turing under the later one, and, this being so, it follows that the former cannot be held to be an anticipation of the latter.

We have considered the Curtis patent with particularity, because upon its supposed effect the conclusion of the learned judge below was rested; but it is not necessary to further extend this opinion, for, apart from that patent, there is nothing in the record which, in our opinion, affords the slightest support to the decree. The patent in suit is for an improvement—in fact, as well as in name—upon the construction shown in Bray's prior patent of January 22, 1889 (No. 396,533); and therefore it was rightly issued, notwithstanding the fact that the patent for the first and inferior contrivance had previously been granted, and was outstanding. The decree is reversed.

McKAY-COPELAND LASTING MACH. CO. v. COPELAND RAPID-LASTER MANUF'G CO.

(Circuit Court, D. Maine. August 8, 1896.)

No. 426.

1. PATENTS—OPERATIVE MACHINE—COMMERCIAL USE.
   Under the circumstances of this case, the mere fact that the patented device has never been put to any continued successful commercial use is not sufficient to overcome the prima facie case made by the patent. Packard v. Lacing Stud Co., 16 C. C. A. 639, 70 Fed. 66, applied.
2. SAME—ANTICIPATION—MACHINE FOR FLANGING COUNTERS.
   The Hurlburt & Kennard patent, No. 243,917, for a machine for flanging the counters of boots and shoes, *held* void as to the first claim, because of anticipation by the device for bending wood for which patent was issued to Kriebel October 24, 1865.
3. SAME—CLAIMS—NOVELTY.
   The third claim of the patent is surplusage and void, as it differs from the first claim only in adding an element which contributes no more to the novelty of the combination than would the floor or block on which the machine covered by the patent rests.

This was a suit in equity by the McKay-Copeland Lasting Machine Company against the Copeland Rapid-Laster Manufacturing Company for alleged infringement of letters patent No. 243,917, issued July 15, 1881, to R. H. Hurlbut and C. E. Kennard for a machine for flanging the counters of boots and shoes.

Fish, Richardson & Storrow, for complainant.
Elmer P. Howe, for respondent.

PUTNAM, Circuit Judge. The contest in this case is over the first and third claims of the patent in issue. The third claim differs from the first claim only in adding an element, which contributes no more to the novelty of the combination than would the floor or block on which the machine covering the patent in controversy rests. The third claim is, therefore, surplusage and void. So we confine ourselves to the first.

In order that we may make clear the reasons for our disposition of this cause, it is necessary to explain the patent in issue, and

its history, somewhat at length. It was issued July 5, 1881. The application describes the invention as "a new and useful improvement in machines for flanging the counters of boots and shoes." At no point does the patent use the word "last" as describing the substance over which the counter is turned or flanged. In place of the word "last" it uses the word "former." This "former" is shown in the drawing to be a block of wood, in no way adapted as a last, and attached to the machine in such manner that it could not be used in lasting even the heel, unless first detached. The complainant calls attention to one of the drawings attached to the application, which shows the outlines of an entire shoe, with a "former" set into it; but it is still a "former," and not a last. There is nothing in the patent which connects itself with these outlines of a shoe, and nothing which shows that it was practicable to fit a shoe, or even the heel of a shoe, into the machine, as shown in the patent. The suggestion arising from this part of the drawing is worthless for any practical purpose in the case. It is entirely plain that the machine could not be used for lasting in any form of it indicated by the patent. Indeed, the entire scope of the invention is shown in the following extracts from the specification, and it is thereby limited to a mere matter of flanging counters, or heel portions of the uppers of boots and shoes, or counter stiffenings.

