

Case No. 4,574.

EVARTS ET AL. V. FORD.

[6 Fish. Pat. Cas. 587;¹ 5 O. G. 58.]

Circuit Court, N. D. Illinois.

Nov. 26, 1873.

PATENTS—CONSTRUCTION OF CLAIMS—RESULT
EFFECTED—INFRINGEMENT—ABANDONMENT—OPINION OF COMMISSIONER
OF PATENTS ON QUESTION OF NOVELTY.

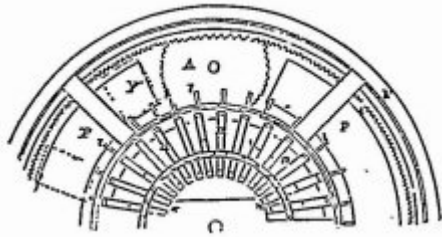
1. The third claim of the patent granted H. H. Evarts, October 1, 1854, for “improvement in shingle-machines,” which is, “presenting the sides of the fibers of the wood to the action of the saws in the sawing of shingles, or equivalent articles, for the purpose of giving them smoother surfaces than can be produced by the usual mode of sawing,” if construed literally, asserts a right to a result, and can not be sustained.
2. Construed as a claim for the mechanism by which the result is effected, it may be sustained.
3. A patent for a machine in which a shingle-bolt is fastened automatically by dogged teeth upon a rotating carriage, which presents it side-wise to the saw, is not infringed by a machine in which the bolt is by hand fastened to a reciprocating carriage, and by hand shoved to the saw and withdrawn.
4. Evarts having failed to patent his hand-machine, made while experimenting and before taking out his patent on his perfected machine, and having failed to mention or describe it in the specification of the patent he did take out, is held to have abandoned it to the public.

5. The opinion of the commissioner of patents, granting an extension, is entitled to great weight on the question of novelty.

In equity. Final hearing on pleadings and proofs.

Suit brought [by Harry H. Evarts and others against David M. Ford] on letters patent [No. 11,858] granted H. H. Evarts, October 1, 1854, for "improvement in shingle-machines," and extended for seven years from October 1, 1868.

The engraving shows a plan view of the machine, as described in his patent, and represents one-half only, the other half being exactly the same.



It is an ingenious and complete machine for sawing shingles from the block. A block, Y (in the engraving represented in broken lines), is placed on each table, P, P'; is seized by dogs, actuated by H, and teeth t' , and carried by the saws A, as the cogged rim F revolves. The tables P, P' are so inclined in respect to saws as to give the required taper to the shingle. The lever cams H are rocked on fulcrums in the rim D, by cams n' , n' , so that two at a time of the dogs i shall pierce the block as it arrives near the saw, or at Y, by which time the other two dogs i, which hold the block thus far, are withdrawn; thus but two dogs, together with the teeth t' , carry a block around. It must be observed that, to give the proper taper, the beds P, P' slope inward and downward from the saws the angle required. As the block always bears against this bed as it meets the saws, the taper necessarily results. The block is sawed alternately from end to end, giving the thin and thick ends of shingles, alternately from each end of the block. As soon as one shingle is cleared, it drops, and the dogs i, now holding the block, are withdrawn (by cams n' , n'), and the block drops a distance equal to the thickness of the shingle just formed on the bed H, and is in the exact position to meet the next saw, just before clearing which, two dogs, i, quickly clamp it, and hold it until past this saw.

Thus it may be seen that a block placed on one of the tables, and the machinery being in motion, the machine will convert it into shingles without further manual assistance.

The claims of the patent are—

"1. Placing the blocks to be sawed into shingles in a rotating carriage, which is combined with the inclined tables p, p (or a single table), with saws O, (or a single saw), in such a manner that the blocks will be carried continuously forward, and be automatically operated upon to convert them into shingles, substantially as herein set forth.

