PERKINS *V.* EATON *ET AL.*

Circuit Court, W. D. Michigan, S. D. December 24, 1889.

PATENTS FOR INVENTIONS—INFRINGEMENT.

Letters patent No. 228,779, issued to Willis J. Perkins, Jane 15, 1880, for improvements in mechanical movements, toeing a device involving a combination of mechanical parts, which in operation produce, by a peculiar method, the rocking of a shaft, with an adjustment for limiting the amount of the rocking movement, and which consists of a roller or its equivalent, moving freely on a slotted arm with varying tension, is not infringed by the rocking movement used in the Remington type-writer, which movement is, in an essential degree, produced by the hand of the operator.

In Equity. On bill for an injunction.

Taggart & Denison, for complainant.

Thomas Richardson, for defendants.

SEVERENS, J. The complainant seeks in this cause to restrain the defendants from infringing the rights secured to him by letters patent No, 228,779, issued to him on June 15, 1880, for improvements in mechanical movements. His invention was of a device involving a combination of mechanical parts, which in operation produced, by a peculiar method, the rocking of a shaft, with an adjustment for limiting the amount of the rocking movement. The mechanical movement was intended by him to provide, as he says in his specification, for changing a reciprocating movement into "a variable oscillating one; *second,* to insure a determined amount of movement in a variable oscillating movement; third, to produce an equal or variable strain or tension on the opposite strokes of an oscillating or reciprocating movement; *fourth,* to furnish a motive power to change a valve or similar device on engines of all classes,—electrical, steam, and hydraulic; *fifth,* to furnish a motive power whereby a spring or similar device is acted upon by the engine or machine with its full power, until the power stored up is sufficient to instantly change the valve without further drawing upon the power of the engine."

According to his specification, his improvements consist:

"*First.* In the combination, with a shaft provided with a slotted device, of a movable device fitted in said slot, and a spring which exerts force upon said movable device. *Second.* In the combination, with a shaft provided with a slotted arm, of a device adapted to be moved in the slot, and a spring which operates upon said movable device. *Third.* In the combination, with a rock-shaft provided with a slotted arm, of a movable device fitted In the slot, and

a spring which draws upon said movable device. *Fourth.* In the combination, with a shaft provided with a slotted arm, of a roller fitted in the slot, and a spring connected to said roller. *Fifth.* In the combination, with a rock-shaft provided with a slotted arm and a grooved roller fitted in the slot, of a spring connected to the bearings of said roller. *Sixth.* In the combination, with a rock-shaft provided with a Blotted arm and a grooved roller fitted in the slot, of a bifurcated bearing, in which the roller is journaled, and a spring connected to said bearing. *Seventh.* In the combination, with a rock-shaft provided with a slotted arm and a movable device fitted in the slot, of a spring connected to said movable device, and adjusting mechanism which limits the rocking movement of the shaft. *Eighth.* In the combination, with a rock-shaft provided with a slotted arm and a movable device fitted in the slot, of a spring connected to said device, and set-screws adapted to engage with an arm of the shaft to limit the rocking movement of the latter. *Ninth.* In the combination, with a rock-shaft provided with a slotted arm and a movable device fitted to the slot, of a spring connected to said movable device, and handle to actuate the latter. *Tenth.* In the combination, with a rock-shaft provided with a slotted arm and a movable device fitted in the slot, of a spring connected to said movable device, and a handle-arm secured to the rook-shaft."

The claims under his letters are in substantially the same language as in the description of his improvements just stated; indeed, are almost literally the same, and are numbered accordingly. The invention is claimed to be applicable to mechanism for operating parts in a shingle-machine, a steam-engine, pump, and many other machines. It is alleged that the defendants, Eaton, Lyon & Co., are engaged in selling the Remington type-writer, in which, as the complainant avers, is embodied a device for producing mechanical movement which is substantially his invention.

Several defenses are set up, the principal of which are—*First,* that the complainant was not the original inventor; and, *second,* that the defendants have not infringed.

