

## MAYNADIER V. TENNEY ET AL.

[2 Ban. & A. 615.]<sup>1</sup>

Circuit Court, D. Massachusetts.

May, 1877.

PATENTS—INFRINGEMENT—MACHINE FOR  
CUTTING SOLES—MECHANICAL EQUIVALENT.

The complainant's patent was for a machine for cutting the soles of shoes by means of a die cutter. This he accomplished by mounting the die cutter upon a shaft which, during the operation of cutting, is bolted, and after the cut is made, the die is lifted and unbolted, and then, 1259 by means of a rack and pinion at the top of the shaft, is made to perform a half revolution, thus reversing the ends of the cutting die, and then it descends, renewing the cutting operation, and so on continuously. One of the main features of the patented combination was the shaft, upon which, as a centre, the cutting die revolved. The defendants dispensed with the shaft, and substituted therefor a sleeve, by means of which the cutting die rotated, but the reciprocating motion was effected by the same operation, and the result accomplished was the same as in complainant's machine: *Held*, that the defendants infringed complainant's patent.

{This was a bill in equity by James E. Maynardier against Daniel W. Tenney and others to enjoin the infringement of a patent.}

J. E. Maynardier, for complainant.

J. W. Hubbard, for defendants.

SHEPLEY, Circuit Judge. The patent of complainants must be considered, upon the evidence in this record, as the first one in the class of machines to which the invention relates. The patent is for a machine for cutting the soles of shoes by means of a die cutter, which has a reciprocating motion, making after each cut a half revolution in order to present the widest extremity of the material to be cut opposite the narrowest extremity at the last cutting operation. This is accomplished by mounting the die cutter upon a shaft, which, during the operation of cutting, is

bolted, and after the cut is made, the die is lifted and unbolted, and then, by means of a rack and pinion at the top of the shaft, is made to perform a half revolution, thus reversing the ends of the cutting die, and then it descends, renewing the cutting operation, and so on continuously. One of the main features of the combination was this shaft, upon which, as a centre, the cutting die revolved.

Under these circumstances, this being the first machine, it was competent for any person to do three things. He might, in the first place, dispensing with one of the elements of that combination in its precise form, introduce into it a known equivalent not in the sense of being a shaft, for instance, but equivalent in the sense that, in that combination, it was the use of another well-known device, performing the same operation in the same way. That would be a naked infringement. It was competent, secondly, for a person to make the change in the machine by introducing, in the place of any one of the elements of that combination, another device, not known before as an equivalent device; that would not be an infringement under the decisions of the supreme court, which say it is not an infringement where the device substituted was not a known equivalent at the date of the patent. It was competent, in the third place, for a party desiring to change the features of the machine, to substitute for one of the elements in the combination, features which should accomplish the same result by the same mode of operation that this element accomplished, and which, in addition to it, should perform some other function which was novel and useful. That, without being a naked infringement, would be the subject of a patent for an improvement, in consequence of the additional new features which it introduced, but would still be subject to the original patent, having embodied in it that which was novel and useful in the original combination.

This last mode of modifying the machine, is the mode which it appears clearly to the court, upon inspection, has been resorted to in the defendants' patent. The shaft, as a shaft, although described as one of the elements, and as an essential element in the combination of all the claims in the complainant's patent, does not exist as a shaft in the defendants' device; but the defendants have substituted for that shaft a sleeve, by means of which the cutting die rotates, dispensing with the shaft, but still effecting the reciprocating motion, the reversed motion of the cutting die, by the same operation, and substantially accomplishing the same thing in the result of the machine; but it also accomplishes another result.

It being obvious, upon inspection of this machine, that, when the cutting die revolved upon a shaft, the cutting die was a prolonged one, as long as the sole of the shoe, so that, when the material to be cut was of unequal density or unequal thickness, the strain would be greater upon one end of the die than upon the other, it being mounted upon merely a central shaft, the new element in the combination introduced in the defendants' machine allowed the pressure to come down upon this die upon both sides of the central shaft, and thus, in the operation, effected an improvement over the mode of operation in the Hatch & Churchill—the complainant's machine. While it had this improvement, which is a valuable improvement, in some respects, over that of the complainant, it still substantially, under the impression which the court has from inspection of the two machines, clearly embodied what there was new in the complainant's invention. It is true that the experts in this case say that this mode of reciprocating the cutting die is not an equivalent, is not the same thing as the shaft which is made an important feature in the complainant's combination; and to the eye of a mechanic, perhaps, looking at it merely with the eye of a constructing

mechanic, this is a different thing, and so it is to the eye of the court a different thing; but whether it be a different thing mechanically in that way or not, when we consider whether it be an equivalent in the sense of the law, by applying the doctrine of equivalents to a combination which is the first invention in a class of machines, and with the broader definition of the term "equivalents," as applied to such an invention, notwithstanding this testimony of the 1260 experts, it is clearly an equivalent in that sense. The decree, therefore, will be for the complainant.

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