

claim of the original patent and first reissue, but to broaden if possible the scope of Dann's invention, and make it cover more than his original patent was intended to cover. It will not be forgotten that the language of the first claim in the first reissue is the same as that of the same claim in the original patent. The original patent was granted in January, 1873, and it was not until November 9, 1875, that the second reissue was obtained; and then the language of the first claim was changed, and thereby I think the scope of the patent was extended to an unauthorized degree, within the latest rulings of the supreme court upon the question. In the second claim the bars are claimed as part of the combination, and their omission from the first claim, and the statement there made, embracing generally and broadly a combination of the knives arranged to move past each other and engage with the log in the manner set forth, I think indicate a purpose by sweeping terms to make any improvements in the structure of saw-mill dogs, occurring after the issue of the original patent, subservient to this second reissue, and this the supreme court has decisively held cannot be done.

I am of the opinion, therefore, that the first claim of the second reissue, upon which this suit is based, is void, and the bill will be dismissed.

ALLIS v. BUCKSTAFF and others.

(Circuit Court, E. D. Wisconsin. October Term, 1882.)

1. PATENTS—PLEADING PRIOR USE—NAMES OF WITNESSES.

Only the names of those who have invented or used the machine or improvement alleged to anticipate a patent, and not of those who are to testify touching its invention or use, are required to be set forth in an answer making such a defense.

2. SAME—SAME—TESTIMONY.

Where an original answer contains no allegation of prior use, but an amended answer does, testimony to establish such prior use, taken before filing the amended answer, under objection of counsel, who afterwards fully cross-examines the witnesses and offers rebutting testimony, may, in the discretion of the court, be allowed to stand.

3. SAME—ANTICIPATING DEVICE.

In order to defeat a patent on the ground of prior use of the patented invention, it must appear that the anticipating device was embodied in distinct form, and was so far perfected as to have been capable of practical use.

4. SAME—EVIDENCE AS TO INFRINGEMENT—DENIAL IN ANSWER.

To allow testimony on the part of the defense, to show that the machine used does not infringe the patent of complainant, the answer should deny such

infringement specifically; but if, by stipulation filed by counsel before taking testimony, it is agreed that defendant may put in testimony to show that there was no infringement, the court will not entertain an objection to such testimony.

5. SAME—INFRINGEMENT—INJUNCTION.

Patent No. 233,409, known as the "Gowen dog," as invented and described in the specification, does not infringe patent No. 122,215, but with the addition made and used therewith by defendants, may do so, and they must be enjoined from its further use.

6. SAME—PATENT NO. 122,215 VALID.

Patent No. 122,215 is valid, and was not anticipated by patents No. 20,660, No. 54,177, No. 52,904, No. 99,486, or No. 134,653, nor by the devices known as the "Morse dog" and the "Muzzy dog."

In Equity.

W. G. Rainey, for complainant.

C. W. Felker and *Finch & Barber*, for defendants.

DYER, D. J. This is one of a series of twelve cases, heard together, in which the several defendants are charged with the infringement of letters patent No. 122,215, granted December 26, 1871, to Nelson F. Beckwith, for an improvement in head-blocks, of which the complainant is assignee, and the several bills contain the usual prayer for an injunction and account. Contest is made on the question of infringement, and among other defenses set up in the original answers it is alleged that Beckwith was not the original inventor of the alleged improvement, but that the same was described and represented in a patent, No. 20,660, issued to J. Comly Post, June 22, 1858, for an improved method for clamping and laterally feeding the log in saw-mills; also in a patent, No. 54,177, issued May 15, 1866, to G. W. Rodebaugh, for head-blocks for saw-mills; also in a patent, No. 52,904, issued February 27, 1866, to E. H. Stearns, for head-blocks for saw-mills; and also, in a patent, No. 99,486, issued February 1, 1870, to Selden and Briggs, for an improvement in head-blocks.

It is further alleged in the original answers that the Beckwith invention was, before a patent was issued therefor, invented by and known to John F. Morse, of the city of Oshkosh, Wisconsin, and was also known to John S. Everett and Charles C. Avery, of the same place; further, that before Beckwith made application for a patent, or reduced his alleged invention to practice, or put it into practical use, or had any knowledge thereof, the said invention "was known to, and had been used in public by, the following-named persons at the places following, to-wit: By the firm of James Jenkins & Co., at the city of Oshkosh, Wisconsin; by John F. Morse, of the

city of Oshkosh, Wisconsin; by Lawrence McVicar, at Manistee, Michigan."

