## Case No. 1,494. BLAKE V. EAGLE WORKS MANUFG CO.

[3 Biss. 77; 3 Chi. Leg. News, 353; 4 Fish. Pat. Cas. 591.]<sup>1</sup>

Circuit Court, N. D. Illinois.

July Term, 1871.

# PATENTS–PRIOR USE–EVIDENCE–COMBINATION–MECHANICAL EQUIVALENTS–BLAKE BTOSE BREAKCR

- Where a single witness testified to the existence of a prior machine, some twenty years before, in a large town where it was said to have been publicly used, and where its use must have been known to many; but neither the machine nor a model of it was in existence, and it never came into general use, although the invention was of great value: *Held*, that the patent ought not to be invalidated without additional and corroborative testimony.
- 2. The patentee having constructed a practicable machine and produced important results by the combination of various parts, it was within the scope of mere mechanical skill to vary the mode of connection in different ways without changing the principle of construction and combination, even though one method, that of the defendants, might involve a loss of power and a gain of quicker motion.
- 3. Letters patent for "improved machines for breaking stones," reissued to Eli W. Blake, January 9, 1866, examined and sustained.

[Cited in Blake v. Rawson, Case No. 1,499; Blake v. Robertson, Id. 1,500.]

4. A machine having a movable jaw in the center and a fixed jaw on each side, *held* to be an infringement of the Blake patent.

In equity. This was a bill in equity [by Blake and others against the Eagle Works Manufacturing Company] to restrain the defendants from infringing letters patent for an "improved machine for breaking stones" granted to Eli W. Blake June 15, 1866, and reissued January 9,1866. The facts and the claims in the patent appear in the opinion, and are also fully stated in Blake v. Stafford [Case No. 1,504].

H. T. Blake and S. A. Goodwin, for complainants.

George Scoville and George Gifford, for defendants.

DRUMMOND, Circuit Judge. This is a bill filed by the complainants as inventors of and assignees of a patent for an improved machine for breaking stone, Eli W. Blake, one of the complainants, claiming to be the inventor and the patentee. The patent has heretofore been before the courts and sustained (Blake v. Stafford, [Case No. 1,504]) by Ship-man, J., and afterwards, on a motion for a new trial, overruled by Mr. Justice Nelson, of the supreme court of the United States. It is claimed that there were some errors of fact committed by the court in the description of some machines then before that court, and now before this. However that may be, I do not understand that the counsel for the defense very seriously contest the validity of the patent on the ground that its subject-matter was wholly covered by previous machines, unless it may have been by that of Forward, referred to by the witness Johnson as having been constructed in Louisville, Kentucky, in 1847.

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[The patent was originally issued to Blake, June 15, 1858, and afterwards surrendered and reissued January 9, 1866]<sup>2</sup>

The examination of the specifications of the patent and the mode of operation of the machine described, together with a comparison of the various other machines with that of the patentee, which have been introduced in evidence, and which, it is claimed, anticipate it, have left no doubt in my mind, not only of the validity of the patent, but of the great value of the machine itself.

The only testimony in relation to the Forward machine is given by one witness, James B. Johnson, who was examined before an examiner upon interrogatories sent to California in 1869. He says he made the pattern in the summer of 1847 for the castings of the machine, and assisted in its construction, and afterwards made a model in contemplation of Forward's application for a patent. Annexed to his deposition was a pen sketch of the machine, which he describes. He says: "I saw the machine in actual operation several times, and it did good service in crushing stone for macadamized roads, for which it was designed. I left Louisville in October, 1850, and have never heard of the machine or model since." This witness recounted his recollection of what took place twenty-two years before. He made his sketch and gave his description, not having seen the machine or the model, or even heard of them for twenty years or more. The machine was said to have been built in Louisville, a large town, and if it operated publicly in macadamizing roads, it must have been known to many. It is difficult to realize that if such a machine-one that it is said in all essential particulars anticipated that of Blake-had been constructed and publicly used, all traces of it would have been lost, except what remains in the memory of one witness. No patent was ever applied for, and no such machine ever came into use in Louisville or elsewhere, so far as this case shows. It is not claimed that Blake ever heard or knew of this machine. I do not feel inclined to invalidate a patent on such testimony as this. I think the defense, under the circumstances, should have introduced some additional and corroborative testimony in relation to this solitary machine. It is the less worthy of confidence because Blake's machine, which it was said to anticipate, was one of great value. The only question, therefore, is whether the defendants have infringed the patent of Blake, and to some extent that involves its construction.

