now, the complainant contending that the changes were merely in-

genious attempts at evasion.

The court is constrained to hold that the patent is invalid for want of invention. Munson v. Mayor, etc., 124 U. S. 601, 8 Sup. Ct. 622; Machine Co. v. Pennock & Sharp, 77 O. G. 633, 17 Sup. Ct. 1; Brill Co. v. Wilson, 77 O. G. 1937, 75 Fed. 1002; Manufacturing Co. v. Cooke, 73 Fed. 685. It is unnecessary to consider the other defenses. The defendants are entitled to a decree dismissing the bill with costs.

## OLMSTED v. A. H. ANDREWS & CO.

(Circuit Court of Appeals, Seventh Circuit. January 4, 1897.)

No. 157.

1. PATENTS-INVENTION.

It is not invention to cause a device to work vertically that theretofore operated horizontally.

2. Same-Construction of Claims-Rejection and Acquiescence.

An applicant who acquiesces in the rejection of a claim of which a particular device was the essential feature cannot afterwards insist that a claim allowed in place thereof shall be so construed as to read into it that device.

3. SAME-INVENTION-MAP CASES.

There is no invention in so altering a map case, made to contain several maps, that it shall hold but one; or in constructing it of lighter materials so that it shall be portable; or in making it more ornamental or attractive.

4. SAME.

The Nutting patent, No. 343,060, for a map case, is void for want of patentable invention, in view of the prior state of the art; and, if invention were conceded, the patent must be so narrowly construed as to exclude infringement even by a device not strikingly different in form.

Appeal from the Circuit Court of the United States for the Northern District of Illinois.

N. C. Gridley and L. M. Hopkins, for appellant, Bond, Adams, Pickard & Jackson, for appellee.

Before JENKINS, Circuit Judge, and BUNN and GROSSCUP, District Judges.

JENKINS, Circuit Judge. This appeal is to review a decree dismissing the bill of complaint for want of equity. The suit was brought to restrain the alleged infringement of letters patent of the United States, No. 343,060, granted on the 1st day of June, 1886, to S. E. Nutting, for a map case. The subject-matter of the patent is with exactness thus stated by counsel for the appellant:

"This map case consists of a rigid back piece that is adapted to rest flat against the wall, a pair of circular end pieces, a covering, made of a single piece of material, secured at one edge to the upper edge of the back piece, whence it extends outward over, downward in front of, and inward partially beneath the single map, which is mounted upon a roller journaled in the circular end pieces. This covering is of curved shape in cross section, it follows and is secured to the correspondingly curved edges of the end pieces, and at its lower edge it terminates a short distance from the projecting lower edge of the back piece, leaving a narrow opening, adjacent to said back piece, through which the map is drawn. To the lower edge of the map is secured a round of such diameter and length

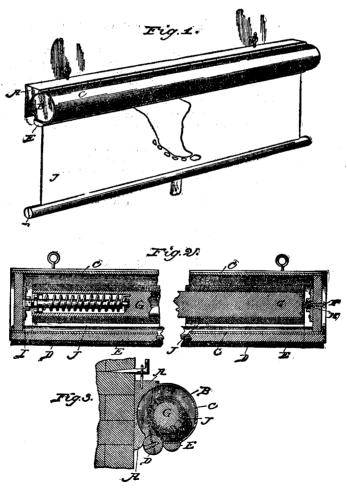
that, when the map is rolled up, the round completely closes the opening between the back piece and the lower edge of the covering."

The patentee in his specifications states:

"The object of my invention is to combine certain parts in a map case, as here-inafter described and pointed out in the claims, reference being had to the accompanying drawings, forming part of this specification."

And, after detailed reference to the drawings, he asserts the result of the combination of parts as follows:

"By combining these parts as shown, I produce a map case for single maps mounted on rollers, which has the advantage of being self-closing by the round on the lower edge of the map adjusting itself to the narrow opening through which the map is drawn when the map is rolled up, filling the opening and substantially closing the case, protecting the map within entirely from dust or other injury. The case is also neat and compact in form, light and attractive, and allows of its being handled and changed about without displacing the map within."



The first claim of the patent is alone involved in this controversy, and is thus stated:

"In a case or cover for wall maps, the combination of a back piece, a covering, and end pieces, the covering being made in one piece, and attached directly to the back piece and end pieces, and extending over, in front of, and partially under the rolled map when in place, substantially as described."