There is a further allegation in the original answers that the invention described in the Beckwith patent was known to, and had been previously combined by, one Pond, of Eau Claire, Wisconsin, and John F. Morse, of Oshkosh, in the same state; that each of these parties, at the time Beckwith obtained his patent, was using diligence in perfecting his said invention, and that Beckwith surreptitiously and unjustly obtained the patent upon which this suit is based.

In the amended answers it is alleged that the same device or combination described and claimed as new in the Beckwith patent, or substantial and material parts thereof, were, before the alleged invention thereof by Beckwith, "invented by H. D. Dann, who lately resided in the city of Oshkosh, but who * * * has moved to Wau-pun, Wisconsin, and now resides there, in the year 1866; and by Franklin B. Muzzy, who resides in the city of Bangor, state of Maine, in the year 1860, and that said mill-dog or head-block, substantially as described in said patent, * * * was used by the firm of Ruddock & Co., in the years 1869 and 1870, at the village of Winneconne, Winnebago county, Wisconsin, which said firm, during said years, was composed of one Ruddock, R. R. Wellington, and one Parmeter, in the year 1869, and of said Ruddock, Parmeter, Wellington, and one Jones in the year 1870;" and the respective places of residence of said parties are stated.

In the specifications forming part of the Beckwith patent the patentee says:

"The principal difficulties encountered in sawing logs into boards are as follows: *First*. When a log has been reduced to such thickness that only sufficient material remains for one or two boards, it is almost impossible to hold it upright upon its edge against the standards upon the carriage during the operation of sawing. The liability of the log to thus turn and slip upon the head-blocks is greatly aggravated if its lower edge, next to the standard, is waney or rounded off from any cause. For this reason it is customary in all saw-mills to leave the last cut in the form of a thick plank, affording sufficient bearing surface to prevent its turning upon the head-block. Two thicknesses of lumber are therefore sawed from the same log or cant. *Secondly*. The standards employed for saw-mill carriages are usually so constructed to hold the log that when the latter is to be sawed entirely into narrow boards of the same thickness the last two or three are liable to bend during the operation of sawing, varying the thickness of each more or less, and producing thereby imperfect boards.

"My invention has for its object to overcome these difficulties; and to this end it consists in constructing the standards with wide-bearing faces for the logs, and in providing each with a central vertical slot or mortise, through which a series of hooks are projected to grasp the log or cant. The lower hook is curved upward, to catch into the lower edge of the log next the standard, and the upper hooks are curved downward, to catch into the face of the log. The lower hook, and the series of upper hooks, therefore, move in opposite directions to grasp the log between them, and prevent it from slipping. The hooks are operated simultaneously by a lever from the back of the standard, and by a suitable system of connecting bars. * * * By this arrangement the upper hook holds the log securely in contact with the lower hook, while the latter holds it firmly against the standard, and prevents it from slipping until the last board is sawed. By constructing the standards with a wide face, and in arranging the hook to project through a central slot, a broad bearing is formed for the log upon each side of the hooks, so that when the log is reduced to the thickness of two or three boards the latter are held securely against bending while being sawed."

In connection with accompanying drawings, the specifications proceed to state in detail the construction and arrangement of the various parts of the device, and the patentee then claims as new:

"(1) In combination with the standards for saw-mill carriages, the hooks, C, D, adapted to be simultaneously projected in opposite directions through the central vertical slot in the face of said standard, substantially as described, for the purpose specified. (2) The combination of the hook, C, and connecting bars, F, I, with the operating lever and the hook, D, substantially as described, for the purpose specified."

There is a further and third claim, which, however, it is unnecessary to refer to.

