

## WOOSTER V. BLAKE AND OTHERS.

*Circuit Court, S. D. New York.*

April 27, 1881.

1. RE-ISSUE No. 6,565—RUFFLING MACHINES—VALIDITY—INFRINGEMENT.

Re-issued letters patent No. 6,565, granted to John A. Pipo, July 27, 1875, for improvements in machines for making ruffles, *sustained* as to its *first, seventh, eighth* and *tenth* claims, and *held infringed* as to such claims.

2. RE-ISSUE No. 6,566—SEWING MACHINE FOR BAND RUFFLING—VALIDITY—IN-FRINGEMENT.

Re-issued letters patent No. 6,566, granted to George H. Wooster, July 27, 1875, for sewing machines for making band ruffling, *sustained* as to its *eighth* and *ninth* claims, and *held infringed* as to such claims.

3. INVENTION—PRIMARY CONSTITUENT—MECHANICAL OPERATION—MECHANICAL ARRANGEMENT.

Invention consists primarily in finding out what mechanical operation is necessary to produce the practical result arrived at, and when such operation is hit upon, the mechanical work is easy. It is easy, when the mechanical operation is seen, to say that it was obvious that certain mechanical arrangements would effect it; but mechanical arrangements are tried and tried in vain to reach a practical result, because the mechanical operation which is to effect the result is not yet seen. In looking at the completed thing the mechanical operation is there, but the inventor, though he knew all about cams and levers and other mechanical arrangements, did not have in advance before him the coveted mechanical operation.

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*Frederic H. Betts*, for plaintiff.

*Benjamin F. Lee*, for defendants.

BLATCHFORD, C. J. This suit is brought on two patents. One is re-issue No. 6,565, granted to George H. Wooster, July 27, 1875, for an “improvement in machines for making ruffles;” the original patent having been granted to Pipo and Sherwood, January 27, 1863, on the invention of John A. Pipo. Only four claims of the patent, of which there are 13, are

involved in this suit. Those claims are claims 1, 7, 8, and 10, and are as follows:

“(1) In a ruffling mechanism a spring or flexible blade, having its acting edge turned or bent towards the surface against which it acts to form the ruffle, in combination with a carrier, to which the blade is rigidly attached, substantially as described. (7) The combination, with the actuating lever and ruffling blade, of a regulating device, to regulate the extent of backward movement of the blade without affecting the position to which the forward end of the blade moves, for the purpose set forth. (8) In a ruffling or plaiting mechanism, a spring or flexible blade, rigidly affixed to its carrier, in combination with a surface opposed to the blade, and adapted to sustain the material being ruffled against the action of the blade, substantially as described. (10) In a ruffling mechanism, the combination, with a blade and rocking lever, of a vibrating member of the needle-actuating mechanism, adapted to rock the lever and move the blade to form a ruffle, substantially as described.”

The specification says:

“This invention relates to a mechanism for forming ruffles or plaiting fabrics, and consists in the combination, in a ruffling mechanism, of a flexible ruffling blade, and with such blade is combined a guide, adapted to guide the material to which the ruffle is to be attached, and also other parts or devices, substantially as hereinafter described, to form a ruffle to be connected with a series of stitches.”

The drawings represent the improvement as attached to a Wheeler & Wilson sewing machine. The specification says:

“1 is the bed-plate, upon which, in an ordinary sewing machine, the work is usually laid to be sewed; 2 is the presser, by which the work is kept down to its place; 3 is the needle; 4 is a lower, and 5 is an upper, guide, through which strips of cloth, between

which the ruffling is to be sewed, are passed; \* \* \* 6 is a tube which guides the strip of cloth of which the ruffling is formed. This tube is flat like the others, and with a proper internal width to receive and guide the cloth intended to be used. It is open on the top, near the end towards the needle, to receive blade, 7, by which the ruffling is formed, so as to allow said blade to work directly upon the cloth. This blade is a spring, or is made flexible, and is provided at the end next the needle with points, or a roughened surface or sharp edge, which will take hold of the cloth to be ruffled and move it forward upon the smooth surface to which it is opposed, and its acting edge is preferably turned or bent towards the surface 431 against which it acts to form the material between it and the surface into a ruffle. This blade is adjustably attached to bar, 8, actuated by the rocking or elbow lever, 9, hung to a support or pendent connected with the bed-plate of the machine. This lever, 9, is vibrated on its axis 10 by means of the vibrating member or rod, 11, connected with and operating the needle and its carrier, which rises against the horizontal portion of the lever, and causes it to move the blade forward, and form the cloth on which it bears into a ruffle. The movement of the blade back from the needle is regulated by means of a set screw, 12, which restricts the return of the lever and blade. The bar, 8, and consequently the lever, 9, are drawn back from each forward vibration by a spiral spring, 13, which is attached at one end to this bar, and at the other end to the bed of the machine; and the end of the blade may be made to terminate at a greater or less distance from its carrying bar by means of a slot and set-screw. The operation of the lever is to press the spring blade on the goods when advancing to form the ruffling. while it is rocked or lifted from the goods during its retreating movement, and the pressure of the blade on the material is thereby diminished or removed. The

strip of cloth to be ruffled is passed under the blade and between it and the presser, and the plain or band material is led through guide, 5, when the plain piece is to rest on top of the ruffled strip and under the presser, where, as the material is ruffled and sewed, it is carried forward by the feeding mechanism such as is usually employed for that purpose, and in the ordinary manner. The edge or edges of the cloth to or between which the ruffling is to be sewed, is or are folded in by the guides, as before stated, and the strips used are fed or moved forward in the same manner that other fabrics are moved on the same machine. The ruffle is formed by blade, 7, which is made to reciprocate, at each stroke of the needle, a sufficient distance over and above the support or surface adapted to sustain the material to be ruffled against the action of the blade, to form a ruffle having folds or plaits of the size desired, the size of the fold, to form various grades of ruffling, being determined by the means already described. \* \* \* I am aware that a rough-surfaced feeder and ruffler have been employed to engage a piece of material to be ruffled, forming the gather in and moving the ruffled piece forward, the ruffler and feeder both engaging the ruffled strip; and, in connection with such mechanism, a separator has been employed to separate a band from the ruffled strip, the band being laid on the surface of the ruffled strip engaged on its under side by the ruffler and feeder, made as four-motioned feeding devices; and I am also aware of United States patent No. 14,475."

