a method never seemed to have occurred to any of the mechanics who have worked with gas fires for years. While the desirability of keeping the flame close to the radiating face plate was recognized as highly desirable, no one seems to have thought of inclining the holes in an asbestos plate, or to have discovered the subtile and desirable effect such inclined holes would exert on the gas. The character of the result accomplished, and the advances made by it, to our mind, stamp Taylor's device as of a patentable character. Nor was it anticipated by prior devices. While the placing of the holes in the upper side of the ridges of the corrugated metallic plates in use at that time brought the flame in close contact to the face plate, yet these holes were not the holes of the Taylor device, or capable of performing the same functional purpose. In Taylor's burner, a board of material thickness is used, and such thickness (a factor absent in the metallic plate) permits the lower side of the external opening to be higher than the upper side of the internal opening. By this means the higher heated portion of the face-plate opening serves as a positive draft to draw the gas to the surface, and, generally, over the entire face plate.

Nor is Taylor's device anticipated in the gas log or in the burner of the Hewitt patent. While some of the holes in these constructions are inclined, yet such inclination is merely accidental, and was not given for any functional purpose. The holes are made normal to the surface in which they are drilled, and are given a relatively upward or downward inclination to the side they happen upon. Such a construction would be fatal to the efficiency of the Taylor device. Such mere accidental use of some of the features of an invention, without recognition of its benefits, does not constitute anticipation. Topliff v. Topliff, 145 U. S. 156, 12 Sup. Ct. 825.

Upon the whole case, our judgment is with the complainant. The respondent's structure is a substantial reproduction of Taylor's device, and is clearly an infringement upon the first claim of his patent. A decree may be prepared.

## NATIONAL MACH. CO. v. WHEELER & WILSON MANUF'G CO.

(Circuit Court, D. Connecticut. January 11, 1896.)

1. PATENTS—DECISION IN INTERFERENCE PROCEEDINGS—CONCLUSIVENESS.

The fact that a party to an interference proceeding permits the decision to go against him by default does not make such decision conclusive against him upon the question of the patentability of the machine in a subsequent suit against him for infringement. It is conclusive only upon the issue of priority of invention.

2. Same—Two Patents to Same Inventor.

The question whether two patents cover the same invention depends upon the scope of their claims. Claims are coextensive which specify the same combination of the same number of parts, with the same features, though the functions which are mentioned in the claims are not coextensive. But two claims are not coextensive which specify different combinations of parts of a process, machine, or manufacture, even where some of these parts are in each of the combinations. Miller v. Manufacturing Co., 14 Sup. Ct. 310, 151 U. S. 186.

8. SAME-BUTTONHOLE MACHINES.

The Osterhout patent, No. 447,791, for an improvement in machines for cutting and stitching buttonholes, shows patentable invention, and was not anticipated. Claims 21 and 22 cover, broadly, a combination having a normally elevated cutter, positively connected with, and unyieldingly actuated and depressed at a certain time by, a depressor operated through or by means of the needle bar actuating mechanism, and a cam or device operating or rotating in unison with the feed cam, whereby the cutter is thrown into action. These claims are infringed by a machine made in accordance with the Tebbetts & Doggett patent, No. 438,655.

This was a bill by the National Machine Company against the Wheeler & Wilson Manufacturing Company for alleged infringement of a patent for an improvement in buttonhole machines.

Edwin H. Brown and James C. Chapin, for complainant. Livingston Gifford and James H. Lange, for defendant.

TOWNSEND, District Judge. At this final hearing upon a bill in equity, complainant prays for an injunction and accounting, alleging infringement of letters patent No. 447,791, granted March 10, 1891, to James B. Osterhout, assignor to complainant. The record in this very complicated case has the refreshing merit of exclusion of irrelevant matter, and inclusion of all necessary evidence. The questions at issue have been exhaustively presented in admirable briefs, and by lucid and thorough oral arguments.

The patented device is for an improvement in machines for cutting and stitching buttonholes. The specification states that:

"One general object of this invention is to provide buttonhole sewing machines with practically successful cutting mechanisms, which shall automatically cut a buttonhole only when the machine is stitching at a predetermined portion, part, or point in the periphery of the buttonhole."

The patent covers a novel machine, comprising patentable improvements upon previously existing devices, whereby new and useful results were produced. The defense is denial of infringement. Prior to the invention embodied in the patent in suit, and in certain patents relied upon by defendant,—notably, that to Egge in 1885, no practical, automatic buttonhole attachments for sewing machines had been devised, which would both stitch and cut the buttonhole automatically. The problem presented was to provide a cutter which should not only automatically cut by a single stroke, at the proper time and in the proper place, but should be prevented from thereafter continuing the cutting operation. Defendant admits that Osterhout so far solved this problem by an inventive act that his device was capable of practical operation in the hands of an expert operator. And defendant further admits that the patents upon which it relies, and under which it manufactures, depend for their operation upon a finger or pin on a feed wheel such as is found in complainant's patent. But they deny infringement, on the ground that this finger was well known in the prior art; that the claims in suit do not cover it, except in combination with other elements not used by defendant; and, further, because defendant's machine shows invention, by the solution of the problem presented, upon a different principle, producing the same results in a different way.

construction of defendant's machine is practically identical with that covered by patent No. 438,655, granted October 21, 1890, to Tebbetts & Doggett. Defendant claims that the Osterhout patent is for an improvement upon the type of cutters known as "step by step cutters," in which a knife is operated at each alternate descent of the needle, but that the Tebbetts & Doggett patent is for an independent, single-plunger cutter, which can operate only once in any event. Defendant further claims that patent No. 345,419, granted to Frederick Egge July 13, 1886, shows such a solution of the problem presented as deprives Osterhout of any claim to any device or construction, except the specific construction described and claimed in his patent. This subject will be discussed later.