In the case of *Allis v. Stowell*, (unreported,)* this court held the Beckwith patent valid, and not anticipated by either the Post patent, the Rodebaugh patent, the Stearns patent, or the Everett and Avery patent. Further consideration of those patents and the inventions they cover has confirmed the conclusion expressed in *Allis v. Stowell* with reference thereto, and I must hold that they do not invalidate the Beckwith patent. That patent must also be held unaffected by the Selden dog, a patent for which was granted to Selden & Briggs, but which, on a rehearing in *Allis v. Stowell*, was held to be invalid for the reason that the dog therein described was anticipated by what is known as the Duvall device. Both the Stearns and the Selden dogs exhibit only a series of hooks working downward, while the Beckwith dog, as patented, consists not only of hooks moving downward, but of an upward-working hook, the entire series being operated

*See 9 FED. REP. 304.

by a single movement of one lever, which is connected with the hooks by means of suitable connecting bars. None of the devices referred to, including those covered by the Post patent and the Rodebaugh patent, have the mode of operation of the Beckwith dog, nor are they like it in combination. The Everett and Avery invention consists of dog-blades attached to a horizontal dog-head and shaft, which have a rotating motion communicated by a lever or crank, and are forced forward by the incline of the face of a journal box contiguous to the dog-head. The principle upon which this device works is that of the screw; and it is so unlike the Beckwith dog in construction and operation that the court had little doubt in deciding *Allis v. Stowell*, and has no doubt now, that the Beckwith device was patentable, notwithstanding the earlier patent of Everett and Avery.

I have come to the same conclusion with reference to the Muzzy dog, a model or specimen of which is in evidence. This is a device for dogging shingle bolts, and is constructed to be used horizontally. In operation, the bolt is held between two iron jaws, which are moved by a lever. As described by one of the witnesses, "there is a clamp composed of two jaws, having shanks which are connected, and which are operated simultaneously by one lever." The jaws are so connected to the frame that they project a uniform distance beyond the face of the frame, and cannot be drawn back beyond the face of the frame or knee. They do not move outward and downward, or outward and upward, but move directly towards each other, in a right line, parallel with the face of the frame. They are evidently designed to hold a block by engaging in the ends of the block, as is the case in shingle machines, and I am unable to see how it could be successfully used in holding logs or cants while being sawed, without a radical change of construction. Certainly, in its present construction and evident mode of operation, it is wholly dissimilar to the Beckwith device, the only trace of similarity being in the fact that in both devices the dogs are operated by the movement of one lever. Otherwise I see nothing in the Muzzy device to suggest the construction or mode of operation of the Beckwith dog.

It is very earnestly insisted, on the part of the defense, that the Beckwith patent was anticipated by a device for dogging logs alleged to have been made by John F. Morse, of Oshkosh, in 1868, and to have been used in Ruddock & Co.'s mill, at Winneconne, Wisconsin, in 1869. The consideration of this defense has involved a very careful examination of a large mass of testimony, which I shall not here attempt to refer to in detail. Objections were seasonably made by

counsel for complainant, to all this testimony, on the ground that the defense of prior use, at Ruddock & Co.'s mill, or elsewhere, was not sufficiently stated in the answers or amended answers, and also because the answers contained no notice that the several witnesses sworn on the question of the existence and use of the Morse dog would be examined. I think these objections should be overruled. The allegation of the original answers is that the Beckwith invention "was known to, and had been used in public by, the following-named persons, at the places following, to-wit:—By the firm of James Jenkins & Co., at the city of Oshkosh, Wisconsin; by John F. Morse, of the city of Oshkosh, Wisconsin; by Lawrence McVicar, at Manistee, Michigan." It is very evident that the use of the word "of," after the name John F. Morse, was a clerical mistake of the pleader; and that, as was stated by counsel on the argument, he intended to allege that the invention was used by John F. Morse at the city of Oshkosh. This is quite apparent when the whole allegation is considered, and all its words are taken in proper connection. Then the amended answers allege that the mill-dog, substantially as described in the Beckwith patent, was used by the firm of Ruddock & Co. in the years 1869 and 1870, at Winneconne. These allegations are sufficient to let in proof of prior use at Oshkosh and Winneconne by the parties named, within the requirements of section 4920 of the Revised Statutes.

There are reported cases to the effect that the names of the witnesses by whom it is expected to prove the alleged prior use should be stated in the answer. Such is the intimation, if not the positive ruling, in *Richardson v. Lockwood*, 6 Fisher, 454. But all cases in which it has been so held are overruled by *Roemer v. Simon*, 95 U. S. 219, and *Planing Machine Co. v. Krith*, 101 U. S. 479, wherein it is held that only the names of those who had invented or used the anticipating machine or improvement, and not of those who are to testify touching its invention or use, are required to be set forth.

