

Other cases, too numerous for citation, have been decided by this court to the same effect, but suffice it to say that we are all of the opinion that there is no error in the record.

*Judgment affirmed.*

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FULLER v. YENTZER.

1. The alleged new and useful improvement in mechanism for marking cloth in sewing-machines, for which letters-patent No. 28,633, bearing date June 5, 1860, were issued to Henry W. Fuller and Anthony W. Goodell, consists only of a combination of old elements or ingredients constituting an apparatus for effecting the results described in the specification.
2. The rights of the holder of such a patent are not infringed, unless it appears that, without his authority, the entire combination is made, used, or sold.
3. The apparatus used by the respondents, and that for which said letters-patent were awarded, described, and the conclusion reached, that they essentially differ in their construction and mode of operation.

APPEAL from the Circuit Court of the United States for the Northern District of Illinois.

*Mr. E. B. Barnum* and *Mr. E. N. Dickerson* for the appellants.

*Mr. Walter B. Scates, contra.*

MR. JUSTICE CLIFFORD delivered the opinion of the court.

Patents for a machine will not be sustained if the claim is for a result, the established rule being that the invention, if any, within the meaning of the Patent Act, consists in the means or apparatus by which the result is obtained, and not merely in the mode of operation, independent of the mechanical devices employed; nor will a patent be held valid for a principle or for an idea, or any other mere abstraction. *Burr v. Duryee*, 1 Wall. 531.

Where the claim immediately follows the description of the invention, it may be construed in connection with the explanations given in the description; and, if the claim contains words referring back to the specification, it cannot properly be construed in any other way. *Seymour v. Osborne*, 11 id. 516.

Improvements in mechanism for marking cloth in a sewing-machine, it is alleged in the bill of complaint, were invented

and patented by the complainant, and he charges that the respondents have infringed the exclusive privilege secured to him by the letters-patent, and he prays that they may be decreed to account for the gains and profits which they have made by the infringement, and for an injunction. Process was served; and the respondents appeared and filed an answer, setting up several defences, two of which it will be important to examine in disposing of the case: 1. That the complainants are not the original and first inventors of the patented improvement. 2. That the respondents have never infringed the complainants' patent, as alleged in the bill of complaint.

Before describing the nature of his invention, the patentee refers to figure 1 of the drawings, as showing the main features of the patented improvement when arranged in a sewing-machine for the purpose of accomplishing the results described in the specification, and he proceeds to state that the invention consists in a vibrating marking instrument which moves in unison with the needle of the sewing-machine, so as to crease the cloth at given distances from the needle, the marking instrument not pressing on the cloth except while the needle is in the cloth, which prevents the cloth from being obstructed in the movement by the feed, and allows the marking to be made at any distance from the sewing without wrinkling the even surface of the cloth.

By the use of a point vibrating in unison with the needle, and acting on the upper surface of the cloth in connection with a notch or an elastic surface or pad below the cloth, a crease will be made whose ridge is below the cloth; and by the use of one, two, or more of these up or down markers, or one up and one down marker, the crease or ridge can be made exactly at the required distance from the line of sewing, and either upward or downward, according to the way in which the cloth is to be folded for the subsequent operations.

Where more than one line of sewing is required, the crease or creases for the next fold are made in the same way; and the patentee states that the device is especially useful in all kinds of tucking, and in plaiting shirt-bosoms and other similar work, and he represents that, by the use of a vibrating pencil or chalk, a line of marks may be made by which a second line of stitch-

ing may be guided, which will become useful in quilting, or in performing any straight, curved, or parallel lines of stitching. Superadded to that, he also represents that if the marking-points are at right angles to the feed, from the needle, the marking will be at a given distance from the sewing and parallel thereto, regardless of the curved or zigzag form in which the sewing is performed.

Sufficient appears in the preceding description of the invention and of the principal devices of which it is composed, including the arrangement of the same and their mode of operation, to render it unnecessary to reproduce the minute references in the specifications to the representations exhibited in the different figures of the drawings.

