that the surrender was not good after recovery. See *In re Stein*, 16 N. B. R. 569, by Judge Blatchford, in which this proposition of inability to surrender the preference after recovery is maintained. Other cases might be cited to sustain this view of the case. The only modern authorities in conflict with them are *In re Black*, 17 N. B. R. 399, and *Burr* v. *Hopkins*, 12 N. B. R. 211.

From the evidence in this cause it appears that there is a conflict of testimony as to the fact of an offer to surrender the security creating the preference; but the respondents having retained this security, and having sought to establish their right to it by a suit in the circuit court of this district, it is manifest that in point of fact they never made such surrender up to the time of the announcement of the decision by the court; nor does it appear that such a surrender was ever made afterwards. For these reasons we deny the right to the respondents to prove their claim founded on the notes and book account, which was the consideration for the security, and we grant the prayer, etc., of the petitioner that the same shall be stricken off.

Considering that this is a case of constructive fraud only, we think it right that the whole costs should be equally divided between the petitioner and the respondent.

PATTEE and others *v.* MOLINE PLOW Co. and others.

(*Circuit Court, N. D. Illinois.* June 22, 1881.)

1. LETTERS PATENT—CULTIVATORS—INFRINGEMENT.

   The tongueless, straddle-row cultivator, which has an arched or bent axle, with wheels revolving upon the journals at the end of the axle, and plows attached to the axle by a joint allowing the plows to swing vertically and laterally, the axle being jointed in the middle of the arch by a torsion joint, which is prevented by lugs from turning only a certain distance, does not infringe patents issued, respectively, to Schroeder, Eichholtz, Norton, Pattee, and Poling.

2. COMBINATIONS OF OLD PARTS.

   A patent for the combination of old parts is not infringed by a different combination of the same parts to produce the same result.

In Equity.

A. McCallum, for complainants.

West & Bond, for defendants.

BLODGETT, D. J. The bill in this case alleges the issue of the following patents by the United States patent-office:

(1) Patent issued to J. Schroeder, September 24, 1867; reissued to complainants, February 6, 1877. (2) Patent issued to M. Eichholtz, April 6, 1869; reissued to complainants, June 12, 1877. (3) Patent issued to C. P. Norton, October 18, 1870; reissued to I. P. Pillsbury, August 26, 1873. (4) Patent issued to James H. Pattee, March 5, 1872; reissued to complainants, October 6, 1874. (5) Patent issued to T. Poling, August 13, 1872.

—All of which patents were for improvements in cultivators, and have come by assignment into the ownership and control of the complainants.

It is further charged that the defendants, disregarding the exclusive right secured by the aforesaid patents to the complainants, have made and sold, within this district, cultivators according to and in which are embodied devices and inventions covered by the said patents, as the same now stand reissued. The bill contains the usual prayer for an injunction, and an accounting for profits and damages. The defendants, by their answer, deny the validity of the complainants' several patents—

First, for want of novelty; *second*, because the reissued patents are for different inventions than those shown by the original specifications and drawings; *third*, they deny that the cultivators made by them infringe all or any of the complainants' patents.

It appears from the proof, as part of the history of the patents in question, that James H. Pattee, one of the complainants, devised what he considered a valuable improvement in cultivators, involving what he deemed a radical innovation on the then mode of constructing this implement, which was to make a two-horse straddle-row cultivator without a tongue or pole—in other words, a tongueless cultivator. The Pattee model, which is in evidence, shows the general idea of his invention—a cultivator, with the ordinary device of an arched axle for straddling the rows of corn or other plants to be tilled; the axle, jointed near the horizontal arms which form the journals for the wheels, and supported on wheels, with the plow's beam hinged to the axle by joints which allow them to oscillate or swing vertically and laterally. For this device he obtained the patent of March 5, 1872, which was subsequently reissued on the sixth of October, 1874. After this patent was obtained the complainants procured assignments of the Schroeder, Eichholtz, and Norton patents,—all of which were cultivators, provided with tongues as an element of their organism,—and secured reissues thereof, covering certain features which are assumed to be essential to the tongueless

machine, and they have also obtained an assignment of the Poling patent, which is a few months later in date than the Pattee patent. What may be called the Pattee cultivator has two characteristic features—

(1) It operates without a tongue or pole, the draft animals being attached in such a way as that each animal, within certain limits, draws his own plow, the draft being distributed to each animal by means of the joints in the axle; (2) it has a jointed axle or coupling yoke, by which the two plows are held together and made to operate at a certain distance apart.