A large part of the testimony tending to show the use of the Morse dog at Ruddock & Co.'s mill was taken before the amended answers alleging such use were filed, and it is insisted in behalf of complainants that this testimony should be disregarded, because there was no allegation of such prior use in the original answers. It was held in *Roberts v. Buck*, 6 Fisher, 325, that where evidence of anticipations not set up in the answer had been taken, and a motion was afterwards made to amend the answer, an amendment would not make that evidence admissible which was taken under objection before the amendment. After all, I suppose it to be discretionary with the court

in such a case, especially after the objecting party has fully cross-examined the witnesses and taken rebutting proofs, either to let the testimony stand in the case, or to strike it out and permit the defense to take the testimony anew under the amended answer. So far as the state of the case in *Roberts v. Buck* is disclosed, in the opinion of the court there is ground for the inference that the objecting party stood on his objection and elected not to cross-examine the witnesses or to offer rebutting proofs. In the case at bar, objection was made to the examination of the witnesses, but there was full cross-examination, and proofs in rebuttal of that particular evidence were offered, and I think it is a proper exercise of discretion to let the testimony, which is objected to as irregularly taken, stand in the case.

Upon a careful consideration of all the evidence bearing on the question, I am convinced that Morse made a saw-mill dog in 1868 with upward and downward working teeth which could be simultaneously operated by the movement of one lever. I am further satisfied that Morse & Co., in 1869, put the dog in Ruddock & Co.'s mill, and that it was there used, but only for a very limited time, as originally constructed. The device itself is not produced, but a model made by Morse since the commencement of these suits, and said to be similar to the dog put in Ruddock & Co.'s mill, is in evidence.

Some of the witnesses, who testify to the use of a dog made by Morse with upward and downward working teeth in Ruddock & Co.'s mill in 1869, also swear that a dog of precisely the same construction was used in McArthur & Trask's mill, and in Lake's mill, in Winneconne, at some time subsequent to its use in Ruddock & Co.'s mill. But I think it is very clearly shown that these witnesses are mistaken by the testimony of Paige, who was Morse's partner, and of McArthur, who was one of the owners of the McArthur & Trask mill. The testimony of these two witnesses satisfactorily establishes the fact that the dogs used in Lake's mill, and McArthur & Trask's mill, furnished by Morse & Co., had only downward-working teeth; and upon the whole evidence the conclusion is fairly deducible that the only dog made by Morse & Co. with teeth working both ways, which they ever attempted to put in practical use, was that which was placed in Ruddock & Co.'s mill in 1869.

Admitting that Morse was in advance of Beckwith in this line of invention, there is reason for grave doubt whether the Morse dog can be held to have anticipated the Beckwith dog, so different are they in mechanical construction. This doubt is fairly sustainable upon the

testimony of defendants' experts. Wilcox, one of the experts, testifies in his direct examination as follows:

Question. I wish you would state what in your judgment there is in the specifications and claims contained in that patent (the Beckwith) that was new at the time it bears date, if there is anything that was new? *Answer.* There was new, as I understand the state of the art at that time, the application of the lever, connecting rods, and links with a series of hooked dogs pivoted to a bolt and operated by a single action of the lever. * * *

Q. Now, Mr. Wilcox, please examine Exhibit No. 1, (the Morse dog,) and suppose that a dog manufactured upon the same principle as Exhibit No. 1 were in use at the time the Beckwith patent was made, what combination or principle would there be new in the Beckwith dog? *A.* There would be new precisely what I stated before: the simultaneous movement of a pivoted hook, being acted upon by a lever and connecting rods and links.

Q. Well, what difference is there in principle between that movement or power and the eccentric in the model No. 1? *A.* One is an eccentric balance and the other is a lever balance, so far as the action of the lever is concerned. So far as the dog is concerned, one is a dog operating in rotary action, and the other is a dog operating in an inclined plane,—the direct action without any rotation.

