

SLOAT v. PATTON.

{1 Fish. Pat. Cas. 154;¹ 24 Jour. Fr. Inst. (3d S.) 23;
9 West. Law J. 550.}

Circuit Court, E. D. Pennsylvania. April 8, 1852.

PATENTS—RESULT—MODE OF
OPERATION—PROPERTY OF PATENTEE.

- 1 A difference in the result of the action of two devices is evidence that their mode of operation is different.
- 2 The invention which is set forth in letters patent belongs to the inventor as rightfully as 328 the house he has built, or the coat he wears. It can not detract from his title, that the subject of it is of his own creation, his thought, conceived and developed and matured in the recesses of his own mind.

[Cited in *Buchanan v. Goodwin*, 57 Fed. 1040.]

This was a bill in equity [by George B. Sloat against James M. Patton] filed to restrain the defendant from infringing the letters patent for “a new and useful improvement in the method of planing, tongueing, grooving, and cutting into moldings, or either, plank, boards, or any other material, and for reducing the same to an equal width and thickness, and also for facing and dressing brick, and cutting moldings on or facing metallic, mineral or other substances,” granted to William Woodworth, December 27, 1828; extended by the board of commissioners for seven years from December 27, 1842; extended by special act of congress, passed February 26. 1845, for seven year from December 27. 1849. and reissued July 8, 1845. There were several suits involving substantially the same question of infringement.

Harding, Campbell & Keller, for complainant.

Taylor, Hubbell & Cuyler, for defendant.

KANE, District Judge. The effort to smooth boards and reduce them to a uniform thickness, by the rotary action of cutter-knives, set in the face of a disc, and

made to revolve in the plane of the intended surface, is of ancient date. But from the time of Bramah half a century ago, until now, it has never been successful.

If it were practicable to construct a machine, mathematically accurate in all its parts, and of inflexible material, so as to prevent all possible vibration; and if, besides, the wood to be operated on could be first deprived of all its elasticity; then each cutter, as it passed on its way, removing a certain portion of the board, would leave the surface absolutely finished behind it; and the other cutters and the same cutter returning in its revolution, all following in absolutely the same plane with the first, would pass over the finished surface, neither abrading it nor compressing it, yet in contact with it.

But these conditions involve mechanical impossibilities. The strongest engine that ever came from the shop, vibrates sensibly when it encounters an intermitting resistance, and there is no such thing as a non-elastic. The practical consequence is, that the cutters, after finishing their work, still continuing to revolve over the smoothed surface, will sometimes be impelled for the instant below the plane of their normal action; and on the other hand, the board, partially compressed when under the action of each cutter in succession, but rising again immediately afterward by its own elastic force, will present a new surface to be acted on by the next cutter, that surface varying in height according to the varying density and consequent elasticity of the board. This is illustrated by the "back lash," an irregular trace made on the finished surface by the cutters that continue to pass over it.

Woodworth was the first to propose a remedy for this, by placing his cutters on the periphery of a rotating cylinder, while he presented the face of the board in the tangent plane of their revolution. He thus prevented the cutters, while the board was moving

from touching it a second time, and gave the dip and lift cut, which has been so often recognized as the characteristic of his patented machine.

It is obvious, that to make this cut it is not necessary to place the cutters on a true cylinder. A cone, or even a dished-wheel, scarcely deviating in appearance from a true disc, will produce the same effect, provided the board approaches and leaves the cutters in the tangent plane of their revolution. I had no difficulty, therefore, when the cases of Plympton and Mercer and others were before me some years ago, in holding that a cone or dished-wheel, so arranged, was simply a mechanical equivalent for the cylinder of Woodworth; and the rulings then made have, on more than one occasion since, received the sanction of both the judges of this court.

Strange to say, in three of the cases now before me, the principal dispute has been as to the fact whether the machine used by the defendant is or is not a disc, or, as it has been spoken of in the argument, a Bramah wheel. Numerous witnesses, some of them highly respectable, have testified that it is nothing else, and that its cutters move of course in the same plane and parallel with the lower face of the board; in other words, that the cutting disc coincides in its revolutions with the finished surface. But it is as certain as any truth in the philosophy of mechanics, that in this they are mistaken; for the machine in its ordinary working leaves no back lash, and the boards, that were passed through it by one of the gentlemen who inspected it under the court's order, show unequivocal marks of the dip and lift cut.

Neither witness nor the counsel has explained how a disc, which all describe to be like Bramah's wheel, and worked as his was, can produce results so different from his; nor how it happens that the results produced by it are so precisely those which would be produced by cutters revolving on a flattened cone. On

the contrary, all admit that the machine does vibrate, and that the boards which it commonly works on are damp, if not wet, and of course easily compressed under the cutters. It is to exact more than a reasoning faith in human testimony, to assure us that such a machine, acting on such a material, will, in 329 the hands of these defendants, renounce the mechanical law which it has been exemplifying every-where else for the last fifty years.