It seems, for the purposes of this case, to be conceded that, in order to make this class of cultivators practical, there must be some provision for the flexion of the axle, so that each horse shall move its own plow, or the plow to which it is directly attached, independently of the other, to a limited extent. That is, if the two plows are rigidly coupled or connected together, and one horse moves faster than the other, or deflects from the line of draft, the machine will have a sideways motion, which will throw it upon or too close to the rows of plants it is intended to cultivate, or require extra effort on the part of the plowman to keep it in line. A joint of some kind, then, which shall operate to prevent the sideways action spoken of, and also divide the draft between the horses, is deemed a special desideratum in this class of cultivators, and one of their chief merits. The flexion is obtained in complainants' machine, under the Pattee patent, by means of two joints, one at each end of the axle, A, as it is termed in the specification. The joints are made by means of the side plates, A and B, and a spindle, as shown. From these side plates stand the horizontal arms which form the journals for the supporting wheels; the plow-beams being attached to the axle just outside the joints—that is, between the joint and inner end of the hub. These joints allow a free backward and forward motion, and the combined parts make the arched jointed axle described.

The principal defendant in this case, the Moline Plow Company,—the other defendants being officers of the corporation, and only charged with violating these patents by their action as such officers,—makes a tongueless, straddle-row cultivator, which has an arched or bent axle, with wheels revolving upon the journals at the ends of the axle, and plows attached to the axle by a joint allowing the plows to swing vertically and laterally, and the axle jointed in the middle of the arch by a torsion joint, which is prevented by lugs from turning only a certain distance; but the joint is placed in the mid-

dle of the axle, instead of having two joints at the spring of the arch, as shown in the Pattee patent.

It is insisted, on the part of the complainants, that it is by the use of this jointed axle,—that is, the axle jointed in the middle,—and in the peculiar two-way joint by which the defendants' plow-beams are attached to the axle so as to secure the requisite lateral and vertical motion to the plows, that certain claims in all these patents owned by the complainants are infringed. In other words, the complainants insist that the defendants' joint in the middle of their axle is but the equivalent of the two side joints in the Pattee axle, and is the same joint which is shown in the Pattee, and at least anticipated in the devices of Schroeder, Eichholtz, and Norton. The Schroeder machine was a straddle-row cultivator with a frame, consisting of wheels, axle, and tongue, but with a peculiar device for securing the plows to the frame by means of what he terms an "arched beam-yoke," which was bolted or pivoted at its center to the tongue in such a manner as that "either end of said beam-yoke may be advanced or receded with its respective plow without disturbing the parallelism of the plow-beams," which are hinged or jointed to the yoke in such a manner as to permit of their being oscillated laterally or vertically, and yet to sustain the plows in their upright positions without rear connections. The plows are attached to this vibrating bar or "arched beam-yoke" by a two-way joint,—this two-way joint allowing a vertical and lateral motion to the plow,—and at the same time the joint is so constructed as to hold the plows in an upright position. The arched beam-yoke consists of the centrally vibrating beam, or evener, and the pendant side arms which drop from the end of the evener. The joint by which the beams are attached to the pendant consists of two flat pieces of metal, one bolted to the top and the other to the under side of the end of the plow-beam, and bent so as to come together forward of the end of the beam. A bifurcated or split plate is made to pass on each side of the pendant, and is attached thereto by a bolt fastened through both parts of the split plate and the pendant, by which means the vertical movement of the joint is obtained. This split plate is carried back and flattened so as to pass between the two plates which embrace the end of the plow-beams, and attached thereto by a bolt, so as to secure the lateral movement. The plows are drawn by means of a forked or two-pronged draft-bar, one limb of which is attached to the lower end of the pendent part of the yoke, and the other either to the upper end of the pendant or to

the end of the evener, and the whiffletrees are attached to the forward end of these two bars, where they converge into a hook, or other device, for attaching them. The claims of this patent, as reissued, which the defendant is alleged to have infringed, are the first, second, third, and fifth, which are as follows:

"(1) Two plow-beams, B B, connected together by an elevated beam-yoke, A, so that either may operate in advance of the other, while both are drawn forward in the line of progression by draft animals attached to each side of the machine, so that each animal draws in a manner its adjacent plow, the attachment of the plow-beams to said yoke being by joints which permit the moving of the beams freely and independently in a lateral direction, combined and operating substantially as described, and for the purpose specified.