Q. In the practical use or working of the dog, what difference, if any, would there be? *A.* One would insert the knives or dogs in a direct line following the line of the slots here, and on entering the log or cant would continue on that same incline until it would pass its full force or extent that the dogs are moved into the log; while the other would strike the log at a certain angle from the pivot from which it worked, and then continue in a curved line into the log. * * *

Q. After an examination of model called Exhibit No. 1, and an examination of the Beckwith dog, are there any results that would be accomplished by the Beckwith dog that might not be accomplished by the Morse dog, or a proper construction of the Morse dog, upon the principle upon which it is made? *A.* There is none.

Q. Then if the Morse dog was in use, or its principle was known, at the time of the construction or patent of the Beckwith dog, there would be no difference in principle, but the difference would be merely failure of mechanical construction, as I understand you? *A.* I think there is no difference in the principle or the object sought in the two: the methods taken to accomplish that object are entirely different, using entirely different mechanical power."

On cross-examination this witness further testified:

Question. Then your opinion, even admitting the prior existence of a dog like the model, Exhibit No. 1, (the Morse,) is that there would have been invention in constructing a dog like the one shown in the Beckwith patent, would there not? *Answer.* There would have been invention in the methods taken to accomplish it—the application of mechanical appliances in different form; and it further takes up an old existing dog known as the spoon dog, and pivots it to a bolt, and operates it with a lever and connecting rods in place of the chisels.

"Q. Now, will you tell us whether, in your opinion, it would not be an exercise of invention to take the single spoon hook and duplicate it, and connect them together by means of connecting rods, so that, by the operation of one lever, the hooks may be made to work in opposite directions simultaneously? A. Clearly it would.

"Q. Even if there was a dog in existence and in use like the one called the Morse dog? A. Certainly."

The witness Gowen, another of defendants' experts, testified as follows:

"Question. State what, if any, principle would be new in the Beckwith patent, provided the Morse dog was in use as shown by the model, Exhibit No. 1, when the Beckwith patent was patented? Answer. There would be no new principle involved; simply difference in mechanical construction. * * *

"Q. Now state if the object and purpose of operating dogs in different directions was not in principle as well set forth in the Morse design as it is in the Beckwith dog, as appears from the model marked Exhibit No. 5, and from the claims and specifications in the patent. A. The mechanical construction and movements of the dog would be entirely different; while these dogs would move in an oblique line across the face of the jack-head, the dogs entering the cant or log would travel in a parallel line of the slot in which these bars travel.

"Q. You misapprehend my question. I asked you if the principle of operating dogs in opposite directions isn't as well shown forth in the Morse design as it is in the Beckwith design? A. So far as the lever is concerned, yes.

* * * * *

"Q. Well, is the principle as well shown forth in the Morse design as it is in the Beckwith design? A. Well, the principle of connecting these hooks, as represented in this dog, Exhibit No. 5, (the Beckwith,) is that the links here connected by a pivot, either side the pivot, with the lever, forms the direct leverage, of course increasing the direct leverage as you move the lever up and down.

"Q. What mechanical term do you apply to the power used in the Beckwith dog? A. Some would call it a toggle-joint, and I have always called it a pivot-lever connected by links. If I could be allowed to answer that question here I would state that that principle is an old one.

* * * * *

"Q. In your judgment, then, is there any difference between the Morse design, as shown by Exhibit No. 1, and the design contained in the Beckwith patent, but mere mechanical construction? A. Not in the object or result. No, sir.

"Q. In your judgment, if the Morse dog was in use, or its design was known, at the time of the construction of the Beckwith dog, would there be anything new in principle in the construction of the Beckwith dog? A. There would not."

On cross-examination the witness further testified:

Question. In your opinion, would there not be invention in taking the single spoon hook-dog and duplicating it, so as to work two or more of them down by the stroke of one lever, and having them connected together? *Answer.* It would be a new mechanical construction,—combination of old parts.

Q. And it would require invention to so combine them, would it not? *A.* To a certain extent, yes.

* * * * *

Q. Now, leaving out the question of principle, would it not take invention to make this new combination, conceding all the elements that enter into the combination, to be old, as shown in the Beckwith patent? *A.* It would be new mechanical combination or construction, and of itself would be an invention.