The defendants' rufflers are called the Toof ruffler and the Johnson ruffler, and are sold by them to be attached to sewing machines for ruffling purposes.

The Crosby and Kellogg tape-trimming patent of August 5, 1862, does not show anything to anticipate No. 6,565. It had flexible blades, but they did not press, in working, on the table or surface which supported the goods, nor were their acting edges

turned or bent towards the surface against which they acted. The Crosby and

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Kellogg ruffler patent of December 2, 1862, does not show a flexible ruffler, and the ruffler is hinged to its carrier. The suggestion, in the specification of that patent, that the crimper may be a spring, gives no details of construction, and cannot take an earlier date than the oath to the specification, June 21, 1862. Pipo's invention preceded that date. The Arnold patent of May 8, 1860, does not show anything that is in No. 6,565, nor does the Fuller and Goodall patent of June 5, 1860. The evidence of Kellogg, Manville, and Wilmot shows nothing but abandoned experiments. The crimpers tried by the Elm City Company were all of them hinged to their carriers. The Cary and Homans machine is not established with accuracy as prior to Pipo. Cary does not go back with certainty to the spring of 1862, and Homans has no books or written evidence, but really relies solely on abstract memory. There is nothing in anything he states as to events which makes it necessary that the date he assigns for the machine should be correct.

Claim 1 of No. 6,565 has three elements in it:

(1) A spring or flexible blade; (2) the acting edge of the blade turned or bent towards the surface against which it acts; (3) the blade rigidly attached to its carrier.

It is not necessary, in claim 1, that the carrier should cause the pressure of the spring to increase in advancing and decrease in retreating. The spring blade has a springy action in respect to goods transversely as well as lengthwise. That transverse springy feature is in claim 1, and is in the defendants' rufflers. So, too, the longitudinal springy action enables the blade to follow, in moving forward, the plane of the opposing surface. The blades in the defendants' rufflers are springy lengthwise, and such lengthwise springiness is

availed of by the defendants, and enables the edge of the blade, as it advances, to be certainly pressed on the cloth plate by the action of the presser foot and the cloth plate, whatever be the motion of the carrier. In regard to claim 1, and other features in the patent, much is said, in the evidence on the part of the defendants, as to the obvious character of this or that arrangement, and that any mechanic would know enough to do this or that. This is the often repeated story, in belittling inventions. The invention consists primarily in finding out what mechanical operation is necessary to produce the practical result arrived at. When such operation is hit upon, the mechanical work is easy. It is easy, when the mechanical operation is seen, to say that it was obvious that certain mechanical arrangements would effect it; but mechanical arrangements are tried 433 and tried in vain to reach a practical result, because the mechanical operation which is to effect such result is not yet seen. In looking at the completed thing, the mechanical operation is there; but the inventor, though he knew all about came and levers and other mechanical arrangements, did not have in advance before him the coveted mechanical operation. In answer to the suggestion that the defendants' rufflers would work as well, in use, if the blade were hinged to the carrier, it is sufficient to say that it is not so made. The three forms of the defendants' ruffler all of them infringe claim 1 of No. 6,565. For the same reason they infringe claim 8. I am also of opinion, from the evidence, that they infringe claims 7 and 10.

There is no evidence that anything is found in the re-issue No. 6,565 which is not to be found in the description or drawing of the original patent, or in the model accompanying the application for that patent.

The second patent sued on herein is re-issue No. 6,566, granted to the plaintiff July 27, 1875, for an "improvement in sewing machines for making band

ruffling;" the original patent having been granted to E. C. Wooster, on the invention of Thomas Robjohn, February 14, 1865.

There are 18 claims in the re-issue, but only claims 8 and 9 are involved in this suit. They are as follows:

"(8) The combination of a ruffling or plaiting blade or knife, arranged and operated above the cloth plate, with a supporting or secondary plate, separate from the cloth plate, between which and the blade or knife the fabric to be ruffled is held and advanced by the blade, substantially as described. (9 (A plaiting or ruffling blade arranged above the cloth plate of a sewing machine, and adapted to operate upon a surface other than such cloth plate, whereby a strip of goods can be plaited or ruffled above a plain piece, substantially as described."

It is plain that the defendants' three forms of ruffler infringe claims 8 and 9.

Those claims are not anticipated by anything shown in the Arnold patent of May 8, 1860, or by machines having a separator plate such as is shown in the model filed with the application for the Arnold patent. Arnold had no ruffling blade operating above the cloth plate. What is contended for is that it required no invention to pass from Arnold to Robjohn. The evidence shows the contrary. The results following the change are very marked, and give to the change the character of invention, as distinguished from ordinary skill. There is nothing else in the evidence which is an anticipation of Robjohn.

Many suggestions were made in argument, on the part of the defendants, which have been considered, though not now adverted to, as none of them control the salient points on which the decision is rested.

There must be the proper decree for the plaintiff in accordance with the foregoing views, and a like decree

in the suit against Handy, and in the suit against Thornton.

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