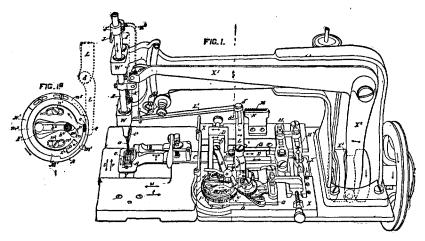
Buttonhole machines of the class in question comprise a stitchforming mechanism, a work-moving mechanism, and a cutting mechanism. This litigation is concerned with the latter mechanism only. In this is included a cutter, a cutter carrier moving relatively to the plane of the work, a depressor to force the cutter through the fabric, and a cutter controller to cause the engagement of the cutter carrier and depressor. The claims alleged to have been infringed are the following:

"(1) In a buttonhole sewing machine, the combination, with its stitch-forming and work-moving mechanisms, of a work cutter and its carrier, normally elevated; a depressor, which ordinarily does not depress the cutter carrier and cutter; a cutter controller connected to and moving with the said workmoving mechanisms; and connections between the said cutter controller, cutter carrier, and depressor, whereby the latter is temporarily caused to depress the cutter carrier and cutter,—substantially as set forth. (2) In a buttonhole sewing machine, the combination, with its stitch-forming and work-moving mechanisms, of a work cutter and its carrier, normally elevated; a depressor, which is operated by the needle-actuating mechanism of the sewing machine, and which ordinarily does not depress the cutter carrier and cutter; a cutter controller connected to and moving with the said work-moving mechanism: and connections between the said cutter controller, cutter carrier, and depressor, whereby the latter is temporarily caused to depress the cutter carrier and cutter,—substantially as set forth." "(4) In a buttonhole sewing machine, the combination, with its stitch-forming mechanism, work clamps, and mechanism, including a rotary feed device for operating the work clamp, of a work cutter and its carrier, normally elevated; a depressor, which ordinarily does not depress the cutter carrier and cutter; a cutter controller connected to and rotating with the said rotary feed device; and connections between the said cutter controller, cutter carrier, and depressor, whereby the said depressor is temporarily caused to depress the cutter carrier and cutter,—substantially as set forth. (5) In a buttonhole sewing machine, the combination, with a stitch-forming mechanism, a work clamp, and mechanism, including a rotary feed device for operating the work clamp, of a work cutter and its carrier, normally elevated; a depressor, operated by the needle-actuating mechanism of the sewing machine; a cutter controller connected to and rotating with the said rotary feed device; and connections between the said cutter controller, cutter carrier, and depressor, whereby the cutter carrier and cutter are temporarily depressed by the said depressor,—substantially as set forth." "(7) In a buttonhole sewing machine, the combination, with a stitch-forming mechanism, a work clamp, and mechanism for operating the work clamp, of a depressor, operated by the actuating mechanism of the sewing machine; a work cutter; its carrier; means to elevate the cutter carrier, and means to support it when elevated and disconnected from said depressor; a cutter controller connected to and moving with the mechanism operating the work clamp; and connections between the said cutter controller,

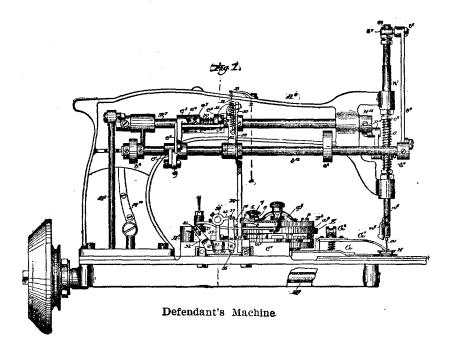
cutter carrier, and depressor, whereby the cutter carrier is temporarily connected with and depressed by the said depressor, and is thereupon elevated and disconnected from the depressor,—substantially as described." "(15) In a buttonhole sewing machine, the combination, with a stitch-forming mechanism, a work clamp, and mechanism for operating the work clamp, of a cutter carrier, normally elevated, and an attached cutter of suitable length to cut a buttonhole at one insertion; a depressor operated by actuating mechanism of the sewing machine, a cutter controller connected to and moving with the mechanism for operating the work clamp; and connections between the said cutter controller, cutter carrier, and depressor, the same being constructed and arranged so as to cause the cutter carrier and cutter to be depressed by the said depressor to cut a buttonhole when the sewing machine is stitching at or near one and part of one side of the buttonhole,—substantially as set forth." "(21) In a machine for stitching buttonholes, the combination, with a stitch-forming mechanism, a work clamp, and mechanism for operating the latter, of a cutter, a cutter carrier or bar, a depressor operated by the needlebar actuating mechanism, a cam or device rotating in unison with the clampoperating cam or disk, and connections between the said rotating cam or device and depressor, whereby the cutter is thrown into action. (22) In a machine for stitching buttonholes, and combination with a stitch-forming mechanism, a work clamp, and mechanism for operating the latter, of a cutter bar sliding vertically in the head of the machine, and entirely disconnected from the needle bar thereof: a cutter of suitable length to cut an entire buttonhole at a single stroke; a slotted throat plate, through which the said cutter can descend; a depressor operated by the needle bar actuating mechanism to cause a descent of the cutter bar and cutter as a buttonhole is being completed; a cam or device rotating in unison with the feed cam or disk for the clamp; and connections between the said rotating cam or device and depressor, whereby the latter is thrown into action to operate the cutter." "(28) The combination, with a buttonhole sewing machine, of a cutter, a cutter carrier, a cam from which motion is transmitted to the cutter carrier to depress the cutter, and mechanism whereby the depression of the cutter from the cam will be produced but once, and after the stitching of the greater part of the buttonhole, substantially as specified."

