ally, to describe it as a leaf which is free all the way to its rear edge of the book-cover. The subject is not changed. At all times it is the leaf, C, and not the book-cover. Moreover, the limitation suggested by the defendant was not required by anything in the prior art. It can hardly be presumed that a rational inventor would place such an unnecessary restriction, voluntarily, upon an already narrow claim. But the subject is not left to presumption. The specification repeatedly makes allusions which are wholly inconsistent with defendant's construction. For instance, the patentee says:

"The book will preferably be provided with a special leaf of considerable strength, and bound or united firmly to the book-covers, B, at the point, a, or at such a point distant from the edge of the cover, B, as will provide room enough to receive the index when folded there between, as in Fig. 2."

The location of the point of contact of the leaf, C, to the book is not of the essence of the invention. There is no reason for locating it at the one point suggested by defendant. If the index happens to be smaller than the book, and the leaf, C, is attached as defendant says it must be, the leaf will buckle, the index will be hidden and the whole contrivance will become inoperative. If the leaf, C, must be free of the cover from the front edge to the rear edge of the cover, it cannot be attached to the cover at all. To construe the claim thus narrowly is to put a premium upon infringement and render the patent valueless. An infringer would escape by simply pasting a narrow strip of the leaf to the rear edge of the cover. Even if it be conceded that the language is doubtful it would still be the duty of the court to resolve the doubt in favor of the patent by placing a liberal and reasonable construction upon the claim. The complainant is entitled to the usual decree.

McGill v. Universal Paper-Fastener Co. et al.

(Circuit Court, N. D. Illinois. July 13, 1891.)

1. Patents for Inventions—Novelty—Paper-Fasteners.

Letters patent No. 162,183, issued April 20, 1875, to George W. McGill, for an improved metallic paper-fastener made by placing two blanks with semi-circular heads, back to back, and bending a metallic cap over the heads so as to hold them together, the shanks being in close parallel contact, and pointed at the ends, so as to make but one hole in the paper, is void for want of novelty, it appearing that complainant used such caps for two years before he applied for the patent, and that substantially the same device is shown in a patent issued to one Gilford in May, 1870.

2. Same—Anticipation.

Claim 1 of letters patent No. 337,182, granted March 2, 1886, to George W. McGill, describes a paper-fastener made from a blank, which is split lengthwise from both ends, leaving a narrow connecting neck, the parts being then folded over back to back, and a head made by bending over the parts above the neck; and also having one shank shorter than the other, for convenience in separating them after they are passed through the paper. Held, that this invention was anticipated by the Pack & Van Horn patent of November 23, 1875, the Lindsay patent of January 25, 1876, and patent No. 199,085, issued to McGill January 8, 1878.

In Equity. Suit by George W. McGill against the Universal Paper-Fastener Company and others for infringement of a patent. Bill dismissed.

Joshua Pusey and Parke Simmons, for complainant. West & Bond, for defendants.

Bloogert, J. The bill in this case charges the defendant with the infringement of patent No. 162,183, granted to complainant April 20, 1875, for an "improvement in metallic paper-fasteners," and patent No. 337,182, granted to complainant March 2, 1886, for a "metallic fastener," and seeks an injunction and accounting. In the specifications of the first-mentioned patent the matter of the invention covered thereby is stated as follows:

"My invention relates to that class of metallic fastenings known to the trade as McGill's paper-fasteners," wherein the shanks of the fasteners are flat, and in close contact with each other, and make only a single hole in the papers which it is designed to connect; the two shanks opening from each other after passing through the papers, and contining said papers between said shanks and the head of the fastener. * * * The shanks of the fasteners so formed are run through the papers or other articles to be connected, and are separated on the other side of the same, and thus confine said articles between the said shanks and the head of the fastener."

The fasteners described in the patent are made by cutting two blanks from thin, flexible sheet-metal of suitable width for the purpose required, which are made pointed at one end, and on the other end is a semi-circular piece, which, on being bent at a right angle, makes a semi-circular head. These two blanks are placed back to back, so that they present a circular head or top, and over those is turned a concave metal cap, which gives the top or head of the fastener a button-like appearance, and holds the shanks of the two blanks in close parallel contact. Another mode of making the fastener, as described in the specifications, is to cut a slit in the middle of the metal cap of the proper shape and size to allow the two shanks to be passed through it, so that the heads of the two shanks shall rest in the cap, and then turn the flange of the cap up over these heads. There is but one claim in this patent, which is:

"The within-described metallic fastener, formed of the two blanks, ab, ab, and the cap or shell, c, bent and connected together as herein shown and described, the ends of the shanks, b, b, of the blanks being in close parallel contact, and pointed so as to make only a single hole in the articles it is designed to connect, substantially as described."

