effects of shock, and to minimize the consequently increased cost of maintenance; but it does not show that electrical engineers had been endeavoring to overcome them, except incidentally, or that they considered that there was involved anything more than the usual problem of easing the shock common to all road vehicles. The state of the art, as proven by the complainant's expert, covers the history of this matter. The prior efforts shown by him, and explained by the complainant, were looking especially towards finding a method of attaching the motor to the car axle instead of to the car body, and also to increasing the tractive power of the wheels. Moreover, we have not been referred to proofs that the complainant's device actually overcame in practice the difficulty described, or minimized it to any considerable degree. The evidence in these respects falls far short of that class of proof sometimes accepted as overcoming a presumption that what was accomplished was within the scope of ordinary mechanical work. On the whole, we must conclude that the complainant fails to maintain its suit. Let a decree be entered, as provided in rule 21 of this court, dismissing the bill, with costs.

CAMPBELL MACH. CO. v. EPPLER WELT MACH. CO.

(Circuit Court, D. Massachusetts. October 8, 1897.)

No. 645.

- 1. Patents—Validity and Infringement—Wax Thread Sewing Machines. The Campbell patent, No. 253,156, for improvements in wax thread sewing machines, whereby the conjoint and opposed movements of the thread arm and eye are dispensed with, and the abrasion incident thereto obviated, construed, and held valid and infringed as to the nineteenth claim.
- 2. Same.

 The Campbell patent, No. 374,936, for an improvement in wax thread sewing machines, consisting of a device for reducing the momentum of the take-up mechanism, and thereby securing greater uniformity in the locating of the lock, is void for want of patentable invention.

This was a suit in equity by the Campbell Machine Company against the Eppler Welt Machine Company for alleged infringement of two patents, for improvements in wax thread sewing machines.

James E. Maynadier, for complainant. Fish, Richardson & Storrow, for defendant.

BROWN, District Judge. This is a suit for an injunction and account based upon the nineteenth claim of patent No. 253,156, dated January 31, 1882, and upon the first claim of patent No. 374,936, issued December 20, 1887. Both patents were issued to the complainant as assignee of D. H. Campbell, and relate to wax thread sewing machines. The questions are of validity and of infringement.

The nineteenth claim of patent 253,156 is as follows:

"19. The combination, substantially as hereinbefore described, of a hook needle, a thread arm, a thread eye, and operating mechanism for the arm and eye, which causes said eye to first carry and deliver the thread to the arm and thence deliver thread to the needle, and also causes the arm to merely re-

tain and release the thread delivered to it by the eye whereby said arm is prevented from abrading the thread, as set forth."

The defendant contends that this claim is limited to a machine wherein the thread arm has no positive thread-drawing motion of its own, and that consequently there is no infringement by the defendant's machine, wherein the thread arm has a pronounced thread-drawing motion, with resulting abrasion of the thread by the thread arm. I am of the opinion, however, that this claim should not be thus limited.

The defendant's argument proceeds as follows: The claim was first presented to the patent office in the following form:

"23. The combination, substantially as hereinbefore described, of a hook needle, a thread arm, and a thread eye vibrated by mechanism which causes said eye to first deliver thread to said arm, and then to the needle."

This language was broad enough to include the prior inventions covered by the patent to Turner and Craig, No. 116,893, and the earlier patent to Campbell, No. 231,954. The claim was therefore invalid, and was rejected. Thereupon the applicant amended his claim to a form which, defendant contends, apart from an immaterial word or two to improve the English, is the same as original claim 23, except that he added the words given in italies, to wit, "and also causes the arm to merely retain and release the thread delivered to it by the eye whereby said arm is prevented from abrading the thread, as set forth"; that consequently the sole point of distinction is that described by the words added in amendment, namely, a thread arm that merely retains and releases the thread, etc. fects in the argument are an assumption that the language of the original and unamended claim sufficiently describes the prior art, and the further assumption that this language is not affected in meaning by the new context added in amendment. Because the inventor first made a claim so broad in terms as to include the earlier machines, as well as his own, it by no means follows that his machine did not in fact involve a patentable invention. Although the original claim failed to indicate them by its terms, as a matter of fact differences did exist between the complainant's machine and the The importance of these differences should be deformer machines. termined by referring directly to the prior art, rather than to the language of a rejected and abandoned claim that fails to describe with requisite particularity either the mode of operation of the complainant's machine, or the mode of operation of the machine of Turner and Craig or of the earlier Campbell patent. The devices in question pertain to sewing machines in which the hook needle must be threaded at each stitch. For the practical operation of machines of this character, it was found necessary so to thread the needle that there should be between the last stitch hole and the needle throat a length of thread considerably greater than the distance between the needle throat and the last stitch hole, in order to produce slack thread behind the needle, so that, when the needle drew down through the material, it would supply itself without the undue resistance that followed from drawing the thread directly from the spool. It was therefore found necessary to add to the eye which carries thread to the needle and to the needle which receives the thread, a thread arm to co-operate with the eye in the production of a loop of slack thread.