The specification reads as follows:

"Our invention relates to that class of machines in which the main part or body of the counter to be flanged is held by a suitable clamping apparatus firmly about a heel-shaped former, while a projecting edge of the counter is turned over upon the sole or tread surface of such former, and forms the flange of the counter. The object of our invention is to provide a simple and effectual means for clamping the counter about the former, and also a flange-turning device, which shall not only turn down such flange, but subject it to a continued rubbing action, thereby causing it to retain its new form much better than when simply turned by a reciprocating slide, as is usually done, and also leaves it more free from wrinkles. While our invention is primarily designed for flanging the counters or heel portions of the uppers of boots and shoes, preparatory to lasting the same, it may with equal facility be applied to counter stiffenings before they are attached to the uppers of the boots or shoes. Our invention consists of the combination, with a heel-shaped former, of a flexible strap or jointed mold, which, by the approach of such former, is caused to automatically grasp and hold an interposed counter while its flange is being turned; and, further, of a peculiar flange-turning device consisting of a rapidly vibrating notched plate, which is adapted to turn down the flange, and at the same time repeatedly rub the same in the direction of its length, as hereinafter set forth."

The expression "preparatory to lasting the same," found in this extract, means evidently preparatory to lasting in some other machine than the patented one. In other words, it has relation entirely to two processes, one to be completed in the patented machine, and the other by some other independent mechanism.

The drawings attached to the application show a complete machine for flanging counters, in which machine is combined a plate, F, properly mounted and adjusted so that the counter or heel portion is turned down by it upon the surface of the "former," and *rubbed* by it so as to obtain a smooth and permanent flange or

heel seat. Although only the first and third claims are in litigation here, yet it is necessary to repeat all the claims in order to properly understand what combination is in issue. They are as follows:

"(1) The combination of the reciprocating former, D, with the clamping strap, E, supported by the arms, g, g, and yoke, h, substantially as shown and described.

"(2) In a machine for flanging counters, the vibratory notched plate, F, as and for the purpose specified.

"(3) The combination of the reciprocating former, D, with the clamping strap, E, arms, g, g, yoke, h, and rod, i, substantially as shown.

"(4) In a machine for flanging counters, the flanging plate, F, mounted on a vibratory shaft, m, in combination with a yielding plate, t, and set screw, v, substantially as specified.

"(5) The combination, with the former, or male die, D, with means for holding a counter firmly about it, of the vibratory notched plate, F, arranged and to operate substantially as described.

"(6) The combination of the former, D, clamping strap, E, plate, F, and gage, s, as herein set forth."

We desire to note, at this point, that neither the first nor the third claim combines plate, F, and neither of them, in terms, combines a machine for flanging counters. The fact that some of the other claims do expressly combine such machines would, perhaps, lead to the result that, by implication, the first and third claims are so broad as to relate to other machines than those described in the patent, notwithstanding the entire application and specification are limited to machines of that character. We do not, however, find it necessary to determine whether or not claims 1 and 3 are so broad, but we do find it necessary to insist upon the fact that they are broad enough to be complete without combining plate, F. The substance of the first claim, and the principle of operation which it covers are shown by the following drawings:

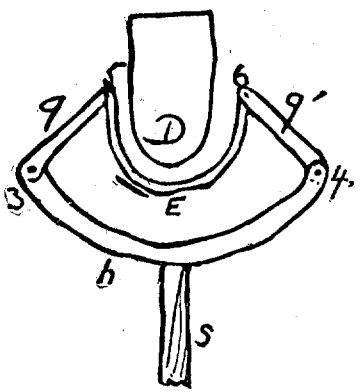

FIG. I.

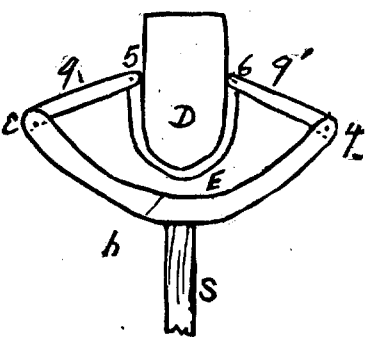

FIG. 2.

Fig. 1 represents the position before the "former," D, and the clamping strap, E, have approached each other, the counter to be flanged being supposed to be interposed between D and E. The

operation is shown in process in Fig. 2, the substance of it being expressed in the specification in the following words:

"Our invention consists of the combination, with a heel-shaped former, of a flexible strap or jointed mold, which, by the approach of such former, is caused to automatically grasp and hold an interposed counter while its flange is being turned."

The remainder of this portion of the description of the inventions we have already quoted. It relates to the flange-turning device, with which we need not trouble ourselves, inasmuch as we have already said it is no part of claim 1.