The second claim is for the combination, in a map case, of the longitudinal bar, of circular end brackets secured to the bar, the roller having its bearings secured to or forming part of the brackets, and the covering secured at one end to the bar, and passing over and around and secured to the brackets, a described strip at its lower end, provided to make the covering more rigid, and forming means through which the covering is fastened to the brackets. The third claim covers the combination with the bar, the brackets, and the covering, secured thereto and to the box, and of the roller set screw passing through one of the brackets, and bearing against the journal of the roller, whereby the other journal of the roller is forced into its support.

The answer denied patentability or novelty, alleged anticipation by prior art, and denied infringement. It also specified 16 patents in proof of anticipation and the prior art, of which the following were introduced in evidence and relied upon: Letters patent No. 66,463, to Coloney and Fairchild, dated July 9, 1867; letters patent No. 77,813, to E. L. Hagar, dated May 12, 1868; letters patent No. 130,050, to Jesse Highfield, dated July 30, 1872; letters patent No. 159,335, to John Lichtenberger, dated February 2, 1875, reissued January 4, 1876, No. 6,841; letters patent No. 181,912, to Couch and Lamb, dated September 5, 1876; letters patent, to Henry T. Cushman, No. 196,636, dated October 30, 1877, reissued September 2, 1879, No. 8,875; letters patent No. 301,102, to Alexander Dom, dated July 1, 1884; letters patent No. 325,337, to A. H. Hall, dated September 1, 1885.

The file wrapper and contents offered in evidence disclose that the claims first presented by Nutting were two, as follows: First, the combination in a map case of the bar, A, covering, C, and brackets, B, in such a manner that the round, D, when drawn to its highest point will close the case; second, the set screw, F, in combination with the bracket, B, substantially as shown and described. The first claim was rejected by the patent office because not sufficiently specific, and that the subject-matter of it is substantially anticipated by patent to The second claim was rejected because in-Highfield, No. 130,050. complete without the roller, and because anticipated by a patent to Gates and Potter for carpet sweepers, No. 226,512. Nutting directed the claims to be erased, and proffered a first claim, rewritten by amendment, as follows:

"(1) In a map case, the combination with a longitudinal bar, adapted to be hung or secured to a wall or ceiling, of circular end brackets secured to said bar, and a covering secured at one end to the upper front end of the longitudinal bar, and passed over and around the end brackets, and secured thereto, forming a housing within which is located the map roller, a space being left between the lower end of the longitudinal bar and the covering adapted to be filled by the lower round

of the map when the latter is drawn to its highest point, substantially as and for the purpose described."

This amended claim was likewise rejected because anticipated, the examiner citing, as additional reference, patent to Couch and Lamb for railway signals, No. 181,912. Thereupon the applicant withdrew such claim 1, and requested that the application be forwarded for issue upon the amended claims 2 and 3, which, not being in controversy here, need not be stated. An interference then being declared with William A. Olmsted, the present complainant, it was ruled in favor of Nutting, who thereafter amended his specification by the insertion of the following:

"The covering, C, here shown, is made of a single piece, and it is attached directly to the bar or back piece, A, and the end pieces, B, and such cover extends over, in front of, and partially under the rolled map when in place, as clearly shown in Fig. 3."

Two additional claims were then filed, numbered 1 and 2. Claim 1 became claim 1 of the patent, and is in contention here. The amended claim 2 was as follows:

"(2) In a case or cover for wall maps, the combination of a back piece, a covering, and end pieces, the covering being connected with the back piece and the end pieces, and extending over, in front of, and partially under the rolled map when in place, substantially as described."

This second claim was rejected by the examiner because broader than the issue as defined in the interference with Olmsted, and broader than allowable by the state of the art as indicated by the reference previously cited. This second claim was then canceled by Nutting, and the patent as it now appears was issued.

Map cases for rolled maps were not new in the art at the time of Nutting's application. The patents to Coloney and Fairchild, Hagar, Highfield, Litchenberger, Cushman, Dom and Hall demonstrate this fact. It is manifest that Nutting supposed his invention to consist in—

"A map case for single maps mounted on rollers, which has the advantage of being self-closing by the round on the lower edge of the map adjusting itself to the narrow opening through which the map is drawn when the map is rolled up, filling the opening and substantially closing the case, protecting the map within entirely from dust or other injury."