“2. I also claim the arrangement of the weighted levers H, H, the fastening teeth i, i, and the inclined planes l, l, with each other and with the inclined tables p, p, and the outer series of teeth in the ledge r, substantially as herein set forth.

“3. I also claim presenting the sides of the fibers of the wood to the action of the saws in the sawing of shingles or equivalent articles, for the purpose of giving them smoother surfaces than can be produced by the usual mode of sawing, substantially as herein set forth.”

It seems that, while experimenting on his machinery for sawing shingles, Evarts invented and put into use a machine known as his “hand-machine,” which accomplished the results described in his patent which he afterwards obtained on his automatic machine, but which did not contain the devices just as claimed in the patent, though undoubtedly the invention of the patentee. This hand-machine the defendants were using. They contended that it did not infringe complainants’ patent, and that it was abandoned to the public.

L. L. Coburn, for complainants.

West & Bond, for defendant.

BLODGETT, District Judge. This suit is brought to recover damages for an alleged infringement of a patent for an improvement in shingle-machines, issued to H. H. Evarts, dated October 1, 1854, and extended for a term of seven years from October 1, 1868.

The title to the patent is admitted to be in the complainants; and it is admitted that the defendant has manufactured shingle-machine since the extension of the patent, which complainants claim infringe their patent. With these admissions, the only questions made upon the argument of the case are: First. Is the complainants’ patent void for want of novelty? Second. Is the machine made by the defendant substantially embraced in the patent (issued to the complainant Evarts)?

The claims in the patent are as follows:

“1. Placing the blocks to be sawed into shingles in a rotating carriage, which is combined with the inclined tables p, p (or a single table), with saws O, (or a single saw), in such a manner that the blocks will be carried continuously forward and be automatically operated upon to convert them into shingles, substantially as herein set forth.”

This claim includes and covers, then, this rotating carriage, with the saws which are shown, and the inclined tables, the function of which is to give the slant or pitch to the blocks, so as to saw alternately butts and points.

The second claim is:

“2. I also claim the arrangement of the weighted levers H, H, the fastening teeth i, i, and the inclined planes 1, 1, with each other, and with the inclined tables p, p, and the outer series of teeth in the ledge r, substantially as herein set forth.”

These two claims refer, it would seem, clearly to the elements contained in the rotating carriage, and to nothing else.

“3. I also claim presenting the sides of the fibers of the wood to the action of the saws in the sawing of shingles or equivalent articles, for the purpose of giving them smoother surfaces than can be produced by the usual mode of sawing, substantially as herein set forth.”

It would seem, from the evidence in the case, that up to the time that the patentee commenced his experiments, nearly or quite all the shingles used in this country were made by the process of riving and shaving; and although several inventors had devised machines for sawing shingles, none of them had been able to produce sawed shingles which were acceptable in the market, or which could be made to supersede the shaved shingles in use. The leading characteristic of the complainants' machine consists in presenting the side of the fiber of the block to be cut into shingles to the saw, instead of the end.

After a series of experiments involving this principle, Mr. Evarts made and put in use a machine substantially like that now made by the defendant, and which is popularly known to the trade as the “Evarts Hand-Machine,” of which Exhibit is a model. Upon this machine he took out no patent, unless it be, as it is now contended, covered by his patent of October 1, 1854.

After making this machine and introducing it to the public, and also introducing its products into the market to a considerable extent, Mr. Evarts made what he deemed his perfected machine, upon which he obtained the patent set forth in the bill.

It is evident from his conduct, and the specification of his patent and the claims, that Mr. Evarts considered all he had accomplished up to this point as mere experiments.

He says in his specification:

“The first general feature of my invention consists in a rotating carriage, arranged in connection with tables inclined in opposite directions, and with circular saws, in such a manner that the bolts of wood placed in said carriage will, one after the other, be continually operated upon, cutting the thick end of the shingle first from one end of a bolt, and the thick end of the next in succession from the opposite end of said bolt, and thus alternate until the bolt is sawed down as thin as it can be safely operated upon.