Throughout the description it is apparent that the patented apparatus is to be attached to an organized sewing-machine; and the patentee states that the manner of effecting the attachment must be varied as circumstances may require, in view of the structure of the particular sewing-machine and the kind of work to be performed, and he adds that the vibrating motion may be given to the marker by the needle-bar or any other suitable device. Gauges, it seems, are employed for spacing off the width of the folds, tucks, or plaits; but the patentee states that he does not claim those devices, though he is of the opinion that the devices which he employs work better than any he has before known.

1. What he claims is the forming one, two, or more creases in cloth by means of markers on opposite sides of the cloth, one of which is connected with the bed of the machine, and the other operates simultaneously with the vibrations of the needle in a sewing-machine, whereby the crease or creases are formed in the cloth itself, parallel to the line of sewing, in such a manner that the cloth is ready for doubling over at the creases for the next line of sewing.

2. He also claims marking a line on the surface of cloth or other material sewed in a sewing-machine, by means of a pencil or similar article pressed upon the surface of the cloth at the time the needle perforates the same, and is raised therefrom when the feed takes place, so as to produce a series of marks parallel to and simultaneous with the line of sewing.

Concede that a result is not patentable, which is clearly shown to be true by the preceding remarks, and two things follow as a necessary consequence: 1. That the invention described in the first claim is merely the described apparatus for forming one, two, or more creases in cloth by means of markers on opposite sides of the cloth, for the purpose and in the manner and by the means therein described, it being clearly understood that the patentee does not claim the described means of attaching the patented apparatus to a sewing-machine. 2. That the invention described in the second claim is merely the described apparatus for marking a line on the surface of cloth or other material sewed on a sewing-machine, by means of a pencil or similar article pressed upon the surface of the cloth at the time the needle perforates the same, for the purpose and in the manner and the means described, excluding the means by which the patented apparatus is attached to a sewing-machine.

Special reference is made to the principal features of a sewing-machine; but inasmuch as the apparatus may be attached to any such machine, it is not deemed necessary to enter into those details, especially as the patentee states to the effect that the sewing is to be performed by the needle of the machine to which the apparatus is attached, in connection with a shuttle, looper, or other similar device.

Particular mention is made of the operative devices of the patented apparatus for marking lines parallel to the line of sewing and for forming the creases in the cloth, as shown in the drawings. Briefly stated, those devices are as follows: 1. An arm extending from the needle-arm or bar, and vibrating with the same. 2. A pencil, chalk, or point adjusted on the arm of the apparatus so that in its vibrations the point shall press upon the cloth and make a mark thereon for the second line of stitches at the required distance from the line of sewing and parallel to the same. 3. Both the specification and the drawings also show a bar which, as the patentee states, may be attached to the presser-foot, so as to be raised up with it, or that it may be sustained in any other convenient manner. 4. Adjustable marking-arms are also shown, which extend from the bar of the apparatus, and which are provided, one with a marking-point, and the other with a marking-notch. Arms formed

as springs are also provided, so that the marking-point and the marking-notch are raised from the cloth, except when acted on by the arm of the apparatus. Springs are also used in connection with the adjustable marking-arms, so as to yield in case of inequality in the thickness of cloth and not to interfere with the full stroke of the needle-bar.

Enough appears to show that the apparatus is attached to the bed of a sewing-machine, to which a plate is screwed which carries another adjustable marking-point, formed somewhat similar to the marking-point previously described, and the device or its equivalent employed to regulate the distance of the second line from the one being sewed.

Two marking-points are particularly described; and the representation is that they are both made thin, round, blunt, and chisel-formed, so as not to injure or catch on the cloth, and that the one shown in the third figure of the drawings may be fitted to slide in a groove to render the same adjustable at the desired distance from the needle, or that several such points may be formed or attached permanently at short distances apart.

Speaking of the device to regulate the distance for the second line of sewing, the patentee states that it may be adjustable, and that it will form a crease for the marking-point, and that it may be set in a small metal holder, or it may be constructed of sufficient length to comprise the whole distance to which the marking-point may be adjusted.

Three marking-points and the notch are mentioned in the specification; and the statement is that the one first mentioned and the device employed to regulate the distance for the second line produce a downward crease, and that the notch and the other marking-point shown in the third figure of the drawings produce an upward crease when the cloth is exposed to the action of these parts by passing between the same.