This is the statement of the original specification, and not amended out of it, and was the substance of the first claim as originally presented. The closing of the case by the roller, and the consequent protection of the map from dust and injury, were the subjects of the supposed invention. This claim was, however, rejected by the patent office as anticipated by the patent to Couch and Lamb. The invention there related to railway signals. The case contained a flag mounted upon a roller, and was drawn out through a slot in the case by an end bar on its outer or free end, which bar, when the flag was drawn in, closed the case, and excluded the dust. This device was attached by screws to the platform side of the station

house, so that the flag could be displayed above the heads of the people present. The device was adjusted to the building so that the flag was drawn out horizontally. Nutting's device works vertically. This would seem to be the principal distinction between them, and the only distinction as respects the closing of the case by the round or bar at the free end of the article contained in the case. It is not, however, invention to cause a device to work vertically that theretofore operated horizontally. Nutting acquiesced in the decision of the examiner, and cannot now be heard to assert as his own the invention claimed in the language of the specification quoted.

It is to be observed that none of the claims of the patent as finally prepared and allowed asserted any claim to the round, D, by which, as disclosed in the specifications, the main purpose of the invention was effected. It is urged by counsel for the appellant that such construction should be given to the claim that the round should be read into it as an element of it. This cannot be. Nutting, by his acquiescence in the rejection of the claim in which the round was the essential feature, cannot now insist that the present claim should be construed as it might have been construed if the original claim had not been rejected and withdrawn. Roemer v. Peddie, 132 U. S. 313, 317, 10 Sup. Ct. 98; Caster Co. v. Spiegel, 133 U. S. 360, 368, 10 Sup. Ct. 409; Yale Lock Manuf'g Co. v. Berkshire Nat. Bank, 135 U. S. 342, 379, 10 Sup. Ct. 884; Dobson v. Lees, 137 U. S. 258, 265, 11 Sup. Ct. 71; Royer v. Coupe, 146 U. S. 524, 532, 13 Sup. Ct. 166; Corbin Cabinet Lock Co. v. Eagle Lock Co., 150 U. S. 38, 40, 14 Sup. Ct. 28.

In what, then, does the claimed invention consist? The specification adds that "the case is also neat and compact in form, light and attractive, and allows of its being handled and changed about without displacing the map within." The protection of the statute is granted for things invented, not for things produced. The qualities thus claimed for this map case belong, as we think, to the domain of mechanical skill, not to the domain of the inventive faculty. It is excellence of workmanship, superiority and lightness of material, structural changes of form and proportion which produce the claimed result. Mr. Curtis observes:

"It is a leading general principle on this subject, as we have already seen, that there must be something more than a change of form, or of juxtaposition of parts, or of the external relation of things, or of the order or arrangement in which things are used. The change or the new combination or relations must introduce or embody some new mode of operation, or accomplish some effect not before produced." Curt. Pat. § 50.

There is here no change in mode of operation. Substantially this map case differs from others only in this: It is intended to contain a single map, the older devices containing several maps. It is so constructed that it is portable, and therefore convenient. The latter devices were designed to be stationary on the wall. These things are not the subjects for mechanical patents, as they do not pertain

to the functions of the device. It is doubtless true, as shown by the evidence, that, prior to Nutting's invention, the case for a single map was unknown to the trade, and it is probably true that such a case is convenient for use in the various rooms of public buildings. We do not understand, however, that it constitutes invention so to alter a case made to contain several maps that it shall hold but one, or to make a case of lighter material so that it shall be portable, or to make it ornamental or attractive. To do this may prove greatly beneficial and convenient, but it is not invention. McCleery v. Baker, 24 U. S. App. 124, 11 C. C. A. 451, and 63 Fed. 841. Utility is not an infallible test of originality. There must be original thought or inventive skill, not mere mechanical change of what was old. Ex parte Greeley, Holmes, 284, Fed. Cas. No. 5,745; Hollister v. Manufacturing Co., 113 U. S. 59, 73, 5 Sup. Ct. 717; Thompson v. Boisselier, 114 U. S. 1, 13, 5 Sup. Ct. 1042; Holder Co. v. Ferguson, 119 U. S. 335, 7 Sup. Ct. 382; Heating Co. v. Burtis, 121 U. S. 286, 290, 7 Sup. Ct. 1034; Marchand v. Emken, 132 U. S. 195, 200, 10 Sup. Ct. 65; McClain v. Ortmayer, 141 U. S. 419, 428, 12 Sup. Ct. 76; Clothing Co. v. Glover, 141 U. S. 560, 563, 12 Sup. Ct. 79; Manufacturing Co. v. Cary, 147 U. S. 623, 13 Sup. Ct. 472; Howard v. Stove Works, 150 U. S. 164, 170, 14 Sup. Ct. 68.