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The re-issued patent consists of three claims. The first two only are involved in this controversy. The patentee gives this general description of his machine:

"My stone-breaker, so far as respects its principle, or its essential characteristics, consists of two jaws between which the stones are to be broken, having their acting faces so nearly in an upright position that stones will descend by their own gravity between them, and convergent downwards, one towards the other, in such manner that while the space between them at the top is such as to receive the stones that are to be broken, that at the bottom is only sufficient to allow the fragments to pass when broken to the required size; and of a revolving shaft driven by steam or other power, which is made to impart to one of these jaws a continual vibratory movement, causing it to alternately advance toward and recede from the other jaw through a short and definitely limited space; hence when the shaft is revolved and a stone is dropped into the space between the jaws, it falls down until its further descent is arrested between their convergent faces; the movable jaw advancing, crushes it, then receding, liberates the fragments and they again descend, and if too large are again arrested and crushed, and so on until all the fragments, having been sufficiently reduced, have passed out through the narrow space at the bottom."

After giving a minute description of the various parts with reference to drawings, he presents, as his first two claims:

"I. The combination, in a stone-breaking machine, of the upright convergent jaws with a revolving shaft, and mechanism for imparting a definite, reciprocating movement to one of the jaws from the revolving shaft, the whole being and operating substantially asset forth.

"II. The combination, in a stone-breaking machine, of the upright movable jaw with the revolving shaft and fly-wheel, the whole being and operating substantially as set forth."

Does the defendants' machine infringe these claims or either of them? It is double, having a movable jaw in the center and a fixed jaw on each side, thus forming a double crusher instead of one. The defendants' counsel admit that it has the revolving shaft, the pulley, the crank and the fly-wheel of Blake's machine, but deny that it has the jaws, the toggle mechanism or the spring described or claimed in Blake's patent.

The difference between the double and single jaw is not insisted on. The jaws of the Blake machine are straight and corrugated, the corrugations running vertically, and there can be no doubt the patentee intended the machine should be so constructed and used, and that without such structure it would be less efficient.

In the defendants' machine the jaws are all curved, the stationary jaws smooth, without corrugations or teeth, and the movable jaw has what are called upright corrugations, but which may properly enough be called vertical. Such a modification as this by the defendants in the form of the jaws does not of itself destroy its identity with the Blake machine. It is not a substantial change.

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Instead of the toggle mechanism of the Blake machine by which the crank shaft is connected with a movable jaw, the defendants use a rod and lever to produce the connection; but it seems to me that when Blake constructed his machine, and thus produced such important results by the combination of the various parts, it was competent for mere mechanical skill to vary the mode of connection in different ways without changing the principle of its construction and combination, even though it might be true that one method—such as that of the defendants—might involve a loss of power and a gain of a quicker action.

And I think the defendants' machine has something different in its structure and mode of operation from the Hamilton and the other old machines which have been introduced in evidence, and which it has borrowed from Blake's machine.

On the whole, therefore, I conclude that the defendants infringe the first two claims of the Blake patent, and the decree of the court will be accordingly.

Injunction granted.

[NOTE. For other eases involving this patent, see note to Blake v. Robertson, Case No. 1,500.]

<sup>1</sup> [Reported by Josiah H. Bissell, Esq., and Samuel S. Fisher, Esq., and here compiled and reprinted by permission. The syllabus is from 4 Fish. Pat. Cas. 591, and the statement and opinion from 3 Biss. 77.]

<sup>1</sup> [From 4 Fish. Pat. Cas. 591.]