“The second feature of my invention consists in presenting the side of a bolt of wood to the saws, instead of the end thereof, for the purpose of producing thereby shingles

with much smoother surfaces than can be produced by advancing the end of the bolt to the saw in the usual manner.”

In his experiments, Mr. Evarts first fastened the shingle-bolt to a long lever or beam, vibrating upon its center like a walking beam, so that the bolt could be brought down in contact with a vertical circular saw, so as to present the side of the bolt to a saw. By this experiment, he satisfied himself that he could produce smooth-sawed shingles by that method of sawing. He then produced the hand-machine. He also met with serious difficulty by the kinking, buckling, or sagging of his saw, and to overcome these difficulties he improved the saw, so that its center was strengthened by a reinforcing plate, and the saw plate beveled toward the outer edge, whereby it was made stronger, and its buckling, kinking, and sagging prevented.

He finally produced the rotating machine, which he patented, evidently deeming that the crowning embodiment of his invention.

The evidence shows that, while making these experiments, Mr. Evarts was embarrassed by want of means, and that he was in fact obliged to dispose of a large interest in his patent to get the means with which to construct his first machine, and demonstrate its utility, by the manufacture of shingles, and placing them upon the market in competition with shaved shingles.

After obtaining his patent, Mr. Evarts continued to manufacture machines and shingles until side-sawn shingles have nearly or quite superseded the shaved shingles in the market; but what seems remarkable in the history of the invention is the fact, well established by the evidence in this case, that the hand-machine—the second step apparently of the inventor toward his perfected and patented machine—is the machine which is most in use, and probably of the most practical utility at this time in the manufacture of shingles.

This machine the defendant makes and sells; and while he, in effect, admits that Mr. Evarts was the inventor, he denies that he has so secured his invention by his letters patent as to have the exclusive right of manufacture. And the question to be decided in this case is, whether this hand-machine is covered by the patent; in other words, after constructing the machine, in which he fastened the shingle-block vertically to the end of a lever, and brought it down in contact with a circular saw, which revolved vertically, and became satisfied that the side-cut with a circular saw would produce a shingle nearly, if not quite, as smooth as a shaved shingle, Mr. Evarts then set about devising a more compact and easily-managed machine for the purpose of applying the principle of side-cutting; and his first effort in that direction was this machine, which is now manufactured by the defendant, and upon which, as a specific machine, he never obtained a patent.

The first and second claims of the patent

have special reference to the rotating machine, and if the defendant's machine is found at all in the patent, it must be in the third claim, which is as follows:

"I also claim presenting the sides of the fibers of the wood to the action of the saws, in the sawing of shingles or equivalent articles, for the purpose of giving them smoother surfaces than can be produced by the usual mode of sawing, substantially as herein set forth."

This claim, if literally construed, calls for a result which can not be allowed under the patent law; but I think a fair and liberal interpretation should be given, and I construe this as a claim for the mechanism by which the result is attained; or, in other words, the mechanism by which the sides of the fibers of the block are presented to the saw, as set forth in the specifications. I say this, because the idea of sawing shingles lengthwise of the grain or fiber, in order to make a smoother cut, was not new or original with Mr. Evarts. He may have made the first and best machine for making sawed shingles, by cutting them with the fiber; but he was not the first to put forward the idea of side-sawing. His machine seems to have depended for its success upon other elements than the side-cutting alone.

Simon Wood, in 1829; William Bell, in 1838, and Manasseh Andrews, in 1839, had already made machines which cut lengthwise of the grain, and were applied to the sawing of shingles, or of staves, or kindred articles; and a machine was also constructed in Maine, which is testified to by the witness William Smith, but the form of which is not exhibited, showing that the same idea was applied in the mechanism for a shingle-machine used in Maine, in 1834. So that producing a smooth surface by a side-cut was not a new idea, upon which, as a result, Mr. Evarts could have obtained a patent.