The mathematical principles brought in play in this operation are very ingenious for its purposes, but entirely simple when once understood. It will be seen that they consist of the combination of two different lines of motion, by which the arms, g, g, after they pass the center of the heel, inevitably press in the ends of the adjustable strap, and therefore the counter which it carries, so as to follow the inward sinuosities of the "former" as it narrows in going forward from the heel; and this combination of these two lines of motion inevitably continues until the arms, g, g, have passed back beyond their own center of motion, when they will fall down by mere gravity upon the yoke, h.

The respondent took no inconsiderable portion of the time of the court in explaining that, in the first machine built by the patentees, the so-called flexible strap was a continuous steel band, which was afterwards replaced by a "jointed mold." The purpose of pressing this on the court we are unable to understand. It is clear that, under the law of patents, as applicable to this case, the one was equivalent to the other, and the specification distinctly says that the clamping strap might be either a "flexible strap," or a "jointed mold," or a "mold made of several parts hinged together."

It appears by the evidence that only two or three machines were ever constructed under the patent, for commercial purposes, and those were made immediately after it was taken out, if not in advance of its issue. Apparently, they were not run more than three or four weeks. The purposes for which they were commercially run is described as follows by the witness, who was one of the patentees:

"Q. 25. When you saw your machine in operation, was the former, D, of the drawings of your letters patent, made use of, or were the separate individual lasts, used for shoes, employed in place of the former, D? A. The former, D, was made use of. Q. 26. And, as I then understand it, after the upper had been flanged over at the heel by the operation of your machine, the upper was removed from the former, D, and stretched over the individual lasts appropriate for the particular boot or shoe before the upper was subsequently lasted? Is that so? A. It was."

After this limited use, the machines wholly disappeared from the view of manufacturers, and the patent was never put to any further practical purpose. The invention lay dormant in all respects until April, 1893, when the complainant obtained title to it, and afterwards began this suit in August, 1894.

Three defenses are put in issue by the respondent: (1) Alleged want of utility, and therefore of patentability; (2) the claim that

the complainant's device is a mere appropriation of like devices in analogous arts; and (3) that there is in fact no infringement. These defenses are all so familiar that they cannot at this late day raise any serious question of law, and they involve for the most part pure questions of fact; so that, therefore, no advantage can possibly come from dwelling on them at length.

As to the first, we are unable to see that the respondent relies on any proofs to overcome the prima facie case made by the patent, except the mere fact that the device has never been put to any continued, successful, commercial use. We have already shown that it was used commercially, although for a limited time. It is plain that it was used sufficiently to show that it was a practical machine in the sense of the patent law. The circuit court of appeals for this circuit, in Packard v. Lacing-Stud Co., 16 C. C. A. 639, 70 Fed. 66, dwelt somewhat upon this class of defenses with reference to this particular distinction. The courts ought to be relieved from pointing out again and again the essential differences between the commercial success of a machine and its utility, under the patent law, and the varying applications properly made of these differences in reference to particular inventions. The supreme court has gone over this matter again and again. It is true that, on the one side, commercial success in some rare cases has enabled the courts to sustain patents, which, perhaps, otherwise would have been annulled by them; while, on the other hand, singular historical instances in which the commercial success of an inventor has either wholly failed, or been long postponed, for reasons in no way connected with the merit of the invention, require caution to prevent confusing this with utility under the patent law. We need in this connection refer only, on the one side, to Watson v. Stevens, 2 C. C. A. 500, 51 Fed. 757, and, on the other side, to Manufacturing Co. v. Holtzer, 15 C. C. A. 63, 67 Fed. 907, Packard v. Lacing-Stud Co., already referred to, and Long v. Manufacturing Co. (decided by the circuit court of appeals for this circuit July 14, 1896) 75 Fed. 835.