"(2) Two plow-beams, B B, connected together by an elevated beam-yoke, A, so that either may operate in advance of the other, while both are drawn forward in the line of progression by draft animals attached to either side of the machine, so that each animal draws in a manner its adjacent plow, the attachment of the plow-beams to said yoke being by joints which sustain the plows in an upright working position without rear connections or other support, and permit of their being moved or oscillated freely in a lateral direction, combined and operated substantially as described, and for the purposes specified.

"(3) Two plow-beams, B B, connected together by an elevated beam-yoke, A, so that either may operate in advance of the other, while both are drawn forward in the line of progression by draft animals attached to each side of the machine, so that each animal draws in a manner its adjacent plow, the attachment of the plow-beams to said yoke being by joints which sustain the plows in an upright working position without rear connections or other support, and permit of their being moved or oscillated freely in a lateral or vertical direction, combined and operating substantially as described, and for the purpose specified.

"(5) The draft-bars, F F, hinged to the beam-yoke, A, and combined to operate with said beam-yoke and plow-beams, B B, substantially as described, and for the purpose specified."

It will be seen that the first claim covers the two plow-beams, connected together by a beam-yoke, so arranged that one may operate in advance of the other, and the plow-beams being attached to the yoke by joints which permit each beam to move freely in a lateral direction, combined and operated substantially as described. In other words, as I understand and construe this claim, it is for a combination of these plow-beams; the particular and special kind of beam-yoke; and the joints by which the plow-beams are hinged to the yoke, so as to secure the lateral motion. The second claim is for precisely the same combination of parts, with the additional statement that the joints by which the plow-beams are attached to the yoke are to sup-

port the plows in an upright working position, and permit of their being oscillated in a lateral direction; while the third claim is for the same combination of parts, with the additional statement that the joints attaching the plow-beams to the yoke must permit the beams to be moved or oscillated freely in a lateral or vertical direction. The fifth claim is for the combination of draft-bars, connected with the beam-yoke and plow-beams as described.

By the first claim he covers as new the combination of certain parts as shown, and the joint allowing a lateral motion to the plows; and by the second and third claims he covers the other functions of the same joint; not the joint as such, on the assumption that no such joint was ever before made, but the result or operation of the joint. By the second claim, that the joint sustains the plows in an upright position; and in the third claim, that it allows the plow to move laterally or vertically. This joint, as shown in his mechanism, is simply a two-way joint, and when used in this combination, as described, permits all these movements or functions as a necessary part of its action in the mechanism, and also holds the plow in an upright position, and I cannot see how these claims for the result or functions of the joint can be deemed valid. It is the mechanism which is the subject-matter of the patent, and not the result of the mechanism.

The Eichholtz patent is for a tongued cultivator, parts of which are so arranged and combined as to dispense with wheels, and where each draft animal was attached to his own plow. It is not a tongueless cultivator, as will be seen, but consists of a beam-yoke, coupling the plow-beams together and to which the plow-beams are attached by a peculiar joint described, which allows the plows to be operated vertically and laterally; but they could not be dropped below a certain line by reason of the extension of the heel of the joint, as I call it, backwards from the pivot. The claims in this reissue patent, which are brought in question in this case, are:

"(1) The combination of two plow-beams and the beam-yoke, connected together by joint pieces so that the yoke sustains the beams in upright working position without their being connected together in rear, and is itself supported in an elevated position, the beams having also lateral and vertical motion, substantially as and for the purpose specified."

—Or, as I understand it, this claim is for a combination of this special kind of beam-yoke, so arranged as to support the plows in a vertical position upon the yoke.

"(2) Two plow-beams, B B', connected together by an elevated beam-yoke, A, so that either may operate in advance of the other while both are drawn forward in the line of progression, the attachment of the plow-beams to said yoke being by joints which sustain the plows in an upright working position without rear connections or other support, and permit of their being freely moved independently in a lateral direction, and in a limited vertical direction, permitting the necessary vertical movement of the plows and sustaining the beam-yoke in an elevated position, combined and operating substantially as and for the purpose specified."

