

TATE AND OTHERS V. THOMAS.

Circuit Court, S. D. New York. January 10, 1885.

PATENTS FOR INVENTIONS—TATE
 QUILTING—MACHINES—THOMAS
 MACHINE—INFRINGEMENT.

The eighth claim of the patent granted August 22, 1871, to William John Tate, for an improvement in quilting-machines, is infringed by the Thomas machine.

In Equity.

Edwin H. Brown, for complainants.

S. J. Gordon, for defendant.

WALLACE, J. Infringement is alleged of the patent granted August 22, 1871, to William John Tate, for an improvement in quilting-machines. The court has been relieved by the concessions of counsel made at the hearing from the consideration of any question except whether the defendant's machine, known as the "Thomas machine," and made under a license from the owner of the patent granted June 9, 1874, to M. A. King; is an infringement of the eighth claim of the complainants' patent. It has been conceded that the other machines made by the defendant are infringements of one or more of the claims of that patent. The object of the invention is to effect the quilting by machinery of complex patterns over the surface of materials used for bed-coverings, the lining of garments, etc. One feature of the invention relates to the production of diamond patterns or figures in the material quilted, and as the infringing machine is adapted to produce such patterns only, it will not be necessary to consider the other features of the invention.

It is obvious that Tate was the first to invent a quilting-machine which would produce the various complex and elaborate patterns which before his

invention were produced by hand-work. The nearest 661 advance in the art, before his invention, had been made by William Muir, whose quilting-machine is described in his patent of April 20, 1869. This machine could quilt in straight parallel lines, like the stitching of the sewing-machine, and it could also quilt in coincident zigzag lines, and thus form patterns defined by such lines. This latter result was effected by a single row of needles combined, with devices for feeding the fabric to the needles, which would impart both a forward or longitudinal and a laterally vibrating movement to the fabric, thus causing the stitching to be done in waved or zigzag lines. Tate conceived that by employing two rows of needles and so organizing the feeding devices that those for each row would operate successively and not simultaneously the zigzag lines of stitching of one row of needles could be made to meet those of the other row at the angle of the zigzag, and thus produce the desired diamond-shaped pattern. The invention described in his patent, so far as it relates to the production of the diamond-shaped patterns, is a combination of the two rows of needles with the requisite feeding devices.

The specification and drawings describe the needles as arranged in two parallel rows, and those of one row so located as to be opposite the spaces between the needles of the other row. Thus the series in one row alternate with those in the other row. When thus located and the described forward and lateral feed movement is applied, the relative disposition of the zigzag lines made by each row of needles is such that the angles of the lines meet at their apexes, thus producing the diamond figures or patterns in the place of the figures or patterns resulting from coinciding zigzag lines. The eighth claim of the patent is as follows:

“The combination of a series of needles, arranged in two rows, one behind and alternating with the other,

and devices for feeding the work beneath the needles, substantially as described.”

Whether the alternating arrangement of the needles is essential to the combination for the purpose of producing the diamond pattern it is not necessary to consider, because the language of the claim in question explicitly imports that arrangement into the claim. A machine which does not have the series of needles arranged in two rows, one behind and alternating with the other, is not an infringement of the claim. The defendant’s machine employs the feeding devices which are one of the elements of the claim, and also the series of needles arranged in two rows, one behind the other. But in this machine the needles of each row are located opposite those of the other row. It does not follow, however, that this machine does not have the alternating needles of the claim; and upon an analysis it appears that it has two sets of needles, and each set consists of a series in two rows, alternating each with the other. Each set of needles operates on the principal of Tate’s invention, and does the work of his machine in the same way. In other words, the defendant has incorporated Tate’s alternating needles into the machine and then duplicated 662 Tate’s arrangement, and when this has been done each needle in one row is opposite a needle in the other row. No new result is obtained by the change, although an aggregation of results is accomplished. If the additional needles had not been inserted the defendant’s machine would quilt diamond patterns just as it does now. The machine is held to be an infringement. A decree is ordered for the complainants.