The apprehension of the court, based on common knowledge, and aided by the proofs in the record, perceives that the suggestion which the device contains is a useful one. This issue is urged on us by the respondent as though it was merely one of "reduction to practice." The respondent says, "A patent, to be valid, must be for an invention made and reduced to practice by the patentees." It requires no detailed statement to point out that this is erroneous. The respondent has apparently confused the question properly raised by this class of defenses with the proposition that a patent, to be valid, must cover a completed invention, and not merely something which is experimental. The question whether this machine had been continued in practical use might, perhaps, have been important if the respondent had insisted that the complainant's patent was in effect a mere paper one, so that there were no interests at stake which would sustain jurisdiction in equity; but no such issue has been made, and, the case being one for which equitable relief would not be wholly inappropriate, the court cannot raise that question of its own motion.

The alleged anticipatory matters, to which the second ground of defense relates, and the application of them to this case, are all of a familiar character, and would be sufficiently disposed of by referring to Potts v. Creager, 155 U. S. 597, 606, 15 Sup. Ct. 194, and National Cash Register Co. v. Boston Cash Indicator & Recorder Co., 156 U. S. 502, 514, et seq., 15 Sup. Ct. 434, as laying down the general principle, and Western Electric Co. v. La Rue, 139 U. S. 601, 11 Sup. Ct. 670, as giving an apt illustration thereof, if the patented machine and the claim in controversy were substantially of the character claimed for them by the complainant. The record shows a patent issued to one Kriebel October 24, 1865, for an improvement in wood-bending machines. The specification describes it particularly as an improvement in machines for bending fellies. This is the only alleged anticipatory patent which, in our judgment, combines the two motions which we have described as covered by claim 1 in the patent at bar, and it does combine these motions perfectly; the only substantial difference, either in the mechanism, or the purpose, or the result, or the principle of operation, being that Kriebel's invention was expressed to be limited to wood bending, while the patent in controversy is expressed to be limited for bending materials suitable for portions of the heels of boots and shoes. The drawings in Kriebel's patent upset the parts as they appear in the patent at issue, which, of course, is not a substantial difference. Kriebel's claim is as follows:

"The hinged dogs, f, in combination with the mold, G, to which the wood to be bent and strap are fastened by a screw clamp, and with the feed screw, D, constructed and operating substantially as and for the purpose set forth."

In this claim the hinged dogs, f, correspond to the complainant's arms, g, g. His mold, G, corresponds to the complainant's former, D. His strap corresponds to the complainant's clamping strap, E, and the wood to be bent is inserted between the strap and the mold, G, precisely as in the complainant's patent the counter is inserted between the former, D, and the clamping strap, E. The sides of the mold, G, fall in, precisely as the sides of the former, D, are supposed to fall in, so far as it corresponds to the shape of the heel of an ordinary last; and the operation is to compel the dogs, f, to press in the wood to be bent, and to follow with it the lines of the mold, G, precisely and upon the same principle of combined motions as the arms, g, g, press in the counter against the former, D, and follow its lines. The pith of Kriebel's invention is given in the following:

"The invention which forms the subject-matter of this present invention consists in the use of hinged dogs which catch behind suitable shoulders, at the ends of the metal straps, and which cause the clamp and felly to bend round the mold, without requiring any change in their position."

None of the other alleged anticipatory matters have given the court any trouble whatever, because, as already said, in one or more particulars, the mode of operation of each is essentially different from that worked out through claim 1 of the complainant's patent.

But the complainant's machine has been spoken of throughout the case as a lasting machine. If it were properly such a machine, it is so apparent that the transposition of Kriebel's device from a

wood-bending machine to an operative lasting machine would necessarily involve so much originality of suggestion, and ingenuity in detailed contrivance, that a fair apprehension of what constitutes invention would probably determine that the result was patentable within the rules, and the application of the rules, explained in the cases cited. But the facts which we have stated, including the references we have made to the complainant's patent, make it so clear that the complainant's machine is not a lasting machine, that it would be a waste of time to travel further over the details of the case with reference to that proposition. Neither need we determine whether the transfer of the pith of Kriebel's mechanism to a machine for flanging counters, such as complainant's machine assumes to be when equipped with the plate, F, would constitute invention, because, as we have already seen, the claim in controversy does not contain the plate, F, in its combination. All there is of it appears in Kriebel's machine, except that the fact that the claim in issue is used in connection with the description and specification of a machine for flanging counters shows that the device was intended by the inventors to be applied to materials suitable for the heels of boots and shoes. But, however that may be, claim 1, as it stands, and as we must construe it, contains nothing except a mere matter of bending the leather, or material akin to it, suitable for counters, precisely as the wood was bent in Kriebel's device.