It seems to me that the only material feature in this combination, which is not found in the Schroeder patent, is the peculiar joint by which the plow-beams are attached to the yoke so that the yoke sustains the plows in an upright position, and permits of a limited lateral and vertical motion of the beams. It may be remarked, and that is all I propose to say in reference to this joint, that it is but another form of a two-way joint. The pivot upon the yoke allows of a lateral motion to a limited extent; the peculiar joint by which the plow-beam is attached to the plate pivoted upon the yoke allows a limited motion upwards and downwards.

The machine covered by the Norton patent is a frame mounted on runners instead of wheels, and the frame is so jointed as to permit one plow to advance ahead of the other, and the plow-beams to be vertically and laterally oscillated by the peculiar mechanism shown. This sled, as it may be called, is arranged with cross-pieces, connected by runners and a tongue in such a manner as to produce the movements of an ordinary parallel rule, by means of which one plow may be drawn slightly ahead of the other, and the irregularities of the working of the team compensated for, to a certain extent, by the mechanism shown. The plow-beams are attached to one of the forward vibrating-bars, in connection with this parallel-rule motion, so as to allow of a limited lateral and vertical motion, but are held upright by a peculiar arrangement of the joints. The claim in this reissued patent is for—

"The main frame, A B, and runners, E, arranged relatively to each other so that either side of the main frame, together with its runner, may be advanced, and either plow-beam vertically or laterally oscillated without disturbing the parallelism of the runners with each other, or with the line of progression, substantially as described, and for the purposes specified."

It will be noticed that running all through these reissued claims is substantially the same idea—the same leading thought: That each plow is to be advanced in the line of progression without disturbing the parallelism of the beams, and without materially disturbing the

action of the other plow, within the limited scope of this allowable motion.

The peculiarity of the Pattee invention I have already sufficiently described.

The claims which it is insisted the defendant infringes are:

"(1) The combination in a walking straddle-row cultivator of the following instrumentalities, viz.: two wheels, D D, axle, A, and two plow-beams, K K, each beam carrying a handle and one or more shovels or plows, and independently hinged to the axle, so as to be retained in working position without rear connection or support, and moved freely in a lateral, vertical, and horizontal direction, substantially as and for the purposes specified.

"(4) The combination of the plow-beams, K K, axle, A, and wheels, D D, the latter being hinged or pivoted to the axle to permit of one side moving in advance of the other, substantially as described, and for the purposes specified."

The Poling patent describes a tongueless straddle-row cultivator, the forward ends of the plow-beams of which run upon caster wheels; and the plow-beams are held together by an arched or elevated beam-yoke, jointed in the middle. In the Poling patent the casters are attached to the axle, as he calls it, and the plow-beams are also attached to the axle by a joint in a way which admits of lateral motion only. They are rigidly attached, so far as any vertical motion independent of the yoke or axle is concerned, but the vertical motion of the plows is obtained by the joint in the axle. The plow-beams are attached to the yoke by a joint which permits of their free lateral movement, but the needful vertical motion is obtained by means of the joint in the middle of the yoke or axle.

I have thus described and discussed briefly each of the complainants' patents. The next inquiry is as to the novelty of those devices, and whether the defendant infringes the same.

From the proof in this case it is quite clear to me that Pattee was not the first to conceive and embody in a working machine the idea of a tongueless straddle-row cultivator. The first machine shown in the proof, which embodies this idea, is that patented by Isaac Constant, in November, 1851. It is a tongueless straddle-row cultivator, with all the elements for a working machine of that description, and so arranged as to be what may be called in this art self-sustaining; that is, it will stand upon its own supports. This was also done by Arnton Smith, in January, 1855; by Whiteley, in 1860 to 1865; by E. W. Vangundy, in February, 1864; by Pratt, in October, 1864; and by Adam Young, in November, 1866. All these show cultivators constructed without a tongue, with two plow-beams held together by

a yoke, each plow drawn by its own draft animal, and operating independently of the other.

The specifications in the patent of Arnton Smith show the idea which he intended to embody in his machine very clearly, as follows:

"Be it known that I, Arnton Smith, of the county of Macoupin and state of Illinois, have invented a new and useful improvement on the plow, and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification.