Upon the evidence, there can be no doubt that the complainant placed the old elements in new relations, produced the loop of slack thread by a new mode of operation, and achieved as a result a machine highly successful in practical operation. In the machines of the prior art the slack thread was produced by the simultaneous, conjoint and opposed movements of the arm and eye. The defendant's expert, Calver, says of the operation of the Turner and Craig machine:

"Simultaneously with the movement of the thread arm in one direction, the thread eye moves in the opposite direction. The resulting effect obviously is the formation of a bight caused by the conjoint movements of the thread arm and the thread eye."

This description is applicable equally to the prior Campbell patent, and accords with the statement in the amended specification of the patent in suit:

"It is not new to employ a swinging thread arm with a swinging eye; but, as heretofore organized and operated, the arm helped itself to thread during the movement of the eye, and, by continuing onward, said arm carried the thread in a direction away from the eye and over the presser foot, so that the thread slipped over the arm, and it is the abrasion incident to this slipping action at the arm which I have obviated by having the eye carry the thread to the arm which merely holds it while the eye next proceeds to and around the needle."

The specification further states:

"This combination of a thread eye which delivers thread to an arm which only moves for the purpose of securely holding the thread thus delivered to it by the eye, said eye then proceeding to deliver thread to the needle, is a novel feature, and valuable because of the non-abrasion of the thread by the arm, and it is also novel to combine these elements as described so that the arm is always not only at one side of the needle, but also at one side of the presser foot and never above it", etc.

· By the invention of the patent in suit, the conjoint and opposed movements of the arm and eye were dispensed with, the abrasion incident thereto avoided, and such advantages were secured of compactness in arrangement of the parts as arose from locating the arm always on one side of the needle. A novel and useful result was thus attained, which was an advance in the art entitled to the protection of letters patent. Moreover, it is obvious that this result was effected not merely by a change of the function of the thread arm. thread eye's function was also necessarily modified. Instead of the direct and continuous stroke of the eye to the needle, in the course of which the thread was intercepted by the opposing stroke of the arm, the complainant adopted two movements of the eye, one of which was independent of the movement that carried the thread to These two movements are separated by the action of the arm in engaging and retaining the thread carried to the arm by the first motion of the eve.

Finding a departure from the prior art and a new mode of motion of the parts, and not merely a new operation of the thread arm, it is

necessary next to inquire: Does the nineteenth claim sufficiently point out any differences other than the new motion of the thread In my opinion, the amended claim, unlike the unamended claim, excludes by its terms the conjoint and opposed movements of Turner and Craig and of the earlier Campbell machine, and provides for the location of the arm upon one side of the needle. journey of the eye described in the original claim might be either to an advancing arm or to a stationary arm. The claim was thus broader than the prior art. When, however, the amendment specified the function of the arm as merely to retain and release the thread, and provided that the eye should carry and deliver the thread to the arm, the necessary implication of this language was a journey of the eye differing from that in the former machines. Movements of the eye in two distinct paths for the elongation of the thread and supplying it to the needle were necessarily involved in the provision that the arm should merely retain and release the thread. this nineteenth claim, in view of the imperfections of former devices, and of the specifications of the patent in suit, and of the purpose of the inventor to obviate the imperfections of the existing art, I think that the nineteenth claim sufficiently describes the actual invention intended to be covered by the patent in suit.

The question of infringement must, then, be determined by a comparison embracing other features than the functions of the respective The machines of the complainant and defendant rethread arms. semble each other, and differ from former inventions, in that they dispense with the simultaneous and opposed movements of thread arm and thread eye, and avoid the abrasion resulting from these opposed movements, and also in having the thread arm always upon one side of the needle. The defendant's thread eye, by a movement independent of the needle-threading stroke, carries the thread to the The arm engages and retains it. The eye then makes the needle-threading stroke. I find these movements to be the same, and in the same order, as those described in the nineteenth claim. The contention that the defendant's machine has a different cycle of operations or a different order of movements rests upon the assumption that the word "first", in the nineteenth claim, means first after the completion of a stitch. The time of operation of the take-up for setting the stitch is immaterial, however. It is the order of movements for the production of the loop of slack thread that is essential, and the movements to effect this end are in both machines the same, and in the same order. In my opinion, therefore, the defendant's machine embodies the new mode of operation of the complainant claimed in the nineteenth claim, and infringes unless the pronounced thread-drawing movement of the defendant's arm and the resulting abrasion is a material difference. Inasmuch as the abrasion incident to the old opposed movements is obviated, the fact that the defendant has given to the thread arm a new abrading movement is of no consequence. If the defendant appropriate substantial advantages of the complainant's device, he does not escape infringement by failure to appropriate all its advantages, nor by introducing abrasion different from that obviated by complainant's device.