The case of Krementz v. Cottle Company, 148 U. S. 556, 13 Sup. Ct. 719, is not, we think, in antagonism. The patent there was for a collar button with hollow head and stem, formed and shaped out of a single continuous plate of sheet metal. Before this invention the joints of the buttons were soldered. The buttons were liable to break at the soldered joints, and the stems and head were solid. The advantages claimed were that increased strength was given to the button and less material was required, which, in the use of gold, was quite appreciable. It also appeared that these advantages were at once recognized by the trade and the public, resulting in very large sales. The decision rested largely upon the latter ground. We do not mean, however, to be understood that the decision could not properly be rested upon the ground of invention, in that, by the method employed, additional strength to the article was secured, and great saving in valuable material was assured. A careful reading of the opinion, however, would indicate that the question of invention was deemed somewhat questionable, and therefore the court applied the rule, applicable in such case, that commercial success of the patented article, and the fact that it had displaced other devices in analogous use, should turn the scale in favor of invention. The rule is applied only in cases of doubtful We do not think it applicable here.

The attachment of the covering to the back piece was not new. It is shown in several of the patents exhibited in evidence, particularly in that of Couch and Lamb. It is difficult for us to see wherein there is invention in the device of this patent. The differences between the device of the appellant and the device of the

appellee are not strikingly marked, but they need not be here considered. Upon a broad and liberal construction of this claim there might be infringement, but we are constrained to concur with the court below that, "in view of the prior art as proven, there is here a clear want of patentable novelty; but, if invention were conceded, it would be upon a construction so very narrow as to exclude a finding of infringement."

The decree will be affirmed.

## SCHENCK v. SINGER MANUF'G CO.

(Circuit Court of Appeals, Second Circuit. January 7, 1897.)

PATENTS—INVENTION—SEWING MACHINES.

The Miller & Diehl patent, No. 224,710, for improvements in band-wheel bearings for sewing machines, held to show patentable invention as to claims 1 and 2, notwithstanding the apparently simple character of the change made, in view of the beneficial results achieved, and the obvious defects of prior constructions, which had for many years baffled other inventors and mechanics. 68 Fed. 191, affirmed.

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

This was a suit in equity by the Singer Manufacturing Company against Allen Schenck, president of the New Home Sewing-Machine Company, for alleged infringement of a patent. The circuit court rendered a decree in favor of complainant (68 Fed. 191), and defendant has appealed.

John Dane, Jr., for appellant.

Livingston Gifford & Bull, of counsel), for appellee.

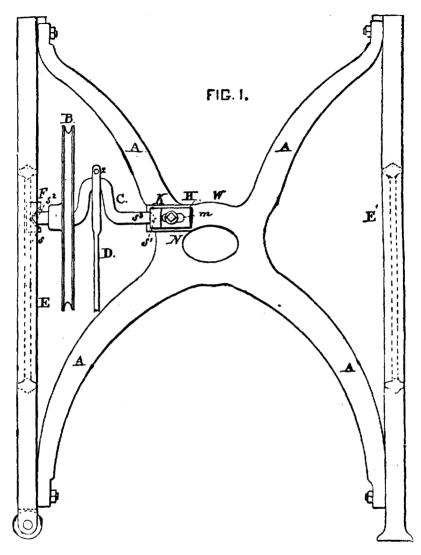
Before WALLACE, LACOMBE, and SHIPMAN, Circuit Judges.

WALLACE, Circuit Judge. The decree sought to be reviewed by this appeal adjudged the validity of the first and second claims of letters patent of the United States to Miller & Diehl, No. 224,710, granted February 17, 1880, and the infringement of these claims by the defendant. At the close of the argument we reserved for further consideration the single question whether, in view of the prior state of the art, the court below should have adjudged these claims void for want of patentable novelty. If the first claim is valid, the second certainly is, because it is for the same combination, with limitations which include some additional minor improvements. The consideration of the case will therefore be simplified by confining our attention to the alleged invention of the first claim. That claim covers an improvement in band-wheel bearings for sewing machines, which consists, essentially, in introducing a brace into the frame of the table supporting the sewing mechanism, which is