Q. Now, assuming that there was a dog in existence, and in public use, similar to the dog shown by the Morse model, Exhibit No. 1, when the Beckwith patent was granted, would it not take invention, in your opinion, to have constructed the Beckwith patent and dog? *A.* To a certain extent, yes; in forming the form and making the connections there, it is mechanical construction or invention.

Q. Now, while the results attained may be the same, isn't the manner of attaining these results, in your opinion, such as would require invention? *A.* I think invention of the connections there would be good.

Q. You are speaking of the Beckwith invention? *A.* Yes. I am speaking of that; it is constructing a patent. I think the claims are good.

Q. Even conceding the Morse dog to have been in prior use? *A.* Yes; they are constructed different, but the object sought is the same; the object is to hold the log firmly against the jack-head."

The testimony of these witnesses has been thus quoted from at some length, to show that, even admitting the Morse dog to have been a successfully-working device, and to have been in public use prior to the Beckwith patent, it is by no means clear that the Beckwith dog was not patentable. Although two devices, which consist of a combination of old parts, may attain in their operation substantially the same results, yet the mechanical construction of the two may be so different and may be so far novel that each may be patentable. Whatever the conclusion may be upon this point with reference to the Morse and the Beckwith devices, I am of the opinion, after a very careful consideration of all the evidence, that the Morse dog, having teeth working both ways, and which was put in Ruddock & Co.'s mill in 1869, was a failure, and was so incapable of practical and successful use that it must be regarded as an abandoned experiment. It seems to me that this is clearly shown by the testimony of the witnesses, who testify to its existence and attempted use. The testimony is so voluminous that I shall not attempt to review or analyze it.

Witnesses for the defendants, who were employed in the mills in Winneconne in 1869, testify that as the Morse dog was constructed, the upward-moving hooks crowded the log off, and that this was a serious objection to the utility of the device. Morse, the inventor, himself says that complaint was made that the dog was not satisfactory; that, in operation, it crowded the log off on account of the pitch at which the teeth advanced from the face of the knee. When asked how the difficulty was obviated, Morse answered:

"By taking off some of the under dogs.

"*Question.* Didn't they push it (the cant) off? *Answer.* The less you had of them the less it would lift the cant, and the top dogs penetrated the best.

"*Q.* Did you succeed in avoiding that difficulty? *A.* No, sir.

"*Q.* It always pushed it off? *A.* I don't think it has ever been a success.

"*Q.* You never succeeded? *A.* No, sir; the dogs that come out on a slanting line don't do it, and none have ever been made that would do it."

Paige, Morse's partner, testifies:

"There was some complaint of their crowding away the cant or log from the jack-head.

"*Question.* Didn't work satisfactorily? *Answer.* Not entirely.

"*Q.* Is that a serious objection? *A.* Well, yes; yes, sir.

"*Q.* And you didn't overcome it in the Morse dog? *A.* Well, we didn't try to very much.

"*Q.* Give it up? *A.* It chanced to be just at that time there was no very large amount of sale of anything but a cheap nature of machinery, and the old-fashioned dog that was driven into a log seemed to answer the purpose for most everybody.

"*Q.* And after making these experiments you gave up manufacturing dogs of that kind? *A.* Well, we manufactured a number of dogs, I think those of the down movement,—I won't say how many,—and we sold our head-blocks without any dog.

"*Q.* Then the experiment of having dogs work both ways proved abortive, did it? *A.* Well, pretty nearly so.

"*Q.* Didn't it to such an extent that you quit making them? *A.* Yes; we quit making them with the double movement.

"*Q.* Because it didn't prove successful? *A.* We discovered that the upward movement tended to carry off the log, and the downward movement didn't."

The same witness further testified that the reason why he knows that the teeth in the dog sold to Ruddock & Co. moved both ways is that they did not work, and that Morse & Co. did not get their pay for the dog, and discontinued the manufacture of dogs with double sets of teeth.

Further testimony of this witness, by question and answer, is as follows:

"*Question.* Did John Morse know that that set sent to Ruddock & Co. was a failure? *Answer.* Well, I don't think he hardly called them a failure; I don't think that he did, because he contended there was no necessity of an up dog. * * * During all the time he and I were in company he claimed that, but was willing to try an up-and-down dog.

"*Q.* Just as an experiment? *A.* Yes, sir.