"The nature of my improvements consist in so constructing them that they shall admit of a free and independent motion of each other by means of the hinged slide-rods, D, in combination with the bar, E, and the coupling-rod, F, said rod F answering the double purpose of a coupler and a double-tree, and thus dispense with the weight of a double-tree usually employed. * * *

"Having thus connected the two plows together as before described, *and attached a horse to each plow*, I proceed to plow two furrows at a time. By placing them between two rows of corn I can plow next to each row and throw the dirt either up to, or away from, the corn; or I can place the two plows on each side of a row of corn and plow each side of the corn row, and throw the dirt away from the corn, or throw the same towards it, and thus hill up the corn. * * *

"I do not claim any of the separate parts of my plow as new, and I am aware that two plows have been united somewhat like mine, but so that both must advance together, and one must, when raised alone, rotate upon and affect the other, whilst my separate plows may move freely."

He shows, in his plans, the two plow-beams held together by a coupling-rod, as he calls it, and to which the plows are jointed by swivel-joints. For the purpose of holding his plows in an upright position he has a rear connection, or shackle-bar, as it is termed in the complainants' device,—shackling the two plows together. Here, then, we have in Smith's device two plows jointed to a beam-yoke in such a manner as to allow of a lateral and vertical motion to each plow, independently of the other, and each animal draws his own plow. This is the first beam-yoke shown in the proofs in this case; but the disclaimer by Smith in his specification intimates certainly that other inventors or manufacturers had adopted the coupling-rod or beam-yoke prior to him. Nor was the idea of an arched beam-yoke new to Schroeder, who is the first and oldest of the complainants' patentees. An arched beam-yoke is shown in the Constant patent of 1851. This beam-yoke is arched so as to pass over the plants to be cultivated, and yet operates to hold the two plow-beams together. The same idea is also shown in the patents of Saville,

Vangundy, and Pratt, and the model of Whiteley. I read from the specifications of Vangundy's patent of 1864 this extract:

"The central portion of the front bar, D, (that is, the arched coupling-bar,) is bent upwards so as to pass over the tops of the rows of growing corn or other grain without injuring the crop, and the rear bar, E, is forked for the same purpose."

Nor was the idea of a jointed beam-yoke or axle which would allow one plow to advance to a limited extent without the other new to Schroeder, Eichholtz, Norton, Pattee, or Poling. Constant made provision for it by the pivoting of his beam-yoke to the beam, as shown in his model, thereby securing the evener motion of Schroeder and Eichholtz, or parallel-rule motion of Norton and Pattee.

Vangundy made express provision for it in his specifications, as follows:

"As the retaining pins, *c c c c*, act as pivots, the longitudinal playing of the ends of the bar, D, upon the pins, *b b*, permit, to a certain degree, the independent movement of the two draught-beams in parallel lines, whilst a similar play of the ends of the bars E and F, upon their retaining pins, *c c*, within the slots in the share-beams, B B', permit the end of either draught-beam to be elevated or depressed independent of the other."

So that here is express provision for the independent action of each plow to a certain extent, and provision also for the lateral and vertical movement which is shown in the patents of the complainants.

Pratt says, in his specifications:

"The invention consists in connecting together two plow-beams, arranged in such a manner that each beam will have an independent movement, or one to a certain extent independent of the other, whereby the implement is placed more under the control of the operator than usual, and managed with less labor and with less fatigue to the team."

* * * * * * * *

"One draught animal is attached to each beam, A, and it will be seen from the above description that each beam, A, in consequence of being connected by the cross-bars, D D, as shown, is allowed a certain independent movement longitudinally, and may therefore be managed and operated with facility in case of meeting with obstructions, and the implement is not so liable to be strained or racked as when the rigid frames are used, nor the team so much fatigued."

"In plowing or cultivating corn I remove the bars, D D, and put on curved metal bars, H, as shown in figure 3."