independent of the table top, and a short shaft or crank for carrying the pedal mechanism, mounted one end upon the brace, and the other upon the leg of the table. By this change of organization, the patentee simplified and condensed the parts of pre-existing bearings, and lessened the cost of construction, besides making a more efficient bearing. The pre-existing bearings were of three One is represented in the patent of 1864 to Stoop, where the shaft was mounted one end on each of the two table legs, and was consequently nearly as long as the table, had to be made heavy to prevent sagging, and vibrated with the vibrations of the table Another is represented in the patent of 1871 to McCann, where a short shaft was mounted on one of the legs of the table. This type is known as the "overhung stud" bearing. The pitman is applied outside the bearing, and in such a construction there is a tendency to sag and jam the shaft, thus producing wear and friction. Another is represented in the patent of 1872 to Brill, where a hanger was bolted to the table top, and the short shaft was mounted one end in this hanger, and the other in one of the legs of the table. By this arrangement the vibrations of the table top are communicated to the shaft. During the period of nearly 20 years intervening between the patent to Stoop and the patent in suit, there were many attempts to obviate the disadvantages which existed in these different types of bearings. The long shaft was discarded altogether. The Brill construction, if it ever went into use, disappeared. The overhung stud bearing became the generally accepted type, and inventors busied themselves with attempts to improve it. Its defects were obvious. One of these attempts appears in the patent of 1871 to Wild, where the patent points out how much accuracy of construction these bearings require, and how quickly they "wobble, jar, and rotate irregularly," and how they "involve frequent and expensive repairs." In spite of the efforts made, the defects were not satisfactorily obviated. They are rehearsed again in the patent to Donovan, of a few months later date than the patent in suit, but which was applied for while the application for the patent in suit was pending. After referring to the overhung stud as the construction almost invariably used. Donovan states:

"This method has been open to serious objections, among which are the great accuracy required in the fitting of the wheel upon its bearings, in order to prevent lateral irregularity in the movement of its rim; the unequal wear upon the stud and upon the axial opening in said wheel, in consequence of the thrust of the pitman; and the large size of said bearing stud required to enable it to withstand in any degree such unequal side pressure, resulting in the creation of a large amount of friction surface, which materially increased the labor of running the machine."

By the improvement covered by the first claim of the patent in suit, the disadvantages thus referred to have been obviated, and, as has been said, the parts are simplified, and the cost of construction lessened. The patentees inserted a brace of sawbuck form between the legs of the table, bolted it to the legs, and located the



crank between the center of the brace and one of the legs. The legs or side pieces of the frame, being usually made of metal, and bolted together substantially, keep the two bearings of the shaft in substantial alignment, and enable a short and light shaft to be used.

The patentees were not the first to introduce a brace into a sewing-machine table, or even a brace of saw buck form. That had been done as early as 1872, as appears by the patent to Leavitt. Leavitt, however, used his brace merely to strengthen the table, and

his patent shows a short crank, mounted at one end in one of the legs or sides of the table frame, and at the other in a large metallic loop, which is bolted at each end to the same leg or side. Cross braces of form and proportions nearly identical with the brace of the patent had been used for many years in the sewing machines made by the complainant, but only for the purpose of strengthening the frame.

In view of the prior state of the art thus exhibited, it seems now to have been a very simple thing to do what was done by the patentees. It was only necessary for them to take the Leavitt frame, change the location of the brace, perhaps enlarge the diameter of its arms, remove the metallic loop, and insert in the cross brace the short shaft shown in the patent to Brill. But the record in this case affords extrinsic evidence of a most convincing kind that what was done by the patentees was not an obvious thing, and that the change of organization was not one which the skilled mechanics of the particular art could have suggested and introduced without the exercise of inventive faculty. This evidence is supplied, not only by the many patents for improvements, which fell short of producing the simple, compact, less expensive, and more efficient bearings of the patent, but by the sterility, during 20 years, of the great army of mechanics employed by the various sewing machine The complainant itself, from 1865 to 1879, used manufacturers. the overhung stud, and for several years of that period its machines contained cross braces readily adaptable to the office of the patented brace. It employed a vast number of skilled workmen. Yet to none of them did the suggestion occur which is embodied in the new organization of the patentees. The simple change made by the patentees has proved so valuable that the complainant has adopted it in more than 9,000,000 sewing machines. The sewingmachine company whose president is the defendant in this suit has also adopted it. No one can examine the bearings of the patent, even cursorily, and compare them with those previously in use, without recognizing the meritorious improvements which they em-We agree with the court below that these improvements were invention, and not merely the exercise of mechanical skill and adaptation.

The decree is affirmed, with costs.

## KOHLER et al. v. GEORGE WORTHINGTON CO. et

(Circuit Court, N. D. Ohio, E. D. November 6, 1896.)

<sup>1.</sup> PATENTS—Subsequent Issue—Presumption of Noninfringement.

The granting of a subsequent patent relating to the same art raises a presumption that the device thereof does not infringe a prior patent.

SAME—CURRYCOMBS.
 The Plant patent No. 220,986 for an improvement in currycombs held not infringed by a currycomb made according to the Du Shane patent No. 407,313.