In order to give motion to these markers, the bar or arm of the apparatus strikes on the spring part of the adjustable marking-arms, which extend from the bar attached to the presser-foot, pressing the surfaces together, and cramping or creasing the cloth.

For tucking, the markers should extend on the other side of the needle-arm, and for that purpose the bar attached to the

presser-foot of the sewing-machine may be fitted in any convenient manner; but where a holder or arm to the presser-foot is used in the manner shown, the hole into which the bar sets may pass through the same and be provided with a clamping-screw, so that the bar attached to the presser-foot can be inserted from the other side, and in that case the plate also should stand on the other side of the needle, a second slot being provided for the purpose. Change to the other side must also be made in the arm of the apparatus, extending from the needle-arm of the sewing-machine to the marking-point first described and the device to regulate the distance for the second line of stitching.

Corresponding variations must be made in the manner of attaching the apparatus to the sewing-machine, and the patentee states that the vibrating motion may be given to the markers by the needle-bar, or by any other suitable device.

Proofs were taken, the parties heard, and the Circuit Court entered a decree dismissing the bill of complaint, and the complainants appealed to this court.

Want of novelty in the supposed invention, and the denial of infringement by the respondents, constitute the two defences set up in the answer; but the evidence to overcome the *prima facie* presumption that the patentee is the original and first inventor being insufficient for the purpose, the first defence must be overruled. *Cammeyer v. Newton, supra*, p. 225.

Grant that, and it follows that the decision in the case before the court must depend upon the question of infringement. Without more, the remarks already made are sufficient to show that the patented improvement is a combination of old elements constituting an apparatus for effecting the results described in the specification.

Intentional infringement is alleged by the complainants, and the burden is upon them to prove the allegation, as the charge imputes a wrongful act to the respondents.

Where the invention is embodied in a machine, the question of infringement is best determined by a comparison of the machine or apparatus constructed or used by the respondent with the mechanism described in the specification of complainant's patent. Comparison of the kind has been carefully made by the court in the case under consideration, aided by the

expert evidence exhibited in the record; and the court is of the opinion that the invention of the complainant, when the patent is properly construed, is not embodied in the apparatus constructed, sold, or used by the respondents, as charged in the bill of complaint.

Two distinct devices are shown in the complainants' patent which operate upon the cloth when being sewed in a sewing-machine, so as by the one to leave a mark, and by the other to make a crease in the cloth to indicate where it should be folded for the future operation. Briefly described, one of the devices consists of a pencil arranged as before explained, and the other consists of the notch and the point fitting into it, called the markers, and placed on opposite sides of the cloth, and which are operated by the needle-arm, and so arranged in their connections as to vibrate in unison with the needle to press the cloth in the notch while the needle is in the cloth, thereby forming a crease in the same parallel to the line of sewing, for the purpose of indicating the place for the next fold.

Creases of the kind are made by the point and notch, but the pencil is employed to make a mark on the cloth when the cloth is moved under it, as a guide for folding the cloth, as before sufficiently explained. No such device as the pencil or its equivalent is found in the respondents' apparatus, nor any thing which will perform the same function, or which has or can be made to have the same mode of operation. Nothing of the kind is exhibited in their apparatus, nor is any thing of the kind described in the patent under which they profess to work, nor are there any means or mechanism exhibited or described whereby such a device can be employed in the apparatus or be made to operate to mark the cloth in any manner so that the same could be evenly folded.

In the complainants' apparatus the pencil is fastened to a bar which projects out from the needle-arm in nearly a horizontal direction, entirely unlike any thing shown in the respondents' apparatus. Projecting outward from the presser-foot, and fastened to it, is a substantial frame-piece, called a bridge by one of the witnesses, which supports a bar running parallel with the bed of the machine and nearly parallel with the needle-arm, which supports one or more spring-arms, the same being pro-

vided with two slides or markers, — one being a point operating in an elastic bed fastened to the plate of the marker, and the other being a point or sharp device fastened to the bed-plate and operating on an elastic bed attached to one of the described spring-arms. Attached to the needle-bar is the arm which supports the pencil, and in the downward movement of the bar it comes in contact with the spring-arms and causes the described points to mark the cloth.

