;" 2d. "The link or hinged brace, * * * or its equivalent, in combination with the weighted levers, * * * which brace * * * prevents the sickle-bar from being traversed longitudinally by the action of the sickle, but allows it to vibrate perpendicularly and accommodate itself to uneven ground, substantially as described." These parts of the specification are all that are material to the point now to be considered. The drawings annexed show a machine, a frame projecting sidewlse to the extent of the swath to be cut, and two parallel levers, one at each end of the finger-beam, hinged at their centres to the frame, and projecting forward to receive the sickle or finger-bar, and backward of the hinges to receive the counterpoising weights. The finger-bar appears, in the drawing, to be attached to the ends of the levers by tenons at the end of the former, entering mortises in the ends of the latter, and the under sides of these ends are curved upwards, to adapt them to slide over the ground when the finger-bar is suffered to rest thereon for mowing. The link or coupling arm is also shown hinged to the inner end of the finger-bar, and from it extending crosswise to the further corner of the main frame, where, near the crank shaft which oscillates the pitman moving the knives or cutters, it is hinged, obviously, so as to move up and down freely as the inner end of the finger-bar shall rise and fall, and so as to hold such inner end of the finger-bar in proper relative position to the crankshaft tad pitman, for the free transverse action thereof and of the cutters, whether the finger-bar at that end be raised or lowered. A certified copy of the model remaining in the patent office was produced in evidence, that exhibited the general structure of the machine in admitted conformity to the specification and drawings, so far as it had been preserved, but the model was in a very broken state, and parts of it were wholly missing, and It is much to be regretted that portions were missing, which showed the precise character of the connection made between the sickle or finger-bar and the ends of the levers, which, in the discussion of this case, was deemed of great importance by the counsel.

In there issued [reissued] patent number 2,608, the only claim material to this controversy, and the only claim which It Is urged that the defendants are infringing, is as follows: 1st. "The combination of a finger-beam with slotted guard fingers, a reciprocating scolloped cutter, a double hinge connection between the finger-beam and the main frame, and a driving shaft for the cutting apparatus, parallel or nearly so to the ground."

Whether there be any other objections to this claim or not, and whether the defendants have violated this claim or not, may pertain to other points discussed in this case, but the claim itself is not liable to the objection now under consideration. All of the elements embraced in the combination do manifestly appear in the specification, drawings and model of the original patent Finger-beam, slotted guard fingers, reciprocating scolloped cutter, and a driving shaft parallel with the ground, are plainly shown. The finger-beam is, with equally obvious distinctness, shown and described as doubly hinged to the main frame, as well as by the hinges at each end of the link piece or coupling bar, as by the hinges by which the levers are connected to the main frame. If, therefore, this reissue is liable to the objection that it embraces what does not appear in the record of the original patent, it must be because of something Inserted in the descriptive or reciting portions of the specification preceding this claim, with reference to which it is Insisted this claim must be construed, and by which it is controlled. That involves substantially the same review of the specification which is involved in the consideration of one or more of the other reissues, and may be discussed in connection with them.

In reissue number 723, the patentees declare that "what is claimed under this patent, as the invention of Sylla and Adams, is the short finger-beam in combination with the yielding connection with the main frame, or its equivalent, substantially as herein set forth." It is obvious that to this claim, as to the last named, the same observations are pertinent. The combination is of the short finger-bar, which Is the finger-bar shown in the original, and the yielding connection of the bar by hinges, before referred to, which permits such motion on the coupling arm or link, and the hinged attachment to the main frame, above described. This is a more limited combination than the former, and must be deemed to embrace such coupling arm, and the hinged levers, or their equivalent Unless, therefore, the reference to the preceding specification, by the words, "substantially as described," or the duty to construe the claim with reference to the preceding specification, brings this reissue into reach of the objection urged, and makes it embrace what is not shown in the original, then this reissue is also free from that criticism.

In reissue number 724, it is stated, that

"what is claimed under this patent, as the invention of Sylla and Adams, is the combination of the finger-beam with the hinges by which it is drawn, arranged above the plane of the cutter, substantially as herein set forth." This language is not, perhaps, the best that might be chosen to express its meaning, but I think it is sufficiently intelligible. It is not every combination of the finger-beam with the hinges which is here claimed, nor even though, in other respects, the machine should be such as is described in the preceding specification; it is only such combination when arranged above the plane of the cutters, substantially as previously set forth. This seems to me a very narrow claim, embracing an arrangement of the hinges connecting a cutter-beam to the main frame above the plane of the cutters. The description of a machine in which this is shown to be practicable and useful, whether the other parts of the machine be the invention of the patentees or not, does not enlarge this claim, but only serves to illustrate a mode of its application. The device itself is single; it is found in the original model; it is shown in the drawings furnished me as copies of those annexed to the original patent. The reissue seems, in that respect, free from the objection now under consideration.