Here we have, in the Pratt device, all of the substantial idea shown in Schroeder; that is, the connection of the plow-beams by a

beam-yoke so that they are held together, and the beam-yoke is arched so as to pass over the rows of plants, and each plow moves to a certain extent independently of the other, by means of the joints at the point where the yoke is attached to the plow-beams. Indeed, it seems to me that Schroeder's "arched beam-yoke" and Pattee's arched and jointed axle are fully anticipated in form of construction, function, and mode of operation by Pratt's "curved metal bar, H." And it is also noticeable that Pratt claims these characteristics as the patentable features of his devices, while they were not originally claimed (or at least allowed to them) by Schroeder, Eichholtz, Norton, or Pattee.

In 1865 W. S. Weir attached the plow-beams of his cultivator to an arched axle, as shown by the proofs, by a two-way joint, which held the plows in an upright working position without rear connections, and permitted all the lateral and vertical motions claimed in the Schroeder patent; while Adam Young, in November, 1866, and George E. Owens, in August, 1871, show the two plow-beams of a straddle-row cultivator connected together by an arched yoke with a joint in the middle, and for substantially the same purpose as used in Poling's device. Young says in his specifications:

"In order to arrange the connections between the plows so as to pass over the tops of corn leaves, after the latter have considerably advanced in growth, as is always the case with the late or final plowing, the connecting beams between the two plows are constructed in a peculiar manner by taking them in a vertical direction above each beam, and conducting them horizontally across towards the other plow. There are two of these bent beams attached to each beam, and to each other in the horizontal part of them, so as to form a pair. Each pair of these beams is coupled together by a peculiar clamp arrangement, which admits of a ready adjustment of the parts to accommodate the width of the rows as before recited. * * *

"The sockets, *a*, are permitted to turn easily around their vertical axis so as to allow one of the plows to be drawn ahead of the other without wrenching or straining any of the parts, and the beams, C C', are pivoted to the sockets, *a*, or the handle, B', so as to allow the requisite lateral motion of these parts."

Owens, in 1871, describes a tongueless straddle-row cultivator with an arched beam-yoke jointed in the center by a ring, and he says that this arrangement permits one section or division of the implement to be eight to twelve inches in advance of the other. There is then shown, by the proof in this case, that at times long antedating all of the complainants' patents all of the ideas or peculiarities of the complainants' several machines—the arched yoke of Schroeder

and Eichholtz and the two-way joints—were adopted and are older than the date of either the Schroeder or Eichholtz patents. The idea of the jointed axle of Pattee, by which the rigidity of the cultivator frame is avoided, and each draught animal operates his own plow to a certain extent independent of the other, is older in the art than either of the inventions covered by the complainants' patents. Not that, in either of these preceding machines, there is shown just the same kind of joint, structurally considered, as that shown in the Pattee patent, or an arched beam-yoke precisely like that of Schroeder; but the idea and function of Pattee's axle and Schroeder's beam-yoke seem to have been anticipated and worked out, in practical machines, by the several inventors from whose specifications I have so fully quoted.

I, perhaps, should not leave this branch of the case without referring to the evidence touching the Whiteley cultivator, which appears in this record. This cultivator—a model of which is introduced in evidence—was never patented, but the proof shows that it was constructed and in use in the vicinity of Springfield, Ohio, from 1860 or 1861 up to 1873 or 1874, and the evidence shows that some hundreds of them were constructed and put to use in that locality, and that it was a popular and useful machine. It is true there is some dispute in the record as to the precise time in which Whiteley completed and manufactured his machines; but I think the clear preponderance is in favor of the defendants' assumption that these machines were made as early as 1860, and that Whiteley continued the manufacture of them for several years thereafter. This Whiteley machine certainly embodies the main ideas that are developed—perhaps with more mechanical skill, but not inventive genius—in the later devices of Pattee and Poling. The time when the Whiteley machines were first made and introduced is fixed by the testimony of the witnesses as during the war, and it is hardly possible that a person could be mistaken as to a fact which occurred during a historical period of such impressive interest as our late civil war.

Arched and jointed beam-yokes, then, being old, and two-way joints being old, the complainants' inventors could have patents only for their special devices and combinations. These patents may be valid as shown. That is, the Schroeder patent may be a valid patent for the combination of the peculiar parts which Schroeder shows in his patent and claims as his peculiar invention—his peculiar arched beam-yoke or evener, his peculiar joint by which he sustains the plow, may be valid, and the combination of them, to make such

a mechanism as he shows, may be valid. He does not claim, in fact, to have invented a beam-yoke, nor a two-way joint; he does not assert that he is the first to have made a joint of this character, but simply puts it into his combination. So, too, an arched beam-yoke, jointed in the middle, as shown in Poling's patent, must be confined to his special joint; and this was evidently the view of the commissioner of patents. Poling describes his device,—his arched axle,—and then is allowed one claim, as follows:

"Having thus described my invention, I claim as new, and desire to secure by letters patent, the bars, A, constructed substantially as herein shown and described, and pivoted to each other at their inner ends, to adapt them to receive the plow-beams and draft, as and for the purpose set forth."

