BRUSH ELECTRIC CO. *v.* FT. WAYNE ELECTRIC CO.

Circuit Court, D. Indiana. December 10, 1890.

PATENTS FOR INVENTIONS—ELECTRIC LAMPS—INFRINGEMENT.

The lamp manufactured under letters patent No. 219,208, granted to Charles F. Brush, September 2, 1879, for "an electric lamp," is a duplex lamp, organized to burn two or more pairs of carbons successively, and its distinguishing features are the arrangement of the feeding mechanism, so that the carbons of the two pairs are dissimultaneously separated to form the arc, and after the arc is formed between two carbons one is fed towards the other as fast as it is consumed, and, when this pair is fully consumed, the electric current is automatically transferred to the other pair. This feeding mechanism is operated entirely by electricity. Brush showed in his specifications that the feeding could be done by a clutch mechanism, suggested that it might be done by clock-work, but expressly said that he did not limit himself to any specific mechanism for obtaining the desired result. *Held,* that the patent is infringed by a lamp having the same characteristics, and differing only in that the feeding mechanism is operated by clock-work, which, however, is brought into action and controlled by electricity; and it is immaterial that in the latter the carbons may be separated by hand, where it appears that if this is not done the machine will do it as in the Brush lamp.

In Equity.

H. A. Seymour and *Offield & Fowle,* for complainant.

R. S. Taylor, for defendant.

Before GRESHAM and BLODGETT, JJ.

BLODGETT, J. This is a bill for an injunction and accounting, by reason of the alleged infringement of patent No. 219,208, granted to Charles F. Brush, on the 2d day of September, 1879, for "an electric lamp." The suit was commenced on the 1st day of July last, and complainant very soon thereafter moved for an injunction *pendente lite,* which motion was heard in the early part of October last. This patent has been four times before the courts of this circuit, and once before the circuit court for the northern district of Ohio, presided over by Judges BROWN, of the eastern district of Michigan, and RICKS, of the northern district of Ohio, in all which cases the patent was carefully considered in the light of the prior art, and its novelty and utility fully sustained. The only question seriously contested upon this hearing for injunction was that of the alleged infringement of the defendant's device upon the device covered by the complainant's patent. The defendants manufacture electric lamps, made substantially in accordance with a patent granted to James J. Wood on the 24th of June last. The Wood lamp, like that of Brush, is a duplex lamp, organized to burn two or more pairs of carbons successively, but the feeding device of the Wood lamp is partially actuated by clock-work, instead of its being operated entirely by action of the electric current, as in the Brush. In the Wood lamp, however, the clock-work mechanism is brought into action and controlled by the electric current. The distinguishing features of the Brush lamp is the arrangement of the feeding mechanism,

so that the carbons of the two pairs shall be dissimultaneously separated for the purpose of forming the arc, and that, after the arc is formed, one of the carbons of the

pair between which the arc is formed shall be fed towards the other as fast as it is consumed, so as to preserve a steady and uniform light, and that when the first pair of carbons is fully consumed, the current is automatically transferred to the other pair, and the arc is formed between them, which are in turn fed together by the feeding device until consumed. The Wood lamp has the same characteristics. The carbons of each pair are dissimultaneously separated, and the arc is formed by the action of the current passing through magnetic coils, as is done in the Brush lamp, but the feeding, as the burning carbons are consumed, is regulated in Wood's lamp by a clock-work. It does not seem to us that the interposition of this clock-work to do the feeding after the arc is formed essentially differentiates the Wood device from that of Brush. The electric current is the efficient motor in both lamps for forming the arc, and controlling the action of the finding mechanisms. Brush evidently saw that the feeding could be done in many ways after the arc was established. He showed a clutch mechanism for doing the feeding, but expressly says in his specifications:

"I do not in any degree limit myself to any specific method or mechanism for lifting, moving, or separating the carbon points or their holders, so long as the peculiar functions and results hereinafter to be specified shall be accomplished."