Viewed in the light of these suggestions, it is clear that the distinct features of the invention consist in the elevated bar projecting out of the frame attached to the presser-foot, the described spring-arm, the bar projecting out from the needle-arm with the described points, and the bed-plate on which they strike.

Turn from that to the patent of the respondents, or to the apparatus which they make, use, and sell, and it appears beyond all doubt that the apparatus of the respondents is substantially different in many respects from the patented improvement of the complainants. There is no framework in the respondents' apparatus, projecting out from the presser-foot, nor any horizontal bar projecting out from the framework, nor are there any spring-arms attached to any horizontal bar, nor is there any horizontal bar projecting out from the needle-arm to operate any such spring-arms as those described in the complainants' specification.

Instead of that there is, in the apparatus of the respondents, a pivoted double-spring blade operating on both sides of an upwardly projecting point. Effective means for operating that blade are also shown, and it appears that they consist in a spring-arm attached to the bed-plate of the marker which extends over the double blade, and that a vertical slot is made in the spring-arm through which the needle passes, and allows the lower end of the needle-arm to force the spring down on to the double blade while the cloth passes under the blade and over the sharp point, by which the elasticity of that portion of the cloth is lessened so that it will readily bend to form a tuck at the marked place.

Other differences are also apparent; as, for example, the spring-arm in the apparatus of the respondents is not attached

to the double blade or marker, nor is the double blade attached to any horizontal bar projecting out from the presser-foot, as in the apparatus of the complainants.

Without more, the differences suggested are sufficient to warrant the conclusion that the construction and mode of operation employed by the respondents is substantially different from the means and mode of operation described in the specification of the complainants' patent.

Expert witnesses testify that the bar projecting out from the frame attached to the presser-foot, the spring marker-arm, and the bed-plate are all necessary in the apparatus of the complainants to perform the function described in the specification, and the court, without hesitation, concurs in that conclusion; and the witnesses also state that if any one of those devices be omitted the apparatus will be wholly inoperative, except that perhaps one marker instead of two might answer the purpose to some extent, as set forth in the specification.

Beyond doubt, all those devices must co-operate to effect the described result; and it is equally clear that neither those devices nor any of them can be substituted by any device in the respondents' patent or apparatus without reconstruction and invention, nor would any thing short of invention enable the constructor to successfully use the devices shown in either apparatus in the other, so as to render the apparatus operative to effect the result described in the complainants' patent. None of the elements of the patented apparatus are new, and it follows that the patent consists in the described apparatus or in the combination of the old elements of which the apparatus is composed.

Valid letters-patent undoubtedly may be granted for an invention which consists entirely in a new combination of old elements or ingredients, provided it appears that the new combination of the ingredients produces a new and useful result; but the rule is equally well settled that the invention in such a case consists merely in the new combination, and that a suit for infringement cannot be maintained against a party who constructs or uses a substantially different combination, even though it includes the exact same elements or ingredients, if the combination is in fact new and useful, and substantially

different from the one which preceded it. *Gill v. Wells*, 22 Wall. 14.

Such an invention, if it produces a new and useful result, is the proper subject of a patent, and such a patent is valid and operative; but the right of the patentee under it differs in one respect from those of a patentee for an invention which consists of an entire machine, or of a new and useful device, as the rights of a patentee for a mere combination of old ingredients are not infringed, unless it appears that the alleged infringer made, used, or sold the entire combination. *Gould v. Rees*, 15 Wall. 194; *Prouty v. Ruggles*, 15 Pet. 341; *Vance v. Campbell*, 1 Black, 428.

Beyond doubt, that rule is correct; but the mere substitution of another old ingredient for one of the ingredients of a patented invention is not a good defence for an infringer, if the substitute performs the same function as the ingredient for which it was substituted, and was well known at the date of the patent as a proper substitute for the omitted ingredient; but the rule is otherwise if the ingredient substituted was a new one, or performed a substantially different function, or was not known at the date of the patent in question as a proper substitute for the one omitted, as in that event the defendant does not infringe. *Roberts v. Harnden*, 2 Cliff. 504.