It is true that upon trammung the disc with the bed-plate in order to test their parallelism, the defendant's witnesses observed no deviation from the disc form. But, though this were so, yet on just such a disc the cutters might be arranged in such a manner as to describe a cone when revolving; and Mr. Patton's cutters were not and probably could not be trammed. Besides which the axis of the disc was so adjusted at its upper extremity as to give it at pleasure the oblique action which is adapted to the revolving cone, and yet to restore it again in a few minutes with the disc parallel to the bed-plate.

When we consider that the machine, while at rest, can have its character thus easily modified, so as to give proof for the time of parallelism of its parts, if such proof be desirable; and that while in motion, it defies all scrutiny revolving it may be some three thousand times in a minute, and its three cutters, therefore, following each other with an interval between them of but the one hundred and fiftieth part of a second; and that an obliquity in the disc, not exceeding the one-sixteenth of an inch on its cutting diameter, would be sufficient to change its effective action; we can apprehend without difficulty that the defendant's witnesses may have fallen very honestly into error. But it is enough for us to know, that according to the laws of matter and motion, which are the condensed expression of all mechanical experience, the machine as they describe it cannot produce the

effects, which we see that the machine produces in fact. The footprint on the sand indicates with less certainty the form and pressure of the foot that made it, than a curved cut on the face of a flat board proves a corresponding curvature in the path of the cutting tool.

It is in vain to refer us, for an explanation, to the abnormal influences of vibratory or semi-elastic forces, without showing us what those influences are, and how they resolve for the time a disc into a cone, or enable the machinist to trace a regulated curvilinear surface by the rectilinear movement of a plane. This is only to reassert the paradox, in more general language, to prove the controverted fact by reference to an unknown theory.

I must hold, therefore, that the planing machines of Mr. Patton, Ashton, and Winslow: and Ashton and Beers, are essentially the same with the planing apparatus of the Woodworth patent.

The machine employed by Mr. Patton, and, as it is said, invented by him, for cutting the tongue and groove, is spoken of as an elliptical saw; it consists of a revolving saw-plate of lozenge shape, set at such an oblique angle as to make all the teeth on its periphery equidistant from its axis of motion. In revolving, it describes, of course, a cylinder, and its action is that of a rasp. It does not divide the board, as a saw does; but performs the office Woodworth's duck-bill cutter, somewhat less perfectly, and apparently at greater cost. This only points of difference are: that what would be the one cutter disc of Woodworth is in Mr. Patton's machine effectively divided into several, so as to form a series of cutting discs saws; the teeth of which abrade in succession the portions of the board to be removed, leaving the edge rough in consequence, instead of giving them the comparatively smooth surface or the Woodworth machine; and that while broken cutter can be removed from the Wood

worth disc, and a new one substituted, a tool broken from Mr. Patton's saw destroys it Whatever, therefore, may be the supposed interest or novelty of the elliptical saw, it must in its adaptation to this particular use be regarded as embodying the principle, and constituting, but for its inferiority, the mechanical equivalent of Woodworth's cutting-wheel.

The tonguing and grooving apparatus of the Ashton and Winslow and Ashton and Beers machines are confessedly those of Woodworth's patent.

The same is true of Snowden's; and his planing machine is an equally direct piracy of the Barnum patent, now held by the complainant.

I have not in this opinion discussed the question of the validity or extent of Woodworth's patent. These have been so often before almost all the courts of the United States, as to make them inappropriate topics for interlocutory argument. There must be at some time or other an end of controversy, as to the character of a patentee's property in his invention; and now that twenty-three years have gone by since the Woodworth patent was issued, and passed into litigation, I am disposed to recognize its parting claim to repose: *salve senescentem*. I therefore limited the discussion at its outset to the single question of infringement.

I have one more remark to make: it is prompted by a review of the devices employed by these defendants, and those who have gone before them in similar controversies. I cannot but think that the time has come, when in this district at least the attempt to mask an infringement of this particular patent should be almost regarded as a waste of ingenuity. It is a truth of large acceptance, both in policy and morals that it is better in the long run to strive patiently for a legal property of one's own, than to persist in trespassing on the property of others. The invention which is set forth in letters patent belongs to the inventor as rightfully as the house he has built, or the coat he wears. It can

not detract from the dignity of his title, that the subject of it is of his own creation, his thought, conceived and developed and matured in the recesses of his mind—that it has cost no man else any thing, and he asks nothing in return for the contribution it makes to the general wealth and happiness, but that security of enjoyment during a limited period, which the laws engage for all 330 other property without limitation of time, and without stipulating a price. It would be a reproach to the judicial system if an ownership of this sort could be violated profitably or with impunity.

The complainant's counsel will prepare the draught of decretal orders in the several cases in accordance with this opinion.

{For other cases involving this patent, see note to *Bicknell v. Todd*, Case No. 1,389.}

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