And further on in his specifications he suggests that clock-work may be substituted for his clutch mechanism. Before Brush entered the field, electric lamps had been contrived which burned two sets of carbons alternately, shifting the arc from one pair to the other at short intervals, making a flashing, unsteady, and unsatisfactory light. The problem which Brush set himself to solve was to secure the complete combustion of one pair of carbons before the arc was transferred to the other pair, and the transfer of the arc to the other pair by the automatic action of the electric current, so that no attendant was needed to light the second pair after the first pair was consumed, thus securing a lamp which would give a steady arc light of from 16 to 20 hours' duration. This he accomplished by his mechanism, which caused the dissimultaneous separation of the two pairs of carbons by the automatic action of the electric current actuating his separating devices, and a feeding device for bringing the carbons together as fast as they were consumed. This long step forward in the art was taken by Brush, and at the present stage of the art it seems that the inexorable law of the electric current requires that when two or more pairs of carbons are to be burned successively, the carbons of each pair must be dissimultaneously separated and the arc produced between the pair last separated. Having done this for the art, Brush is entitled to cover all means equivalent to his own for obtaining the same result, one of which is a clock-work feeding device.

The argument ingeniously and ably made in behalf of defendants is that Wood has evolved his lamp along the lines indicated by the inventions of Denayrouse and Meynall,

who had preceded Brush. But neither of these inventors produced a lamp where the carbons would be burned

successively. It seems to be the history of many great inventions that the minds of many persons, without any concert of action, are at about the same time attracted to the subject, and each sets himself at work to invent a mechanism which shall produce the desired new result and meet the felt public want. One of the experimenters succeeds while all the rest fail. After the one has succeeded it is easy to go back into the limbo of these old failures and in the light of the successful machine, by perhaps slight changes, make these old abortive attempts do the work of the successful inventor. But it is the successful experimenter who has shown them the way, and he, and he alone, who is entitled to be called the inventor, and be protected by a patent. The successful inventor may even have taken advantage of hints and suggestions from the abortive attempts of others; but that does not entitle them, or any one else, to appropriate his successful machine.

It was strenuously urged by the able counsel for the defendant, both in his oral and printed arguments, that the Brush patent shows two feeding devices, while the Wood lamp shows but one feeding device or mechanism. This position, if correct, would hardly, we think, answer the charge of infringement; but we do not entirely agree with the learned counsel in his position that Wood has only one feeding device. The clock-work mechanism of Wood is practically as much a separate device for each pair of carbons as the clutch mechanism of Brush, for, while Wood's clock-work is made to feed each pair of carbons in turn, it feeds the first by one pinion and the next one by another pinion, after the arc has been produced between the second pair by the action of the electric current, thereby making his device as much a duplex feeding device as is that of Brush.

The feature of the Wood lamp which allows the attendant when he lights the lamp, or puts the lamp in circuit, to separate the carbons of one pair by hand, instead of allowing that to be done by the operation of the electric current, as is done by Brush, does not, it seems to us, in any degree evade the Brush patent, because it clearly appears from the proof and operation of the machines, as exhibited upon the hearing of the motion, that if the attendant did not latch up the upper carbon of one pair the machine itself would automatically do so, the same as it is done in the Brush lamp; and the manual separation of one pair of carbons, even before the lamp is lighted, is nothing but the adoption of Brush's dissimultaneous law, and it leaves the arc to be formed between the pair of carbons last separated. In this as in almost all cases on infringement, there are slight differences in mode of construction and devices for the result accomplished by the patent. It is rare that we find an infringing machine which is copied with Chinese fidelity from that which it is claimed to infringe, but the infringers always endeavor to escape the charge of infringement by some modifications which shall apparently cause their machine to differ from that of the patentee. The essential thing, however, to be considered in all such cases is whether the principle embodied and claimed in the patent has been substantially used by the defendant, and if we find that it has been so substantially

used it is the duty of the court to protect the patentee, however ingenious may be the mode of infringement. The motion for an injunction is therefore sustained.