The defendant insists that its thread arm does not merely retain and release the thread, and therefore is not within the terms of the The word "merely", however, must be given a nineteenth claim. reasonable interpretation, according to the subject-matter relative to which it was employed. The primary purpose of the inventor was not to produce a thread arm that merely retained and released the thread; it was to avoid old defects by a new combination. this new combination is concerned, a stationary arm and an arm with a retreating movement, or a movement not opposed to the eye, are substantially the same. The word "merely" was used to indicate the exclusion of the old opposing movement of the arm, and the location of the arm upon one side of the needle. This clearly appears from the specification. To put upon the word "merely" a signification that would make movements of the thread arm, in no way affecting the value of the new mode of operation, essential features in a case of infringement, would defeat the manifest intention of the inventor, and nullify a valuable invention by a misinterpretation of the language employed to describe it. The thread-drawing movement of the defendant's thread arm is, in my opinion, merely an additional movement given to one of the parts of complainant's machine, and is not a movement of the kind intended to be excluded by the inventor by the use of the word "merely", in the nineteenth claim. The differences between the machines of complainant and defendant I find to be in immaterial features.

There remains the Cornely patent, No. 219,225, cited as an anticipation of the nineteenth claim. The invention set forth in this patent is for a combination of elements different from those of the patent in suit. It is apparent that the thread carrier in this device requires additional mechanism for the threading of the needle; and the device appears to me too different in its purpose, and too inapplicable to machines like those under consideration, to constitute an anticipation of the nineteenth claim.

The second patent in suit is patent No. 374,936, of which only the first claim is involved. The first claim is as follows:

"1. In a wax thread sewing machine, the combination with a thread-clamping brake of a take-up embodying two or more positively reciprocated stitch tightening thread fingers, substantially as described, whereby slack thread is taken up in two or more bights, and thereby easily and promptly placed under a stitch-tightening tension."

The issue is as to the patentability of the invention claimed. The term "thread-clamping brake", interpreted in the light of the specification, I find to mean a device through which the thread must not slip or render when the take-up operates. Such a device was old in combination with a single take-up, and a multiple take-up was old in combination with a yielding tension device. It is, nevertheless, claimed that the combination of a multiple take-up with a device through which the thread cannot render is an invention. The object of this combination is to reduce the momentum of the take-up mechanism, thereby securing greater uniformity in the locating of the lock. The means for reducing this momentum were found in the multiple take-up, an old device for that purpose, and in a thread-

clamping device which prevented the take-up from drawing thread, also an old device. Each of these devices tends to lessen the stroke of the take-up, and in the new combination each performs only its old function of lessening the length of the stroke. I think that nothing more was done than to substitute for the single take-up in the prior patent to Campbell, 231,954, the well-known device of a multiple take-up, and that momentum was lessened by this substitution, in the same way that it was lessened in the prior art. tended, however, that this reduction of momentum remedies an evil not existing in the prior machines, i. e. the irregular location of the lock, and was adopted for that purpose. Admitting that this beneficial result followed, it was simply from a reduction of momentum by an old and familiar device to lessen the excessive length of the stroke of the take-up. The beneficial effect was due to mechanical skill, and not to invention.

I find, therefore, that the nineteenth claim of patent No. 253,156 is valid, and is infringed by the defendant. I find that the first claim of patent No. 374,936 is invalid. Decree for complainant as to patent No. 253,156. Bill dismissed as to patent No. 374,936. Question of costs reserved.

GAGE-DOWNS CO. v. FEATHERBONE CORSET CO.

(Circuit Court, W. D. Michigan, S. D. October 27, 1897.)

TRADE-MARK—GEOGRAPHICAL NAME—UNFAIR COMPETITION.

One making corset waists at Chicago, and selling them as "Chicago Waists," so that this designation has come to denote among purchasers the goods made by him, is entitled to an injunction against another who makes similar waists in a different state and city, and sells them as "Chicago Waists," with the manifest intent of availing himself of the reputation acquired by the other's goods.

This was a suit in equity by the Gage-Downs Company against the Featherbone Corset Company to enjoin the use of certain marks and labels upon its goods. The cause was heard on a motion for preliminary injunction.

Aldrich, Reed, Foster & Allen and Crane, Norris & Stevens, for complainant.

Howard, Roos & Howard, for defendant.

SEVERENS, District Judge. In this case a motion was made some time ago for an injunction to restrain the defendant from using certain marks and labels upon its goods, which it is alleged in the bill are calculated to deceive the public, and lead them to suppose that they are buying the goods of the complainant; and the complainant claims that the defendant is thus appropriating the benefits of the reputation acquired by the complainant's goods. facts as they now appear, the complainant has long been in the business of making and selling corset waists at Chicago, and marking them "Chicago Waists," and, being the only person marking its