The invention claimed in this patent consists of a cutter normally elevated, and out of engagement with the other parts of said machine, but which may be so connected with the work-moving and feeding mechanism that, at the appropriate time in the stitching of the buttonhole, it is caused to be positively and unyieldingly operated by the needle-actuating mechanism of the machine, so as to cut the buttonhole, and immediately thereupon to be again disengaged, and return to its normal position. In the stitch-forming mechanism of this class of machines, the needle does not move over the cloth, but reciprocates constantly in one position, while the work-moving mechanism imparts to the fabric a jogging movement for each stitch, and a progressive feed movement, whereby the cloth is so moved as to produce the required buttonhole.

A question which has been much discussed is whether the complainant's cutter controller, as claimed, covers only a controller which necessarily controls the cutting during the entire period from the time when it is automatically put into engagement, until the cutting operation is terminated, or whether it may also cover merely the means whereby it is put into engagement, without reference to the length of the engagement. The accompanying illustrations will serve to show the distinction between the two machines:



Osterhout Patent.



Complainant's lettered exhibit, "Wheeler & Wilson Machine with Osterhout Device No. 2," also shows the buttonhole cutter of the patent in suit. P, of the patent drawings, represents the cutter controller, a laterally projecting finger attached by means of screws to the feed-wheel disk, F, arranged to be operated by means of teeth in said wheel engaging a ratchet or pawl, motion to which is imparted by the motion of the main shaft of the machine. disk revolves, it brings the projecting point of the cutter controller into engagement with a vertical finger on the arm, L, of a lever which so moves the arm, L', of said lever, acting by means of hinges upon the vertical cutter carrier, I, as to cause the cutter bar to slightly rotate, and to bring the clutch, J, on the cutter carrier, and the clutch, J', on the needle carrier, A, into engagement. upon the downward movement of the needle arm depresses the cutter carrier, and the cutter passes through the fabric. Upon the upward movement of the needle carrier, a spring causes the clutches to be disengaged, and another spring, K, upon the cutter carrier, elevates the cutter.

The defendant's machine is constructed substantially in accordance with the Tebbetts & Doggett patent. The drawing on sheet 1 of said patent shows said cutter in operative combination with a Wheeler & Wilson buttonhole sewing machine. It also comprises a circular feed wheel attached to a Wheeler & Wilson machine, and having a laterally projecting finger or controller, like that of the patent in suit, operated in the same way. As the feed wheel revolves, a pin on said finger strikes an arm of a bell crank lever, causing said lever to slightly rotate and bring a latch into engagement with a catch on a collar on a needle bar rocker shaft. This latch is fastened by means of screws to a cutter bar rocker shaft. At the extremity of said cutter bar rocker shaft is an arm which operates the cutter car-On said cutter bar rocker shaft is a collar with a projection The upper short arm of said bell crank lever is or finger thereon. pressed against said finger when the lower arm is brought into engagement with the controller or finger on the feed wheel; thus causing a slight rotary movement of the cutter bar rocker shaft, sufficient to bring the latch into engagement, as above stated, with the catch on the collar carried by the needle bar rocker shaft. The rotary movement of the needle bar rocker shaft, communicated by said engagement to the cutter bar rocker shaft, causes a jaw or clutch at the externity of said arm, connected with and operated by said cutter bar rocker shaft, to descend, and, in descending, to depress a finger, with which it is in engagement, on the cutter carrier, and thus to depress the cutter which cuts the buttonhole. the cutter is thus being depressed the movement of said cutter bar rocker shaft causes a releasing, snail-shaped cam thereon to press against the top of said bell crank lever, thus releasing the arm of said lever from engagement with the controller on the feed wheel. Defendant claims that this releasing operation accomplishes what the patentees of said machine state as the main object of their invention,—a single automatic descent of the cutter, and the prevention of further descents by means of a device independent of the needle When the cutting operation is completed a spring on the cutter bar rocker shaft elevates the cutter. A comparison of the two machines shows that each has a circular feed-wheel disk, operated in the same way by the feed-wheel mechanism, and provided with a projecting pin, which, at a certain point, contacts with a lever which causes a cutter carrier to engage with a needle carrier by means of a clutch; the lever in one device acting directly upon the cutter carrier, and causing it to contact and engage with the needle carrier, and in the other device, through the intervention of an interposed cutter bar rocker shaft, engaging with a needle bar rocker shaft by means of collars and clutches thereon. In each case the cutter bar and needle bar are normally disconnected. In each case the movement of the needle-actuating mechanism causes the descent of the cutter carrier. In each case it is positively and unvieldingly actuated at a given point. In each it is normally elevated by a The prior art does not show this construction, or any such combination.