He describes the peculiar kind of axle. He describes how he secures the peculiar kind of joints shown—by cutting the axle in two and pivoting the parts together. It is true this is a torsion joint, the same as is used by the defendant, but it is a peculiar kind of torsion joint; and inasmuch as torsion joints were not new, and the idea of a joint in the middle of the axle had been shown by Owens, I think Poling must be limited to his peculiar joint. He cannot claim the idea of a joint in the middle of the arch or axle, because that had been done by preceding inventors.

The defendant's arched yoke is a peculiar device by itself. It is an arched axle with a hinge in the center. It differs not essentially, perhaps, in its mode of operation, from Poling's, but it has another kind of joint—a different joint from Poling's; not but what it has the same function, but Poling had no right, in the state of the art, to cover the function, or to cover every joint at that place. He was not the first to joint the arch or axle of a cultivator in the middle for the purpose of obtaining the result which he obtained. The field was open to the defendant to make another kind of joint in the same place which might accomplish the same result as Poling's without infringement. I therefore come to the conclusion that the defendant, in its combination of parts to produce its cultivator, does not infringe upon any of the special devices which are shown and covered by the complainants' patents. It is true that the defendant has an arched axle, but arched axles were old, older than Schroeder's or any of the complainants' patents. It is true that defendant's axle is jointed in the center, but an arched axle or beam-yoke, jointed in the center, was older than Poling's. It is true that defendant uses a two-way joint by which lateral and vertical motion of the plow-beam is

secured, and the plow is held in an upright position, but this had been done by Weir and other inventors long before any of the complainants' patents were issued.

The patents of Schroeder, Eichholtz, Norton, Pattee, and Poling all seem to me, from the proof, to be mere combinations of old parts, and, as I have said, may be valid as such combinations; but the defendant had the same right to combine other, or the same parts, so long as it did not use the same combination shown in complainants' patents, which I find it does not.

The bill is dismissed for want of equity.

THE TUBAL CAIN.

(*District Court, S. D. New York.* November 17, 1881.)

1. RES ADJUDICATA—STATE COURTS—ESTOPPEL—SUPPLEMENTAL ANSWER—ADMIRALTY—EVIDENCE—STAY OF PROCEEDINGS.

Where the substantial issue in two actions is the same, although the particular claims or causes of action be different, a trial and judgment upon the merits in the one action may be pleaded or given in evidence as an estoppel upon the same matter in the other.

The rule is the same, though the one action be in admiralty and the other in a state court or a foreign jurisdiction.

Where the owners of the brig T. C. chartered her to W. & Co. to proceed to Turk's island for a cargo of salt, to be furnished with quick dispatch, and the brig went there, and, after waiting eight days for a cargo, and none being furnished, returned to New York, refusing to wait longer or to go elsewhere for a cargo, as desired by W. & Co.; and the owners thereupon sued the charterers in a state court for breach of the contract in not furnishing the cargo as agreed, and the charterers then sued the owners by libel in this court for breach of the contract in not waiting longer or going elsewhere for a cargo as desired, and the defendants in each case set up a breach of the charter-party by the opposite side: *held*, that the substantial issue in each action was the same, and that a judgment in favor of the plaintiffs, after a trial by jury in the state court, might be set up as an estoppel in favor of the defendants in the action pending in this court; that leave should be given to set up the recovery of such judgment by supplemental answer; and, as there was an appeal pending from the judgment in the state court, the cause, on being reached for trial in this court, should be stayed until the determination of the appeal.

In Admiralty.

Beebe, Wilcox & Hobbs, for libellants.

Hill, Wing & Shoudy, for respondents.

BROWN, D. J. A motion is made for leave to file a supplemental answer setting up a judgment recently recovered in a state court, in another action between the same parties.