The important question, then, is: Do we find in the hand-machine the particular mechanism, or device, by which this side presentation is accomplished, as "set forth" in the patent? In the patent, this result is accomplished by placing the blocks in the rotating carriage, where they are automatically gripped or dogged, and carried forward by the motion of the carriage to the saw. The mechanism which does this work, is the rotating carriage and the dogging-teeth *r* and *i*. In the hand-machine, the side presentation is accomplished by means of a reciprocating carriage, into which the block is fastened, and the carriage is then shoved, or pushed forward, by the hand of the operator, along a tramway, so as to bring the side of the block in contact with the saw. The dogging or fastening of the blocks in the carriage or frame is done by the operator, and not automatically by the machine itself, and the movement of the block against the saw is here made by the hand of the operator.

These two mechanisms, to my mind, have nothing in common, except it be the result, which can not be patented. The two devices seem to me to be radically different. In the patent the block travels on the radius of a circle and approaches the saw, and is operated

upon it, not exactly sidewise, but by a partial end and partial side presentation—a sort of diagonal or quartering cut. This is a necessary incident of the rotating machine, and the degree of quartering or end cut in the rotating machine, which must be given to the block, depends, of course, upon the length of the radius. The rotating carriage differs from the reciprocating carriage as essentially as the rotating or circular saw differs from the reciprocating saw.

When a shingle has been cut in the hand-machine, the carriage must be brought back over the saw and the block dropped upon the tilting table; the table tilted to give aslant to the next shingle and the block redogged, then it is ready to cut another shingle. All this is avoided in the rotating machine.

My conclusion, then, is that the two devices are essentially different in their mode of operation. I have, I must be permitted to say, reluctantly come to the conclusion that the third claim of the patent does not by any fair construction or interpretation, include the mechanism made by the defendant. I say I come reluctantly to this conclusion, because the evidence before me shows to my satisfaction that this hand-machine is of great practical value—that it was the actual invention of Mr. Evarts, and that it has worked a revolution in the manufacture of shingles; but he can take no more by his patent than he has claimed, and as it is not claimed or described by apt words in the patent he must be held to have abandoned it to the public.

As I stated just now, I have no doubt from the proofs that Mr. Evarts made what was really the first practical machine for making smooth-sawed shingles, which could and did compete successfully in the market with the shaved article; but I think his success largely attributable to other elements of his machine, as well as to the side-cutting. Others had cut with the grain, but their machines were not generally acceptable to the public. To my mind his improved saw and his simple device of the tilting and inclined tables had much to do with his success, and made his machine, as a whole, practicable, and enabled him to make cheap and valuable shingles. Yet the saw, in its improved form, is not noticed in his specification, either as an original invention or as an improvement in combination with the other parts of the machine. If he can now claim the hand-machine, as covered by his patent, why may he not also come back hereafter and claim the beveled saw? or, if some person shall see fit to saw shingles by the old walking-beam or tilting lever, why may he not also claim that his patent covers the use of that as it is one of the steps by which he accomplished

his result in the rotating machine. I mention this only by way of illustration. Mr. Evarts used all these in his experiments, but abandoned them, or at least must be held to have abandoned them, when he had devised what he deemed to be his fully matured machine. If he had wished to cover his initial steps by patents, he could have done so after the example of many other inventors; but not having done so, these must be deemed to have been surrendered to the public, although probably more valuable now than the elaborate machine which he patented. The bill is therefore dismissed.

I should say, in addition, gentlemen, that this case was heard mainly upon the evidence on the application for the extension of the patent before the commissioner; and much stress is laid upon the opinion of Judge Foote, who granted the extension. I have not considered that opinion as binding, because there it was not a question of infringement; but the question was, whether this was a patentable device under the state of the art as it then stood. Of course, the opinion of the commissioner is entitled to great weight upon that question as it was presented; but upon the question of infringement. I do not consider that it should have any special weight, because the point of infringement was not before the commissioner.

¹ [Reported by Samuel S. Fisher, Esq., and here reprinted by permission.]