Prior to the invention of the patent in suit, fingers or projections on the feed wheel had been used to bring some independent or auxiliary device into operation at a predetermined point. Thus, in patent No. 303,453, granted to F. W. Ostrom August 12, 1884, a pin on the feed wheel released certain cording mechanism, so that it was operated by a spring, and also released certain brake mechanism. This device did not suit. While it set a train of mechanism in motion, it did not throw it out of operation. In patent No. 240,546, granted April 26, 1881, to John Reece, for an automatic buttonhole stitching and cutting machine, a cutter-actuating cam on the feed wheel, acting upon the cutter lever, caused the depressor of the cutter to cut the fabric, and thereafter permitted its release. vice was combined with a sewing machine having two needles,—one to make the edge stitch, and the other the depth stitch,—so that there was no jogging movement therein, and it furnished no suggestion for adaptation to machines having such movement. patent, No. 303,454, is for a buttonhole cutter operated by hand. was incapable of automatic operation. Allen patent, No. 246,859, is for an attachment for trimming the edges of fabrics. descends and cuts at each descent of the needle; thus illustrating the step by step cutter, as compared with the single-stroke cutter. Its operation is controlled by hand, and, while it might be used in a two-needle machine, it is not adapted for use in a machine having a Patent No. 337,273, granted March 2, 1886, to J. jogging motion. W. Lufkin, shows a cutter in which an arm, operating upon the cutter lever every second time that the needle descends, causes it to cut the buttonhole during the operation of the stitching, but only at the time when the needle is making the edge stitch. It differs from the stitching mechanisms here in controversy in that, while in the latter the cutter is brought into operation by means of a finger on the clamp-feed mechanism, and only descends at a certain predetermined portion of the stitching operation, the Lufkin machine operates step by step, and continuously, by alternate descents, during the entire

stitching period, is actuated from a cam in the main driving mechanism of the machine, and is not provided with any means for determining the cutting operation. These machines do not anticipate the combination of the patent in suit. They show that there existed, in the prior art of buttonhole stitching machines, hand and automatically operating cutting attachments, and that fingers, similar to that of the patent in suit, for starting the various operations at a definite time, were well known, and that controlling devices, limited in adaptability and scope, had been constructed. They serve to illustrate the problem then presented in the art, namely, in a machine imparting a jogging motion to the work, how to connect a finger on a feed wheel with a cutter bar so that at a predetermined time the cutter bar would be automatically thrown into such position that upon actuation of a depressor the cutter bar would descend and cut a buttonhole slit, and would thereafter be automatically prevented from continuing such cutting operation. In patent No. 301,974, granted July 15, 1884, to Arthur Felber, the cutter carrier is mounted upon the needle carrier, and connected therewith by a spring which acts as a depressor. The cutter carrier moves up and down with the needle. The needle has a jogging movement rela-When the needle descends at a certain portion tively to the cloth. of the stitching operation to make an edge stitch, the spring-actuated cutter descends with it, and cuts the cloth. When it jogs to make the depth stitch, a projection on the cutter strikes upon an intercepting jaw, which holds the cutter out of contact with the goods, and prevents it from cutting. It is claimed that this machine was impracticable, and various obvious reasons are given in support of said claim. The evidence shows, however, that it had some small measure of success, as applied to a limited class of work. This machine is arranged to operate automatically with relation to the jogging movement, and is, in a limited sense, controlled, as argued by counsel for defendant, by a cutter controller or intercepter, and provided with a depressor. But the mechanism and mode of operation of this machine are radically different from those of the Osterhout's cutter bar is normally detached from patent in suit. the needle bar. Felber's is continuously attached, and is actuated at every descent of the needle bar. Osterhout's depressor and cutter controller operate through a train of mechanism only to cause a positive and unvielding descent of the cutter to make a single cut. Felber's depressor consists of a mere spring, which causes the cutting by means of its resiliency, and which, when not cutting, opposes every descent of the needle. His so-called "controller" "is a mere smash block, against which the cutter carrier necessarily smashes at every descent of the needle bar during the stitching of the whole of one side of the buttonhole." I concur with the expert Quimby in his statement as to said machine, which is as follows:

"There is no disclosure or suggestion in the Felber patent of a cutter controller, moving with the work-feeding mechanism, a cutter carrier and depressor, and, between the cutter carrier, depressor, and cutter controller, a train of connections susceptible of being so affected by the cutter controller as to bring about a single actuation of the cutter at any prescribed stage in the stitching of the buttonhole. Nor is there in the Felber patent any suggestion

or disclosure of the employment of a wide cutter to cut the buttonhole slit at one stroke. Hence the Felber patent does not show or disclose the invention of said claims of the patent in suit."