Unsupported as claim 1 is by anything which makes for it, outside of its letter, properly construed, it is impossible for us to say that there was any invention in merely taking what Kriebel did and applying it to a strip of leather instead of a strip of wood. Not only does the case lack, in this particular, the features which appear in Watson v. Stevens, already cited, of the practical appreciation by the art, and by those engaged in it, of what is covered by claim 1, but the case, as we have already shown, in consequence of the fact that the complainant's machine was used only for a few weeks, and then abandoned, makes to the contrary. We therefore can only repeat what was said by the circuit court of appeals for this circuit in Long v. Manufacturing Co., already referred to, that "if this invention had been put in early use, and so continued with a long public acquiescence, it might, perhaps, have safely received therefrom a practical construction more favorable to the complainants"; adding, in the spirit of the opinion in that case, that, "in view of the rapidity with which mechanical improvements advance in this age, it would establish a very dangerous precedent to give to a mere paper patent, which has lain dormant for years," a construction and effect beyond what its terms clearly require.

In conclusion, we are unable to see that claim 1 covers any patentable invention, in view of Kriebel's anticipatory device, and we are of the opinion that the bill must be dismissed. Let the respondent file a draft decree on or before the 20th day of August current, dismissing the bill, with costs; and the complainant may file corrections thereof on or before the 27th day of August current.

INTERNATIONAL TOOTH-CROWN CO. v. BENNET.

(Circuit Court of Appeals, Second Circuit. November 6, 1896.)

PATENTS—PRIOR USE—ARTIFICIAL TEETH.

The Low patent, No. 238,940, for a device for permanently inserting artificial teeth, without the use of a plate, and without using the gum as a support, is invalid as to both the first and second claims, because of prior knowledge and use. 72 Fed. 169, affirmed.

Appeal from the Circuit Court of the United States for the Eastern District of New York.

This is an appeal from a decree of the United States circuit court, Eastern district of New York, dismissing the bill. The suit is brought to enjoin infringement of letters patent No. 238,940, issued March 15, 1881, to James E. Low, for an improvement in dentistry. Suit was heretofore brought by this complainant in the Southern district of New York, on the same patent (with others), against one Richmond. The patent was sustained, and infringement found. 30 Fed. 775. In the suit at bar the circuit court found a prior use, anticipating the patentee's invention, and for that reason dismissed the bill. 72 Fed. 169.

Edward N. Dickerson and James C. Chapin, for appellant.

C. K. Offield, for appellee.

Before LACOMBE, Circuit Judge, and TOWNSEND, District Judge.

PER CURIAM. We do not deem it necessary to add anything to the discussion of the case in the circuit court. We concur with the learned judge who tried the cause in the conclusion that the real invention of the patentee was a device (consisting of a band or cap and attachments thereto) for permanently inserting artificial teeth without the use of a plate, and without using the gum as a support to the artificial denture; his device holding the tooth in place with sufficient strength to stand the strain of ordinary mastication, by attaching it rigidly to the natural dentition. This invention could be put in practice by rigidly attaching the artificial tooth either to a single natural tooth adjoining it on one side, or to two adjoining natural teeth, one on each side.

The specification of the patent sets forth that:

"A band of gold or other suitable metal is first prepared, and accurately fitted around the tooth adjacent to the vacant spaces to be supplied with an artificial tooth. This band is firmly secured in place by cement, which effectually excludes water or the fluids of the mouth, and is thus permanently attached to the tooth, so that it cannot be removed without an operation directly for that purpose. It is sometimes sufficient to prepare one of the adjacent teeth in this way, but generally it is desirable to prepare the adjacent teeth on each side of the vacant space. It will always be advisable to do so if the vacant place is to be occupied with more than one tooth."

The invention is not a bridge with two abutments. A bridge with abutments existed in the prior art. The contribution which Low's patent undertook to make to the art was an improved kind of abutment, and that improvement would be availed of when the process pointed out in the above quotation was applied to a single tooth.