What is claimed under reissued patent number 726, as the invention of Sylla and Adams, is "the combination of a stop with the mechanism for connecting the finger-beam with the main frame, and allowing it to rise and fall, substantially as herein set forth." Here, again, the device claimed is single, and was shown in the original. In the reissue, the machine which the patentee describes, in order to illustrate the application of the stop to practical use, is not necessarily the invention of the patentee. For the purpose of such illustration, any machine might be described, and, therefore, it is not material, so far as the validity of the patent for the mere combination of a stop with the mechanism connecting the finger-beam with the main frame is involved, to inquire whether the machine by which the patentee illustrates the practical use of the stop was or was not correctly and fully described in the original application for a patent, or the specification thereof, or even in any patent whatever. For example, let it be supposed that a patent for such a combination had once been granted, and the patentee had, in his specification, attempted to show its application to use, by describing its construction, location, and adaptation to a particular machine, but, through mistake or error, he had failed sufficiently to indicate the manner of its application, or made his description of the device otherwise imperfect, I know of no rule which, on obtaining a reissue, would forbid his selecting a machine of a different construction, and even one invented by and patented to another person, and, describing that, show also the application of his newly invented combination thereto, as an illustration of its practical utility and the manner of employing it; provided, always, that his description of the stop and its application, and his claim thereto, did not embrace anything more than the combination of the stop with the mechanism connecting the finger-beam with the main frame. He would not, of course, thereby acquire the exclusive right to the

machine described, nor (if it had been patented to another) any right to use it, but he would secure the exclusive right to the stop itself, in the combination stated. Whether this reissued patent be or be not liable to any other criticism, it is not invalid on the ground that the device patented was not shown, suggested, or indicated in the original patent

If, however, the claims in either of these last two patents be deemed to draw to themselves the description of the machine described by the preceding specifications, as illustrations of their use and mode of operation, then the observations yet to be made in respect to reissues 2,608 and 723 will apply to these also.

Recurring now to reissues numbers 2.608 and 723, it remains to inquire how far there is anything in the specification preceding the claims alleged to be infringed that makes them invalid, as including what is not shown in the original patent. It has already been seen, that the claims on their face disclose no such departure from the original patent. It may be here properly suggested, that exaggerated statements of the utility and general capacity of the machine described in the reissues, do not expose the reissues to this objection, so long as the specifications correctly describe the construction and manner of operation of the thing invented, and a practicable mode of applying it The object of a specification is to describe the thing invented, so as to enable a mechanic of ordinary skill to construct it and apply it to practical use; and the claim declares what the patentee claims as his invention. Beyond this, all essays eulogistic of its utility, and assertions of its capacity, are immaterial and useless. If fraudulently inserted to mislead, and if they operate to deceive others in regard to the actual construction of the thing claimed and the mode in which it may be applied to use, they may render a reissue void on that ground, but that is not the point now before us; and where, notwithstanding such apparent exaggerations, the thing is correctly described, so as to serve the above stated objects of a specification, and the claim is limited to what is shown in the original record, the objection now under consideration has no force. These observations seem pertinent, in view of the criticisms, made at some length on the hearing, of the somewhat extended essays and of the vaunted

utility of the Inventions, found in the specification.

The main feature, however, in which these reissues were supposed to include something not shown in the original record, and the feature chiefly pressed upon the attention of the court is, that the specifications represent the connection between the finger-bar and the frame as such that the finger-bar can rise and fall at either end, without the rise or fall of the other, thus practically adapting itself to undulations of the ground in the direction of its length. Confessedly, the finger-bar, as described and shown in the specification, drawings, and model of the original patent, could rise and fall perpendicularly, by the free play of the hinges of the coupling arm and of the hinged levers which resisted the backward thrust; but it is denied that such finger-bar, as there described, had any other motion or capacity of motion, and it is insisted that neither the specification, drawings, or model exhibited a construction which permitted one end thereof to rise or fall without the other.