Much testimony has been taken upon the question whether one Egge or Osterhout was the prior inventor of an automatic button-The evidence as to the original Egge machine, of 1879, for stitching buttonholes, and as to the cutter mechanism attempted to be used therewith, is not directly material, as the proposed cutter attachment never went into practical use, and was a mere abandoned experiment, and also because Egge has failed to show reasonable diligence in reducing to practice, or any excuse for his long He admits that he knew of no sewing-machine head on which this cutter attachment could be used; that he left it out of his application for a patent for the automatic buttonhole stitching device; that, in his crude suggestion of a cutter capable of being used therein, he stated that he preferred to cut the buttonhole in the usual manner, after it was made; and that he never attempted to introduce or sell or reproduce said cutting mechanism. January of 1885 Egge again began experiments in the construction of a buttonhole stitching and cutting machine; and in the latter part of February, 1885, he constructed and operated a practical machine, containing a cutting mechanism, for which on July 13, 1886, he obtained patent No. 345,419. The machine feeds at every vibration of the needle bar, and a lug or trip on the feed bar, contacting with or pressing against the crosspiece, keeps the cutter elevated until after one side of the stitch and the barring stitchings are com-Then, as the feed bar commences to move backward, said lug permits certain pawls to come into vertical alignment, and the cutter is depressed by the upward movement of said crosspiece. The operator then shifts the feed plate to make the barring stitches, and thereby determines the cutting operation. It will thus be seen that the Egge 1885 machine was not strictly an automatic cutter, as applied to the then existing machines. Irrespective of the objections to its practical operation, it was constructed upon a different principle from that embodied in the device of the patent in suit. It did not comprise a rotary cutter controller, nor any device capable of automatically cutting a buttonhole slit, by a single stroke of the cutter at a predetermined point in the sewing operation. The mechanism for forming the complete buttonhole was necessarily The machine of the Egge patent, therefore, is shifted by hand. so differentiated from that of the patent in suit that at most, if it be prior in conception and reduction to practice, it can only affect the claim of the patent in suit as a pioneer patent.

This review practically covers the devices introduced as anticipations which are earlier than the invention of the patent in suit, and the Egge 1885 machine. An examination of the patents and models, and a consideration of the expert evidence and of the arguments of counsel, have failed to satisfy me that any of the devices materially detract from the evidence of inventive skill shown in the Osterhout patent. Some of the machines were failures. Others worked imperfectly. The Felber and Egge devices, which gave the best re-

sults, were constructed and operated upon principles which led away from, rather than towards, the fundamental invention of the patent in suit.

In December, 1884, Osterhout, the patentee of the patent in suit, commenced to reduce to practice a cutter attachment which he claims to have conceived and disclosed as early as 1881. He claims that he completed the first machine in the latter part of February, 1885, and that he completed a second machine in March, 1885. Thus, it will be seen that each of these inventors, Osterhout and Egge, claims to have reduced his conception to practice at the same time. It has already been shown that Egge's earlier experiments were abandoned. I do not feel satisfied as to which of these inventors is entitled to priority. But, in view of the radical differences between the Egge and Osterhout constructions, already stated, and in view of the decision of the patent office as to Tebbetts & Doggett, this evidence is not very material.

In this art, as already stated, two kinds of cutters are recognized: First, the step by step cutter; second, the single-stroke cutter. the former a small knife is used, and the cutting is effected by imparting several distinct movements to the cutter. In the singlestroke cutter a knife of the size required to cut the particular buttonhole is used, and only a single cut is necessary. The defendant claims that Osterhout first attempted to use the principle of the single-stroke cutter, and afterwards abandoned it, and, having got the idea of using the step by step cutter from the subsequent invention of other persons, he finally secured a patent upon the principle of an automatic, step by step cutter, while the defendant's patentees were the first inventors of a machine covering the principle of the single-stroke cutter, arranged to operate automatically. I think defendant has failed to prove this point. While the conflicting evidence cannot be satisfactorily reconciled, it is sufficiently shown that Osterhout was engaged in attempts to develop both the single-stroke and the multiple cutter, and that he finally claimed both forms of his invention in the original application for the patent in suit. says:

"In applying my invention to various buttonhole sewing machines, I either have the cutter, i, wide enough to cut the whole length of a buttonhole at one stroke, or at a few strokes, and the cam part, P, so short, and the part, e, of the bar or lever, L, so narrow, as to cause the cutter carrier to be engaged with and depressed by the needle carrier only once, or a few times, while the cam, P, is passing the part, e; or I have the cutter of any desired less width, and the parts, e, and P, or one of them, of corresponding greater extent, as illustrated by the drawings, so that the cutter carrier will be engaged with and depressed by the needle carrier a greater number of times to progressively cut the work while the part, P, is passing the part, e."

"In Figs. 33, 49, 53 and 57 the cutter, i, is broad enough to cut the whole length of a moderately short buttonhole at one stroke, and such a broad cutter can be secured to and used with each cutter carrier shown in the other figures. When such a broad cutter is used, the part, e, of the bar or lever, L, and the cam or part, P, should each be reduced to a suitable size or tooth."