Substantial differences between the apparatus of the respondents and the patented improvement of the complainants other than those referred to may also be pointed out, which of themselves are quite sufficient to show that the charge of infringement is not established.

By the patent of the respondents it appears that their apparatus contains an additional device, consisting of a slide-guide, the function of which appears to be to regulate the width of the tuck, the scales being marked on the bed-plate to be used as a guide for that purpose. Plainly no such device is shown in the apparatus of the complainants. Instead of that, they adjust the spring-arms which are on the bar projecting out from the framework or bridge attached to the presser-foot.

When the slide-guide in the respondents' apparatus is moved, the needle-arm still continues to strike the spring-lever or spring-arm on the same place; but when the spring-arms in

the complainants' apparatus are moved on the bar projecting out from the frame attached to the presser-foot of the sewing-machine, the bar projecting out from the needle-arm necessarily strikes the spring-arm at another point on the bar, showing that the two devices operate on distinct principles, as they are controlled and regulated by different mechanical means.

Wide differences also exist in the operation of the marking-points, when one apparatus is compared with the other. Suitable means for adjusting the marking-point are shown in the complainants' patent, but the marking-point in the respondents' apparatus is stationary. In the complainants' apparatus it is adjustable in a slot made in the bed-plate, so that it may be moved longitudinally to correspond with the notches or bearings in the end of the spring-arms when the latter are adjusted, it appearing that one marking-point in that apparatus projects up from the bed-plate, and that the other marking-point extends down from one of the spring-arms; that the point in the bed-plate operates in a bearing or notch in one of the spring-arms, and that the other spring-arm has a point operating in a bed in the slot made in the bed-plate, which shows that either spring-arm, with its respective marker, may perform the same functions substantially as the other spring-arm.

From these remarks, it follows that the point or bar for marking, in the complainants' apparatus, must necessarily be adjusted in the bed-plate to a distance corresponding to the movement of the spring-arms. Unlike that, the marking-point in the respondents' apparatus is stationary, and in that particular is entirely different, as all must admit who have given the matter any examination whatever.

Besides, there is in the patented apparatus a curved or movable plate attached to a horizontal arm or frame-piece fastened to the presser-foot, the function of which plate is the holding of the cloth smooth on the bed-plate as it passes through the apparatus. One end of the movable plate is elevated above the bed of the machine, while the other end is curved, and brought nearly or quite to the bed-plate of the marker, and operates independently of the other mechanism. Compare those means for holding the cloth with the means

employed in the apparatus of the respondents, and the difference is at once seen to be material and obvious; as, for example, the bar which holds the cloth to the bed-plate in the latter apparatus is attached to one end of the bed-plate, and extends lengthwise of it, and is rigidly fastened to the marking-blade, forming a different combination from that exhibited in the other apparatus, inasmuch as the bar which holds the cloth to the bed-plate is made to bear harder thereon when the spring-arm is brought down on the blade than when the needle-arm is ascending. Detach the bar from the bed-plate in the respondents' apparatus and no marking can be done, but the marker will continue to perform its function in the complainants' apparatus, even though the smooth plate were detached from the device fastened to the presser-foot.

Differences of equal importance might be continued at much greater length, but the court is of opinion that those already pointed out are amply sufficient to show that the decision of the Circuit Court dismissing the bill of complaint is correct, and there is no error in the record.

*Decree affirmed.*

MR. CHIEF JUSTICE WAITE, MR. JUSTICE MILLER, MR. JUSTICE STRONG, and MR. JUSTICE BRADLEY dissented.

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FULLER *v.* YENTZER.

SAME *v.* GOODRICH.

1. Reissued letters-patent No. 3,218, granted Dec. 1, 1868, to Henry W. Fuller, assignee, by mesne assignments, of Israel M. Rose, for an improvement in a tuck-creasing attachment in sewing-machines, were not superseded by letters-patent No. 28,633, issued June 5, 1860, to Henry W. Fuller and Anthony W. Goodall.
2. The court holds that the apparatus constructed, used, and sold by the respondents do not infringe the complainants' patent.

APPEALS from the Circuit Court of the United States for the Northern District of Illinois.