The specification annexed to the reissues assigns to the finger-beam this capacity, and describes one mode of construction which allows it. One example will suffice: "The forward ends of both the yielding bars are connected with the finger-beam, one of them, at least, not rigidly, but both strongly, so as to give the requisite support to the beam, without preventing it from swaying freely within certain limits, or rising and falling at either end unrestrained by the opposite end. One mode of securing the requisite freedom of the connection is by providing for play in the joint between the bar" lever) "k and the finger-beam, as shown in figure 7." It will be perceived, that the question is not whether there was or is, according to the specification, drawings or model of either patent, an instrument or device which, by its action on the finger-bar, brought it to the ground, or compelled it to conform to the undulations thereof. The construction, at most, allowed it to rest on the ground, and, by its own weight, conform to the undulations. We have, then, at the outset and at the end, it may be, of the discussion, the question of fact-Do the specification, drawings or model of the original patent indicate a construction which allowed, by not preventing, the finger-bar resting on the ground, in mowing, to sway up and down at either end within certain limits, to conform to undulations which tend to raise one end without the other? It seems to me obvious, that a finger-beam attached at each end to a hinged lever vibrating freely up and down, would certainly, when resting on uneven ground, sway or incline to some extent conformably to the undulations, unless the attachment to the levers and the close working of the hinges were of extraordinary firmness and rigidity, and that this would be suggested at once to the ordinary mechanic; and, in view of the great importance and even necessity of such conformity to the surface of the ground, it seems improbable that such a construction could be described without suggesting to the mind that such swaying or inclination was intended.

It is certain, that the original specification is not very, full or precise upon this point As above quoted, it speaks of "fastening the sickle-bar or stock to the end of two levers, so as

to allow it to vibrate perpendicularly, and accommodate the sickle to uneven ground;" and again, in describing the construction and the connection between the frame and sickle-bar by the link or couplingarm at one end of the sickle-bar, it states, that such "link is hinged to both bars by strong staples, so as to allow the sickle-bar to vibrate perpendicularly and accommodate itself to uneven ground, In cutting grass." Do those expressions import an accommodation to uneven ground by vibrating perpendicularly, and by that vibration only? or do they import both a vibration perpendicularly, and also an accommodation to uneven ground generally? The first would seem to satisfy the language, and yet the language is not such as to exclude the latter meaning. The most that can, I think, be said, is, that this specification is not inconsistent with a construction which permits the finger-bar to sway or incline at either end. If such construction was elsewhere indicated, and the invention actually embraced that feature, then the want of clearness in this specification is not only no objection to the validity of a reissue, but it furnished a just and proper occasion therefor. Similar observations are due to the drawings annexed. They do not, on their face, very clearly indicate a loose tenon in the mortises shown, and yet the double lines may indicate that the tenon does not fill the mortise, but has some play therein, and the drawings are not plainly inconsistent therewith. Great importance, therefore, necessarily belongs to the model, which, in a device that, when reduced to the small scale used in the drawings, might be left in doubt, would furnish a distinct exhibition of the truth. And here I repeat the regret that those portions of the original model which contains these points of connection of the finger-bar to the hinged levers are lost we must, therefore, resort to other evidence, and to collateral circumstances, to ascertain the fact.

In the first place, we have the great importance of this feature in a mowing machine, one quite necessary to its success. We have the before-mentioned obvious tendency of the hinged finger-bar, when attached to the ends of the lever, moving freely in hinges, to sway, when resting on the ground, in the manner in question, and, without motion or play at the points of connection, to wrench the parts and break or split them. We have the testimony that, in the first experimental use of the machine, in 1852, that

wrenching or splitting" occurred, either because there was no such motion or play, or because it was not sufficient to make the machine practically useful on uneven ground. We have it established by evidence which, notwithstanding some discrepancy, I think, preponderates, that, in the fall of 1852, the machine which was then tried was altered, so as to give play, or to give more play, in those points of connection, for the express purpose of enabling the finger-bar, with more freedom, to rise and fall at either end, to accommodate lateral undulations. The importance of this feature being thus practically demonstrated to the eyes of the inventors, it would seem most natural that it would not be lost sight of, and when, In the following month of May, they filed the model, those circumstances warrant the belief that it would show that feature, unless we assume that they were greatly devoid of ordinary care in the exhibition of an essential feature of the machine they desired to patent If, to these facts and considerations, even a little weight is given to the presumption arising, from the fact of reissue, above referred to, that the patent office had before it then the facts justifying the reissue, we should feel constrained to say that the evidence establishes that this feature of the invention was disclosed and shown in the original model.