But in further support of this contention the defendant claims that three things are essential to the operation of the Osterhout device, namely, the to and fro or jogging motion of the feed-wheel

mechanism, to put the cutter carrier into engagement with the depressor on the needle carrier when the goods are in the edge-stitch position; the rotary movement of the feed-wheel disk to regulate the length of engagement of the controller with the lever, and to determine the cutting operation; and, as involved therein, the surface contact of said controller relative to the length of each feed By a series of operations, upon the argument, counsel for defendant demonstrated that its machine did not use said jogging motion at all in connection with the action of the cutter-operating mechanism, and only used the rotary motion to start the cutter device by a pin, and did not depend upon any contact surface to determine the cutting operation. They further show that the original Osterhout device was so constructed that, in practical operation, it sometimes cut beyond the buttonhole. They claim that, in the revolution of the feed wheel, it is impossible to so practically control its operation that the parts shall always be automatically put in engagement at a predetermined point, and the cutter controller operate in the same relative position, because the controller, being mounted upon the cloth clamp actuating mechanism, depends upon the movement of said parts for its operation. In defendant's device, the operation of the cutter not being dependent upon the cloth clamp actuating mechanism, it is claimed that the element of uncertainty as to cutting does not enter into the operation of its cutter Of course, this evidence, although it may show an imcontroller. provement upon complainant's device, would not, for that reason, relieve defendant from the charge of infringement, but these facts are relevant as tending to show that the means employed in the two machines for effecting the termination of the cutting are different. In each machine there is a jogging and a rotary movement. In each the effect of the rotary movement is to effect the engagement of the controller with the cutter. Each machine starts the cutting opera-If the correctness of defendant's contention tion in the same way. as to differences of operation be assumed, it does not meet the evidence that the original application described an operative device actuated by a cam working in harmony with the progressive movement of the work carrier, and not necessarily limited to a construction dependent upon the combined rotary and jogging motion for causing a depression.

It is further claimed by counsel for defendant that, in the train of mechanism between the operation of the sewing machine and the cutter controller, a frictional element, essential to the operation of complainant's machine, caused a slip, by reason of the friction-driving device on the feed wheel, and necessitated a rearrangement of the relative position of the parts in order to prevent an additional cutting operation. I do not understand why, in this respect, there is any difference in the operation of the two machines, and I therefore do not give any weight to this latter claim.

Complainant argues that its original device, which was confessedly an operative machine, is not limited to a controller which controls the operation of the device throughout the cutting operation, but that, as is shown by claims 21 and 22, it also covers a

device for automatically starting the cutter. The original application covered a construction whereby the cutter might be put in engagement independently of the jogging motion; and complainant forcibly contends that, inasmuch as claims 21 and 22 of the patent refer only to using the cutter controller as a starter, and as the defendant also uses the cutter controller as a starter, it has infringed said claims, considered as a subcombination of the general combinations covered by the other claims. An essential difference between these two claims and the others here in suit is that the latter are limited to a construction moving upon the clamp-feed mechanism, or located on the rotary feed wheel, while the former cover broadly a construction actuated by a cam or device rotating in unison with the clamp-operating cam or disk for throwing the cutter or depressor into action. While it is true that the device of defendant is so constructed that it is not dependent upon the jogging motion of the feed-wheel mechanism for the determination of the number of strokes of the cutter, and while it is true that the complainant's device is thus dependent, yet the specifications do not necessarily describe a controller which thus determines the engagement, or, if they do, they also describe a pin on the feed wheel, which operates as aforesaid, to start such engagement; and the claims 21 and 22 cover the finger device used merely as a starter, They do not claim or refer to any control thereand nothing more. I think defendant, by means of its modified or added devices, may have constructed a better machine than that of complainant, and the later Osterhout and Hallenbeck construction confirms this view. But, from a comparison of the two machines, it appears that in the features which are common the defendant has appropriated devices first conceived and created by Osterhout, and unlike anything in the prior art. The features comprised in claims 21 and 22 of a normally elevated cutter, positively connected with, and unyieldingly actuated and depressed at a certain time by, a depressor operated through or by means of the needle bar actuating mechanism, and a cam or device operating or rotating in unison with the feed cam whereby the cutter is thrown into action, are found both in complainant's and defendant's machine. fore, it be necessary to limit certain claims of the patent to a cutter controller which determines the duration of the cutting period, as is claimed by defendant, yet, inasmuch as the specification describes, and claims 21 and 22 broadly cover, such combination used as a starter, and nothing more, I think these claims are infringed by defendant.