The other patent shows a blank for a metallic fastener cut from thin, flexible sheet-metal, preferably sheet-brass, split from both ends in a manner to leave a neck between the two cuts, so that two pointed shanks project in one direction and two arms in the other direction from this neck. This blank is then folded over in such a way that the shanks are brought back to back, in close parallel contact, the neck holding them in this position. The arms are then bent at right angles in opposite directions, and a metal cap is closed over these arms, thus making a

head for the fastener. This metal cap may be round or oblong in shape; may be placed on top of the arms, and its flange turned down over them; or a slit may be made in the middle of the cap, through which the shanks may be passed, and then the flange of the cap turned upward over the arms. The specifications say:

"The fastener is operated by forcing its double shank through the articles to be bound or fastened until the under side of its covered head rests on one side of the same, and then separating the blades of the shank on the other side of the material and bending them down flat, in opposite directions, on the same, so as to bind the material between them and the fastener head. One of the shanks of the fastener is made longer than the other, so that it will project beyond the shorter one when both shanks are folded in close parallel contact, to admit of the ready separation of the shanks in applying the fastener, as described. The connecting neck holds the parts of the fastener together, thereby facilitating the capping or covering of the same. It also binds or locks together the tops or fold of the fastener shanks, and prevents their parting at that point while the shanks proper are being separated in applying the article to the uses intended."

Infringement is charged only as to the first and second claims of the patent, which are:

"(1) A metal fastener blank, split centrally through its length from both ends in manner to form a connecting neck, a, having two shanks, b, b, of different lengths, projecting in one direction, and two arms, c, c, in the opposite direction, substantially as set forth. (2) As an improved article of manufacture, a metallic fastener consisting of a metal fastener blank split centrally through part of its length from both ends, one of the split ends forming the two shanks, b, b, of different lengths, and the other end the arms, c, c, the shanks, b, b, being folded back to back, in close parallel contact, and the arms, c, c, folded over in opposite directions at right angles from the shanks, b, b, and permanently secured in such position by a metal cap, substantially as described."

The defenses insisted upon are: (1) That the patents are both void for want of novelty; (2) that defendants do not infringe.

The proof shows that the initial step in the art to which these devices belong was a fastener made of thin, flexible metal, pointed at one end, and a portion of the other end bent at a right angle, thus leaving a pointed single shank, which could be thrust through the paper and bent sideways, so that the paper was held between the head and bent shank. The proof also shows that in July, 1866, a patent was granted to complainant for a metallic paper-fastener, which was made by bending a strip of thin, flexible metal in such a manner as to form a head, and two shanks project back to back downward from the middle of the head. This is described in the patent as a "T-shaped fastener;" thus making a fastener with two shanks, instead of one, which could be thrust through one hole in the paper or material to be held together, and the material firmly held between the head and shanks by bending the shanks sideways in opposite directions. And the proof also shows that for more than two years before complainant applied for patent No. 162,183, of April 20, 1875, he had made and put upon the market paper-fasteners made substantially like those described in his patent of July, 1866, over the heads of which had been turned a metal cap, thus giving the heads a button-like appearance. It is true, he states that he had used this metal cap merely as an ornament, and that it performed no such function as it performed in patent 162,183, where the cap held the two shanks of the fastener together. The proof also shows that in May, 1870, a patent was granted to one Gilford for a button, where two metal shanks, with the upper ends bent at right angles, are held together by turning the flange of the middle cap over them; and it is obvious, even to superficial inspection, that these shanks, thus united by a cap, only needed to be pointed to make the fastener described in complainant's patent 162,183. The complainant's admission that he had used the metal caps on the heads of fasteners made under the 1866 patent, seems to me sufficient to answer any claim of novelty in the idea of capping the heads of the shanks shown in pat-It involved no invention to use a cap for the purpose of ent 162,183. holding the two shanks of the 1875 patent together when the same kind of cap had been turned over the head of the 1866 fastener, even if in the latter the cap was merely ornamental. But I doubt if the cap was a merely ornamental appliance to the 1866 fastener. The heads of its fasteners were made by merely bending a flat piece of metal into a T-shape, and would be naturally loose and easily displaced, and the cap necessarily gave firmness and strength to the structure, and the inference is certainly a natural one that the statement of merely ornamental use was made in the exigency of his case for the purpose of securing the issue of the patent No. 162,183, the application for which was then pending, and had been reported adversely upon in the patent-office. With a metal cap, used by complainant himself for over two years on T-shaped paper-fasteners made under his patent of July 24, 1866, and with the Gilford patent of May 24, 1870, showing two button shanks, held together by a metal cap, I am of opinion there was no novelty in the fastener covered by the patent No. 162,183, granted April 20, 1875. The first claim of the patent of March 2, 1886, is upon the metal