But, the foregoing is not all of the proof bearing on this precise question. The defendants have put in evidence copies of the files of the patent office containing the applications for the reissues, the proposed new specifications and claims, the marginal criticisms made at the office, and the correspondence leading to the granting of the reissues. This was in 1859. From these it appears, that the officers observed the want of distinctness in the original specifications and drawings, and suggested that it did not appear that, according to the description thus given, the finger-bar would rise and fall at one end without the other. Whereupon the applicants, insisting on the contrary, referred them to the model itself, then, no doubt, complete, and the result was the granting of the reissues in the form in which they now appear. This is strong, very strong, persuasive evidence of the correctness of the complainant's claim in this respect. It was the very point in discussion, and appears to have been disposed of on the fact that the model showed this free connection of the finger-bar to the levers, which permitted the play therein, so that either end of the finger-bar would rise and fall without the other, "within certain limits."

Other criticisms of the reissues, as compared with the original patent, were made by the defendants' counsel. It is impossible for me to follow through all the details, and discuss them in this opinion. I have considered the arguments urged, and, as I trust, given them the weight to which they are entitled, but my conclusion is, that the reissues ought to be sustained; that there is no sufficient evidence of fraud; and, as to the actual construction of the devices claimed, that nothing is embraced in the patents which was not suggested or shown in the original.

3. I do not think there is serious doubt upon the question of infringement. The invention of Sylla and Adams has brought into use a class of machines which are distinguished by the manner in which the short finger-bar is suffered to rest upon the ground and conform to the undulations thereof, while the relation of the cutters to the operating mechanism is preserved by a crank shaft arranged parallel with the ground, and a link or couplingarm holding the finger-bar while it moves forward, supplied with another vibrating arm or arms, which sustain the backward thrust The attachment of one end of the couplingarm to the frame at or near the crank shaft causes the rise and fall of the inner end of the finger-beam to be in substantially the same arc of a circle as the rise and fall of the end of the pitman hinged to the sickle or knife plate. Hence, there is due relation between the motion of the pitman and the motion of the finger-bar, and the knifes are, therefore, moved freely, however the finger-bar be affected by the undulations of the ground. By this means, there is free action of the mechanism moving the pitman, and free action of the knives in the finger-bar, without torsion or friction. In short, a result is produced which, in other machines, is effected by making the driving mechanism itself vibrate up and down around a gear centre.

The defendants' machine plainly belongs to the same class of machines, and, although it differs in some details, which, I think, pertain to form rather than to the substance of the construction, it embodies the principle and the substantial means of operation characteristic of the complainant's patented machine. True, they have enlarged the hinge of the coupling-arm, so as, no doubt, by the intervention of a different form of shoe from that shown on or formed by the end of the complainant's hinged lever, to aid more effectively in sustaining the finger-beam against backward thrust, and to dispense with a hinged lever at the outer end; and the attachment of the remaining hinged arm, which serves, like the complainant's, to sustain the backward thrust, is carried diagonally to the frame. These changes may be improvements. They render the machine more compact and convenient. But, the essential ingredients of the combination are present-the short finger-bar, the reciprocating scolloped cutters, the double-hinged connection between the finger-beam and the main frame, and the driving shaft, parallel, or nearly so, to the ground. It seems to me, that, independently of the doctrine of equivalents, the defendants machine is, in these respects,

substantially like the patented invention, and, if the changes made by the defendants be deemed improvements, that is all that can be claimed for them. And, if the doctrine of equivalents be applied to the subject, then, clearly, the substitution of the hinged arm running obliquely from the inner end of the finger-beam to the main frame, and the enlarged hinge at the end of the coupling-arm, are a mere substitute for the complainant's hinged levers which sustain the finger-beam against the backward thrust. In view "of the limited claims of the reissued patents, the omission of counterpoising weights cannot be regarded as relieving the defendants from the charge of infringement They are neither of the essence of the invention nor of the claims of the patentees alleged to be infringed. These observations are pertinent to each of the reissues, if each be deemed to include, by implication or reference, the device specially claimed only when used upon a machine of the class to which, as before stated, the complainant's patented invention belongs. They are, however, especially applicable to reissues numbers 2,608 and 723.

As to reissue number 724, which; as above stated, claims the device of combining the finger-beam with the hinges by which it is drawn, arranged above the plane of the cutters, the use of the same combination is plainly exhibited in the defendants' machine.