These claims were put in interference with the Tebbetts & Doggett patent, and the applicants for the latter made default, whereupon the patent office awarded said claims priority over Tebbetts & Doggett. Counsel for complainant argues that defendant thereby conceded patentability of its invention, and that defendant's patent infringed said claims. I do not so understand the law. The object of the interference proceedings is to determine priority, not patentability; and, while the decision in interference proceedings may be res adjudicata as to this question, it does not preclude

defendant from raising other questions not in issue in said proceed-Holliday v. Pickhardt, 29 Fed. 853; Christie v. Seybold, 6 U. S. App. 520, 5 C. C. A. 33, 55 Fed. 69; Electric Ry. Co. v. Jamaica & B. R. Co., 61 Fed. 655; Reece Buttonhole Mach. Co. v. Globe Buttonhole Mach. Co., 10 C. C. A. 194, 61 Fed. 958. But the decision of the patent office effectually disposes of defendant's claims of priority, so far as they are based upon the Tebbetts & Doggett patent. Claims 21 and 22 were originally drawn by counsel for defendant as part of the Tebbetts & Doggett application. The patent office adopted them as a basis for interference with the patent in suit. All the prior patents, except the Ostrom corder patent, were cited as references in said interference. Defendant's counsel did not move to dissolve, but defaulted, and acquiesced in the decision of the patent office awarding priority of invention to Osterhout. The Osterhout and Tebbetts & Doggett machines are the only practical buttonhole stitching and cutting machines now in practical operation, except the Reece machine, which is not relevant in this connection, owing to its totally different construction.

The considerations already suggested apply to defendant's argument that the application was improperly enlarged during its pendency in the patent office. That the invention infringed by defendant was disclosed in the original application, and covered in its claims, and that it was not limited to a dependence upon the jogging movement, is clear from the language thereof. That claims 21 and 22 were not inserted to subordinate defendant's prior machine, has been adjudicated by the patent office. It has not been proved that Egge was prior to Osterhout. Irrespective of the fact that his machine was defective and nonautomatic, its construction was so unlike the combination covered by claims 21 and 22 that there was manifestly no enlargement to cover it.

But, in further support of the defense of noninfringement of any of the claims, defendant contends that the original Osterhout application contemplated a cutter actuated only when the finger is thrown into coaction with its follower; that the snail cam on defendant's device positively throws its vertical rocker shaft out of engagement with the starting pin as soon as the cutting operation is set in motion; that Osterhout, in his patent, says, "I control by a controller on the feed wheel," while Tebbetts & Doggett say, "We do not control by a controller on the feed wheel, but merely push the button so as to put the controller in engagement with the train of operative mechanism and subsequent operations, and eliminate all control from the pin or controller on said wheel;" that, in the present operative machine of complainant, it has been obliged to take away the control of the cutting operation from the controller, in order to get the best results; and that although a machine can be devised which shall be operative, as already stated, in the hands of an expert or skillful operator, when constructed on the principle of the original Osterhout machine, yet that it requires such nice adjustment as not to be capable of use in the ordinary factory, as shown by the patent granted to said Osterhout and one Hallenbeck. as joint inventors. And finally counsel for defendant insist that, if

the claims of the patent in suit are to be so broadly construed as to make defendant's machine an infringement, they also cover the invention in said prior patent to Osterhout & Hallenbeck, and that, therefore, within the rule laid down in Miller v. Manufacturing Co., 151 U.S. 186, 14 Sup. Ct. 310, the patent in suit is void, because the invention therein claimed had been shown, described, and claimed in said patent No. 402,610, granted to said Osterhout & Hallenbeck But, while it may be true that the cutter is actuated only when the finger is thrown into engagment with its follower, said finger does not determine the period of any one engagement of the cutter bar and depressor, but only the number of engagements, as already stated. The same function is performed by defendant's snail cam. As this is a different mechanical construction, I think its substitution supports the defense as to all the claims except Nos. 21 and 22. The same may be said as to the above language used by the respective patentees.

The machines now used by complainant are manufactured in accordance with said Osterhout & Hallenbeck patent. This has a lug or controller, called in the patent a "trip," which is similar to the controller of the original Osterhout machine. But, when said lug engages with said lever, it causes another vertical lever to rock and permit a parallel bar to engage with an oscillating stud or follower for the purpose of connecting the two members of the clutch device upon the needle bar and cutter bar, respectively. Thereupon the descent of the needle bar causes a descent of the cutter. backward movement of the switch cam on the main shaft causes a movement of the parallel bar, which disengages the clutch, and thus the bar is caused to ride up an incline of an auxiliary lever attached to said vertical lever, thus positively preventing any further connection with or operation of the cutter. When the lug on the feed-wheel disk passes out of engagement with the primary lever, the vertical lever assumes its normal position. Assuming that complainant's original device was somewhat defective, yet it is admitted that it was capable of continuous, successful, practical operation. Osterhout & Hallenbeck have made improvements on it in one way, and have obtained a patent therefor. Tebbetts & Doggett have made and patented other improvements. But, notwithstanding the doubts cast upon some of Osterhout's early experiments, the evidence strengly confirms the view that he first disclosed the combination and certain valuable features thereof described in his original application. So far as said combination is concerned, I concur with complainant's expert, in his statement that:

"It is clear from the records of both parties that Osterhout was the first man to produce a buttonhole stitching and cutting machine which had a cutter normally elevated, and out of use; a depressor for positively and unyieldingly forcing the cutter through the work; a controller for effecting the engagement of the depressor with the cutter carrier; and connections intermediate the controller and the cutter carrier for engaging the latter with the depressor."