The first claim of the patent of March 2, 1886, is upon the metal blank split centrally lengthwise from one end to form the shanks of a fastener, one shank being shorter than the other, and also split centrally from the other end to form arms, leaving a connecting neck between the two slits, thus making a blank which, on being folded over on the line of the slits, brings the two shanks of the fastener closely together, face to face, and on which a head can be formed by bending the arms above the necks in opposite directions at right angles, and covering them with a metal cap. This claim is most clearly anticipated in the Pack & Van Horn patent of November 23, 1875, in the Locks patent of December, 1883, in the Lindsay patent of January 25, 1876, and in the complainant's patent No. 199,085, granted January 8, 1878, so far as the slitting of the metal is concerned, so as to leave a connecting neck between the two shanks; and in complainant's patent No. 56,587, granted July 24, 1866, the drawings show one of the pointed shanks of the T-shaped fastener there described as shorter than the other; and in com-

plainant's patent, No. 308,368, granted November 25, 1884, he not only shows in his drawings, but particularly describes, a two-shanked fastener, with one shank made shorter than the other, "for convenience in separating the shanks for the purpose of clinching them down." So that it appears clearly from the proof that a blank for a metal fastener with these two features—the connecting neck, with one shank shorter than the other—was certainly old at the time the patent No. 337,182 was applied for and obtained. The second claim of this patent, No. 337,182, is for a metallic fastener as a new article of manufacture, made from the blank described in the first claim, and the head covered by a metal cap. As the metal cap in this claim is of the same kind, and performs no other function, than the cap called for in complainant's patent, No. 162,183, granted April 20, 1877, not to mention those which he applied to his fasteners of his July, 1866, patent, and is also found in his patent of January, 1878, there was certainly no novelty in the use of such cap at the time complainant applied for and obtained his patent No. 337,182.

I will add that the proof shows that this complainant has taken out over 100 patents upon metallic fasteners intended to fasten paper or textile material together, but, so far as the two patents now before the court are concerned, the two-shank fasteners covered by the old patent of July 24, 1866, with the head covered by a metal cap turned over portions of the top of the strip, bent at right angles, so as to form the button-like head, anticipates both the structures now under consideration. The idea once conceived and illustrated by a capped T-shaped fastener, and with two flexible shanks arranged to pass through the same hole in the paper or other material to be held together and clinched by bending the shanks apart from each other, can afterwards be applied in a variety of ways. Thus a T-shaped two-shank fastener could be made by bending thin, flexible metal in many ways, so as to secure two shanks to the head; and these changes involve no invention, but mere mechanical skill. Improvements they may have been, but not inventions. I am therefore clearly of opinion that both these patents are void for want of novelty, and that the bill should be dismissed upon that ground alone, but, if not void for want of novelty, it is very clear to me that the defendant's patent does not infringe either of the complainant's patents now in suit, as it is made of a blank formed substantially like the blank described in the 1866 patent, except that one shank is not made shorter than the other, and only one of the defendant's shanks is pointed. If it was patentable to make one shank shorter than the other in a paper-fastener, it certainly does not infringe that patent to point one shank, and leave the other square at the end which is to be passed through the paper, thereby giving an opportunity to take hold and separate the shanks by reason of the metal being cut away from one. The bill is therefore dismissed for want of equity.

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(Circuit Court, D. Massachusetts. November 10, 1891.)

1. Patents for Inventions—Infringement—Web-Holders for Knitting-Machines.

Letters patent No. 218,460, issued August 12, 1879, to the Shaw Stocking Company, as assignee of Benjamin F. Shaw, for improvements in web-holding mechanism for knitting-machines, the claim being, among other things, for web-holders with "downwardly curved tail-pieces," is not infringed by a machine in some respects similar, but having web-holders with straight tail-pieces.

2. Same—Amending Claim.—Waiver.

When a broad claim is rejected by the patent-office because of anticipation by certain other patents, and thereupon the applicant amends his specification and claim, and accepts a patent thereon, he waives the broad invention, and cannot afterwards, in an action for infringement, claim that his invention was really made before the anticipating patents were issued.

In Equity. Bill for infringement of patent. Dismissed. Frederick P. Fish, for complainant. Joshua Pusey, for defendant.

COLT, J. This bill in equity is founded upon the alleged infringement of letters patent No. 218,460, granted August 12, 1879, to the complainant, as assignee of Benjamin F. Shaw, for improvements in web-holding mechanism for knitting-machines. For a number of years Shaw was engaged in the production of a machine for knitting seamless stockings, and his inventions are covered by several patents. The patent in suit is for a part of this mechanism, and relates to devices for holding down the fabric during the operation of the needles. In the old circular knitting-machines, the requisite tension was brought to bear on the web by means of weights hanging upon it, and these answered the purpose for plain tubular work. In the production of the heel of a seamless stocking, however, it is necessary to run only a part of the needles, while the rest remain stationary. Under these conditions, the weights might pull effectively on the side of the web where the needles are at rest, but they would not produce the proper tension during the widening and narrowing operation on the side of the web which is being lengthened. To meet this difficulty Shaw substituted what he calls "web-holders" in place of the weights. The web-holder is made of a thin, flat strip of metal, and it has a turned down tail-piece at its forward end, and an overhanging book or finger on its upper side. tail-piece is downwardly curved or made blunt, so that it may not penetrate or hold the web as it is moved over the end of the tail, and through the hellow needle-bed or cylinder. A web-holder is inserted between each pair of adjacent needles. The tail-pieces always remain in the rear of the needles, near the upper edge of the web, where the knitting takes place, and the projecting fingers, co-operating with the needles, press upon the edge of the web, and hold it down during the operation of knitting.