"*Q.* And after he made that trial and failed he didn't try any more, did he? *A.* Well, I don't recollect that he did.

"*Q.* You never heard of any more being made, did you, while you were with him? *A.* No; I don't think that we ever made only that one set with both movements; that is my recollection."

Other testimony in the case is to the effect that this dog, as it was constructed by Morse, was used in Ruddock & Co.'s mill but a very short time; that in order to continue its use the upward-moving teeth were taken off, and that thereafter, and until it was taken out entirely to give place to the Dann dog, it was used with only the downward-working teeth; and when all the testimony on the subject is considered, in connection with the facts that the only set of dogs with teeth working in opposite directions that Morse sold for public use was that which he put into Ruddock & Co.'s mill, that he never attempted to obtain a patent, but abandoned the manufacture of dogs thus constructed after the trial at Ruddock & Co.'s mill,—the conclusion seems unavoidable that his device now claimed to have anticipated Beckwith was but an abortive and abandoned experiment.

The law on this subject is well settled. In *Howe v. Underwood*, 1 Fisher, 166, Judge Sprague said:

"A machine, in order to anticipate any subsequent discovery, must be perfected; that is, made so as to be of practical utility, and not to be merely experimental and end in experiment. The terms 'being an experiment' and 'ending in experiment' are used in contradistinction to the term 'being of practical utility.' Until of practical utility the public attention is not called to the invention. It does not give to the public that which the public lays hold of as beneficial. If it is an experiment only, and ends in experiment, and is laid aside as unsuccessful, however far it may have been advanced, however many ideas may have been combined in it, which, subsequently taken up, might, when perfected, make a good machine, still, not being perfected, it has not come before the public as a useful thing, and is therefore entirely inoperative as affecting the rights of those coming afterwards. This is important to be understood, because the idea has been carried all along that if a prior inventor has gone to a certain extent, although he falls short of making a complete machine practically useful, those who come after him have no right to secure to themselves the advantage of their invention. That is not the law."

In *Coffin v. Ogden*, 18 Wall. 120, Mr. Justice Swayne, in delivering the opinion of the court, said:

"The invention or discovery relied upon as a defense must have been complete, and capable of producing the result sought to be accomplished, and this must be shown by the defendant. The burden of proof rests upon him, and every reasonable doubt should be resolved against him."

Among the many other cases which support the proposition that in order to defeat a patent on the ground of prior use of the patented invention it must appear that the anticipating device was embodied in distinct form, and was so far perfected as to have been capable of practical use, it is sufficient to cite *Union Sugar Refinery v. Matthiessen*, 2 Fisher, 625; *Sayles v. C. & N. W. R. Co.* 3 Biss. 52; *Washburn & Moen Manuf'g Co. v. Haish*, 4 FED. REP. 904.

Applying to the facts of this case as they bear on the question under consideration the rule of law laid down in the authorities referred to, there can, I think, be little doubt that the Beckwith patent stands unaffected by the device made by Morse in 1868. It is not an answer to what has been remarked of the Morse dog to say that the Beckwith device was also a failure. The proofs in the case do not show such to be the fact. It was used six years in Webster's mill in Omro. Beckwith obtained a patent. The presumptions of the law are in favor of the patent, and of the novelty and utility of his invention. *Geiar v. Goetinger*, 1 Bann. & Ard. 555; *Ricketson v. Lockwood*, 6 Fisher, 455.

On the argument, it was claimed, by counsel for the complainant, that the defendants had no right to show, if they could, that they were not infringing the Beckwith patent. This was claimed on the ground that infringement is not denied in the answer. There may be some doubt whether the answers put in issue, in proper form, the question of infringement. But by a stipulation on file entered into between counsel when the taking of testimony was begun, it was expressly agreed that the defendants should be at liberty to disprove infringement if they could, and, in the face of this stipulation, the court will not entertain any objection to the right of the defendants to urge that they do not infringe. The defendants, some or all of them, are using what is known as the Gowen dog, of which William Gowen is the patentee, under letters patent No. 233,409, issued October 19, 1880. As invented by Gowen, and as described in the specifications forming part of the letters patent, this is a device having only downward-working chisel-shaped teeth; and, without entering upon a detailed description of the mechanism, it is sufficient to say that, as constructed by the