The distinctive features of the Osterhout & Hallenbeck machine, already stated, show that it embodies specific and distinct devices

adapted to carry out the generic invention of the patent in suit, in certain special classes of machines.

In Miller v. Manufacturing Co., supra, it appears, from the opinion of the court and the disclaimer of the patent, that the court had before it a comparatively narrow and limited invention; and it found that the entire invention, including the part or function claimed in the second patent, was described and claimed in the first patent. The court says, "The broad idea sought to be reserved is embodied in identically the same mechanical device constituting the invention, and covered by the first patent." The question of identity of invention depends upon the scope of the claims. Mr. Walker, in the last edition of his work on Patents, tersely and accurately states the rule deducible from the Miller v. Manufacturing Co, case, and applicable herein, as follows:

"Claims are coextensive which specify the same combination, of the same number, of the same parts, with the same features, though the functions which are mentioned in the claims are not coextensive. That was held to be the character of the respective claims of two patents to the same inventor in the case of Miller v. Manufacturing Co., and therefore the second of these patents was held to have been granted for the same invention as the first, and to be void. But two claims are not coextensive which specify different combinations of parts of a process, machine, or manufacture, even where some of those parts are in each of the combinations."

The inventions here claimed are distinct, and are distinctly patentable. But defendant further urges that the effect of sustaining these claims would be to prolong the monopoly of the Osterhout & Hallenbeck patent beyond the statutory period of 17 years. In several recent cases in this court, in which Miller v. Manufacturing Co. has been cited, this argument has been pressed as a ground for extending the scope of said case beyond the actual decision of the court, and for declaring a new interpretation of the law. But this would not only be violative of the express declaration of the supreme court that its decision therein was in accordance with the rule settled by its previous decisions, but such a construction would amount to judicial legislation. It is not the duty of the court to thus change the law, but only to interpret it as it exists. Refrigerating Co. v. Sulzberger, 157 U.S. 1, 15 Sup. Ct. 508. The same questions as are involved herein were carefuly considered by me in the case of Thomson-Houston Electric Co. v. Winchester Ave. R. Co., 71 Fed. The material facts bearing on this issue are practically the same, except that in that case both patents were granted to the same inventor. The application for the patent in suit herein was filed in December, 1885. While this application was delayed by interferences, the Osterhout & Hallenbeck application was filed. it be admitted, as defendant contends, that the same rules are applicable in the present case, where the subsequent patent issued to joint inventors. I see no reason to modify the following language of my former opinion:

"This patent for this specific combination, adapted and claimed only for this specific purpose, applied for October 22. 1888, after the original application bad been allowed, but before the patent thereon was granted, was earlier in

the date of issue. The original application was delayed by interference proceedings in the patent office. Whatever may be the rule as to cases where the application for the generic patent was filed subsequent to the application for the specific patent, I do not think the patentee should be deprived of his broad patent where the application for such patent was made first, and was delayed in the patent office through no fault of the inventor. Such a ruling would be a reproach to the law."

It is not necessary for the decision of this case to extend the principle of said decision in said case of Thomson-Houston Electric Co. v. Winchester Ave. R. Co., namely, that, when a prior application for a generic patent has been delayed in the patent office without the fault of the applicant, the grant of a subsequent patent for a specific, distinct, and separate improvement upon the principal patent will not invalidate a patent subsequently issued upon the original application. Let a decree be entered for an injunction and accounting as to claims 21 and 22 of the patent in suit.

## THE GLIDE.

## HUDSON v. GRAFFLIN.

(Circuit Court of Appeals, Fourth Circuit. February 4, 1896.) No. 135.

1. Admiralty Appeals—Decree against Stipulators—Appeal by Claimant Alone.

The sureties in a stipulation for the release of a vessel are not parties to the cause, though they are bound by the decree. Hence, where the decree is adverse to the stipulators, the claimant may appeal alone without any proceedings to effect a severance.

2. SAME—DEFECTIVE RECORD—ORAL TESTIMONY.

An admiralty cause was tried in the district court for the district of Maryland upon oral testimony alone, there being no rule in that district requiring the testimony to be reduced to writing. An appeal was taken, but, as no notes of the evidence had been preserved, it could not be included in the record. The proctor for the appellant sought to supply the omission by retaking the testimony of the witnesses before a notary, first giving notice to the proctors on the other side. The latter declined to be present, and, when the testimony was submitted to the judge, he declined to certify that it was the purport of the testimony taken before him. The record was filed in the appellate court with these depositions attached. Held, that the judge below properly refused to make the requested certificate; that the depositions could not be considered on appeal; and that, under the peculiar circumstances, the appellate court would not hear the case de novo, but would remand it without prejudice, and with instructions to grant a new trial, with a statement, however, that this proceeding is not to be regarded as a precedent, and that in future the party by whose omission the testimony is not taken, so that it can be incorporated in the record, must suffer the consequences.

Appeal from the District Court of the United States for the District of Maryland.

Motion to dismiss the appeal. Leave to take testimony pending the appeal was heretofore granted. Leave to take testimony pending the 15 C. C. A. 627, 68 Fed. 719.

Robert H. Smith, for appellant. Frank Gosnell, for appellee.