I do not think that the evidence sustains the objection that this patentee had been anticipated in his invention. In my opinion, there is little similarity in the mechanism and devices illustrated by the machines and contrivances shown by the defendants' exhibits and proofs to the devices covered by the patent in question.

But, in my opinion, the claim of the complainant that the device employed in the type-writer is an infringement upon his patent is not made out. It is true that there is much of similar mechanism in it. There is a rock-shaft, and its rocking movement is limited by a similar arm and stops to those of complainant's. There is also a similar loop. This in the type-writer is attached, not at the end of the shaft, but between the bearings thereof; and it is attached so that in its length it extends transversely across the lower side of the shaft, the latter being in the middle of the upper side of the loop. A spiral spring extends from a fixed position below to the loop, and attaches to it by a hook. There are notches

on the upper side of the lower portion of the loop at each end for the hook to rest in, and to prevent its slipping, and for the same purpose the lower portion of the loop arches towards the middle from either end. And, if the hook were to take the place of the movable device in the loop

in the complainant's specification, the two constructions, at rest, would look strikingly similar. But in operation they do not perform the same function, nor do they perform their functions in the same way. In the type-writer there is at one end of the key-board a "lower-case" key, and at the other an "upper-case" key, each of which is attached to the forward end of a lever. The levers are each pivoted, and at their further ends are each attached to a perpendicular rod. These rods are attached to the ends of arms on the opposite sides of the rock-shaft. By pressing the keys alternately, the shaft is rocked, and by other attachments to the shaft the platen is held over the type, either capital or smaller, (upper or lower case,) as the operator desires. If the hook on the end of the spiral spring is at the end of the loop or slotted arm, so as to hold the shaft rocked to the right direction for printing the lower case, the operator, by pressing the upper-case key, (against the power of the spring,) can rock the shaft the other way, and hold it so while he prints the upper-case type. And this is the method of use while printing the uppercase, if that is only wanted temporarily. But, if a permanent change is desired, the hook on the end of the spring is transferred, usually by the thump and finger, but never automatically, to the other end of the slotted arm. This relieves the operator from longer pressing that key, and the machine is now permanently printing the new types. Precisely the same method is employed to change to the other case of type, either temporarily or permanently, as desired.

Thus it will be seen that a very important part of the plaintiffs device, namely, a roller or its equivalent, moving freely through the slotted arm, with a varying tension during its movement, (though equal in reciprocation,) and accelerating the latter part of the movement, is entirely wanting. (1) There is no free movement, but the reverse; (2) there is no tension operating on the slotted arm while the movement is taking place; (3) there is no automatic movement of the movable device while the shaft is being rocked. This third peculiarly distinguishes it from the plaintiffs invention, as illustrated by his Figs. 1 and 2, but perhaps does not from his Figs. 8 and 4, in which the movable device is pulled or pushed through the slot in the arm by a rod attached to the device, and moved by hand or other power. In the type-writer the spring creates an unvarying tension simply, at, the one end of the Blotted arm or the other, the shaft being rocked by other means. The hand of the operator, and the hook on the end of the spring which the hand lifts and moves through the slotted arm, are, not an equivalent for the plaintiff's device moving through the arm automatically, or freely, but under tension which modifies that movement, and gives it its peculiar effect. The complainant's patent is for a combination of elements, and, in order to constitute an infringement, the trespassing machine must embody all the elements material to the complainant's device. The elements need Dot he identical, but they must be equivalent in their nature. *Refinery* v. *Matthiessen,* 2 Fish. Pat. Cas. 602; Walk. Pat. § 349; Curt. Pat. § 308; *Gage* v. *Herring,* 107 U. S. 640, 2 Sup. Ct. Rep. 819; *Forncrook* v. *Root,* 127 U. S. 176, 8 Sup. Ct. Rep. 1247. And the accused machine must

perform substantially the same function; and in the same way, and with like results, or there is no infringement. See the above authorities. Applying these principles to the facts in the present case, it follows that the bill must be dismissed.