As to reissue number 720, what is claimed is the combination of a stop with the mechanism for connecting the finger-beam with the main frame, and allowing it to rise and fall, substantially as in the specification set forth. I think the combination used by the defendants cannot be held to infringe this claim. It will be seen, that the claim is not broadly for any stop which may prevent the finger-bar from falling too low, in passing over ditches or other abrupt depressions in the surface of the ground. Such a claim would doubtless be liable to two objections: first, as being too broad, and, second, as not being of itself alone the subject of invention, but rather the suggestion of an obvious necessity. It could, in that aspect, only be permitted to patent the means or instrument devised to supply that obvious want, in any machine wherein the finger-bar is permitted to fall by its own gravity. The claim hero avoids the suggestion of invalidity, by being confined to the specific combination of a stop with the mechanism for connecting the finger-beam to the main frame. That is the combination shown in the complainant's patent the defendants have no such combination. Let their finger-beam be detached from the hinge which, through the coupling-arm and hinged lever or brace, connects it with the main frame, and that coupling-arm and hinge will then fall indefinitely; no stop is combined with them, which restrains their motion, and yet these are the mechanism which connects their finger-beam with the main frame. The defendants attach a flexible chain to the finger-beam itself. It is adjustable by the driver, so as to sustain the finger-beam, when desired. True, it accomplishes the same result as is effected by the combination claimed, but it is not within the words of the claim, nor, as I think, an equivalent in the combination, when the combination stated in the claim is viewed as a definite mechanical device.

4. On the subject of the novelty of the inventions embraced within the claims alleged to be infringed, no discussion would be satisfactory or useful which did not take up, one by one, the very numerous patents, applications for patents, machines, attempted machines, models, partial models, and experiments made or devised or attempted, in the endeavor to make a successful mowing machine, prior to the date of the inventions in question. Some, and, I think, all, have been before me on a former occasion, and some of them several times. I have, on these occasions, given them careful consideration. I have renewed and revised my examination of them in this case, with a view to the particular devices here claimed by the complainant. Nor would any discussion of their respective characteristics be satisfactory, that did not follow the argument of counsel through their full, minute, and extended presentation of these patents, machines, models, attempts, and experiments, and, professedly, at least, meet or discuss their several suggestions. This is chiefly the duty of opposing counsel, a duty which judges often undertake in vindication of their opinion, and, sometimes, when confined to what Is necessary for the elucidation thereof, may profitably be done. I fear I may have trespassed upon, that limit in the preceding discussion. I cannot attempt It on this point As to two of the machines or supposed machines relied upon-one alleged to have been invented by Hazard Knowles, and the other by Ogden Randall-I deem it proper to say, that there are several grounds upon which I deem the proofs not sufficient to invalidate the claims of the original patentees, Sylla and Adams, to be held the first inventors of the subjects embraced in the claims alleged to be infringed by the defendants. I am not satisfied that the combinations and devices so claimed were included in those machines. I deem whatever was done by either of those parties to have resulted in unsuccessful and abandoned experiment, constituting no impediment to the invention of Sylla and Adams or to the validity of their patents. The suggestion, that, where such experiments are made without resulting in a useful machine, and the product thereof is abandoned on that ground, whatever devices it contained become public property, and can. be dug up in after years and produced to defeat the patent of an independent and successful inventor, is not, I think, sound, or warranted by the law. And, finally, I place

no confidence in the testimony of the principal witness as to each machine, tending to, show the nature, character, and even limited success of those inventions. As to other machines, models, and experiments, it is manifest, that there were very many attempts to produce useful mowing machines; some of an entirely different class in respect to construction and mode of operation; some successful, but not embracing the principle or plan of Sylla and Adams, e. g., what were called on this hearing, the Wheeler type, involved in the case of Wheeler v. Clipper, etc., Co., [Case No. 17,493;] some only partially successful; and some, of various different kinds, failures. But I am not satisfied, that, by any, Sylla and Adams were anticipated by the successful invention and application to machines for mowing or reaping, of the devices claimed to be their invention, and to have been infringed in this case. The complainant must have a decree in conformity with this opinion.

[NOTE. So far as ascertained, there are no other cases involving this patent reported prior to 1880.]

² Reported by Hon. Samuel Blatchford, District Judge, and by Samuel S. Fisher, Esq., and here compiled and reprinted by permission. Syllabus taken from Blatchford's Reports, and statement from Fisher's Patent Cases. Merw. Pat. Inv. 073, contains partial report only.]

² [From 5 O. G. 4.]

³ [From 6 Fish. Pat Cas. 538.]