inventor and as described in the patent, it does not infringe the Beckwith dog. But the defendants, or some of them, have added to the Gowen dog a lower upward-moving hook, which is of the form of that in the Beckwith dog, and is placed substantially in the same position as that of the upward-working hook in the Beckwith device. The added hook in the Gowen dog is connected with the lever by an arrangement of movable bars or joints, that are very clearly the equivalent of those employed in the Beckwith dog; so that by one stroke of the lever this hook, with the upward movement and the series of teeth having a downward movement, are thrown out or drawn in. While, therefore, the Gowen dog, as constructed by the inventor and as described in the patent, does not infringe the Beckwith, I am of the opinion that the addition of the lower upward-moving hook constitutes infringement, and that the defendants, or such of them as use that hook on the Gowen dog, should be restrained from so doing.

There was put in evidence what is known as the Dann dog, which is described in letters patent No. 134,653, issued January 7, 1873, and in two reissues, one granted September 29, 1874, numbered 6,071, and the other granted November 9, 1875, numbered 6,733. Testimony has been taken on the question of priority of invention as between Beckwith and Dann. I think it is shown by testimony that is competent, within the decision of the supreme court in the case of *Phila. & Trenton R. Co. v. Stimpson*, 14 Pet. 448, that, as the inventor of a saw-mill dog, Beckwith was in advance of Dann. Upon the testimony of Morse I think the date of Beckwith's invention must be fixed as early as 1869, while Dann's invention must, in the light of the evidence, be held to have been perfected in 1870. Counsel for complainant admits in his brief that these suits were brought to restrain the use of the Gowen dog, and hence that no proof was made of any other infringing dog in opening complainant's case. But as the proofs on the part of the defendants developed the fact that some of the defendants were using the Dann dog, and as the complainant claims that the Dann dog infringes the Beckwith, counsel asked on the argument that, should the court find such infringement, a decree might be entered accordingly. As the record stands, I am not sure that it is essential or proper for the court now to determine whether the dog constructed by Dann infringes the Beckwith patent. I have given the question of infringement some consideration, and am inclined to the opinion that the mechanical construction of the two devices is so different that the Dann dog should not be regarded as an infringement. My mind tends strongly to that conclusion for

reasons stated in the opinion heretofore rendered in *Neacy v. Allis, ante*, 874, in which case it was sought by the assignee of the Dann patent to hold the complainant, Allis, as assignee of the Beckwith patent and manufacturer of the Beckwith dog, liable as an infringer. But this question, whether the Dann dog infringes the Beckwith, was not argued in the cases at bar as fully as its importance would seem to demand; and if it is deemed a question to be necessarily determined here, I shall reserve it for further argument and consideration, and in that case, as the question may be deemed a close one, and is in my judgment of great importance, I shall direct that it be argued before the full bench.

WHITTLESEY and others v. AMES and others, and two other cases.

(Circuit Court, N. D. Illinois. January, 1880.)

1. PATENTS FOR INVENTIONS—EXPERIMENTAL DEVICES.

Evidence of similar devices, merely experimental, will not defeat a patent, though prior in point of time.

2. SAME—NOT TO DEFEAT SUBSEQUENT PATENTS.

Although prior unsuccessful experiments in part suggested the construction which the patentee adopted and perfected, this fact will not defeat the patent.

3. COMBINATIONS IN REISSUES—USE OF A PART.

Although the owner of a patent had the right to claim a combination in his reissue, the claim cannot be extended to the sole right to the use of a part of the combination.

4. SAME—PROTECTION OF—SUBSTITUTION OF PARTS.

The court will so protect a patented combination as not to allow it to be defeated by a mere substitution of parts performing the same functions.

In Equity.

Coburn & Thacher, for complainants.

G. L. Chapin, for defendants.

BLODGETT, D. J. These are bills in equity for damages and injunction for alleged infringement by the defendants in each case of reissued letters patent No. 7,704, dated May 29, 1877, for an improvement in bedstead frames, the original patent having been issued November 30, 1869.

The original specifications describe the invention in the following terms:

“This invention relates to a new frame for single and double bedsteads, which are provided with elastic or flexible sheets for the support of the bed-