description so strikingly suggests the alleged invention covered by the third claim that it does not seem necessary to further comment upon it. It seems to justify the application of the well-settled rule that, "that which infringes, if later, anticipates, if earlier." Miller v. Manufacturing Co., 151 U. S. 186, 14 Sup. Ct. 310; Knapp v. Morss, 150 U. S. 221, 228, 14 Sup. Ct. 81; Grant v. Walter, 148 U. S. 553, 13 Sup. Ct. 699: Peters v. Manufacturing Co., 129 U. S. 530, 9 Sup. Ct. 389; Heating Co. v. Burtis, 121 U. S. 286, 7 Sup. Ct. The only proof of infringement is an exhibit of defendants' packing, and the testimony that defendants have used starch in their packing to keep together the outside strands and the inside An examination of the exhibit in connection with said testimony does not show that the defendants use the article of manufacture covered by the third claim. But, giving to this evidence the greatest possible weight, and assuming that starch is the equivalent of India rubber, it does not appear that defendants have done anything more than to twist asbestus, mixed with a glutinous or adhesive substance, into a rope. This was described in the British patent; and the mere fact that they may have chosen to retain the adhesive substance for the inner core, and to reject it from the outer core, would not affect their liability, whether such construction were or were not described in said British specification.

Let a decree be entered dismissing the bill.

BOWMAN v. DE GRAUW et al.

(Circuit Court, S. D. New York. March 26, 1894.)

1. PATENTS—NOVELTY—FASTENING STARS TO FLAGS.

There is no novelty in fastening stars to the opposite sides of a flag by a method which had previously been employed to fasten letters to blankets, patterns to embroidery, and patches to fabrics.

2. SAME.

The Bowman patent, No. 469,395, for an improvement in the method of making flags, is void for want of novelty.

This was a suit by Henry A. Bowman against Walter N. De Grauw and others for infringement of a patent.

Campbell, Hotchkiss & Reilly and J. E. Maynadier, for complainant. R. B. McMaster, for defendants.

TOWNSEND, District Judge. The questions herein are presented by a bill in equity for the alleged infringement of letters patent No. 469,395, granted to complainant February 23, 1892, for improvements in the method of making flags. The defenses are anticipation and lack of patentable novelty. The object of the alleged invention was to provide a practical and economical mode of so affixing stars or other emblems to the opposite sides of the field of a flag that they should accurately correspond in their respective relations without requiring especial care on the part of the operator. This was accomplished by temporarily fastening emblems, such as stars, on the face of the field, and unformed blanks, sufficient to cover the corre-

sponding area, on the back of the field. The cut-out star, or guide star, the field, and the blank were then stitched together by a zigzag or herring-bone stitch, which passed alternately through the raw edge of the guide star and the field and blank, and through the field and blank. The blank was then cut out around the lines of stitching so as to make stars of suitable proportions on the back of the field. "By this mode of operation the stars on both sides of the flag are made accurately opposite to each other. The zigzag stitching prevents the raw cut edges from wearing off, while the stars lie flat and smooth upon the field fabric, and do not present thick, bulky seams, nor give to the flag a stiffness such as comes from pasting stars." The claims of the patent are as follows:

"(1) The method of making flags herein described, consisting in affixing and accurately duplicating the emblems or stars on opposite sides of the field fabric by stitching through the field and an underlying blank fabric from the outlines of the superposed accurately formed star or emblem properly located on the face of the field and subsequently trimming the blank to the outline indicated by such stitching, whereby said stars for both face and back are given similarity of configuration and a smooth flat-laid attachment without unduly stiffening or encumbering the flag. (2) The method of making flags as herein described, which consists in locating and temporarily fastening accurately formed stars or emblems upon the face of the field fabric, then temporarily fastening an unformed fabric or blank upon the back of the field fabric covering the position and area of the face stars stitching through the several plies on the outlines of the accurately formed star by overseaming stitch embracing the raw-cut edges thereof, and then trimming away the outlying portions of the unformed blank fabric to conform to the stitched outlines of the face stars, substantially as set forth. (3) A flag having the emblems of stars with raw-cut edges affixed thereon in duplicate upon opposite sides of the field or ground fabric and secured by overseam stitching that embraces the raw-cut edges of the face stars by zigzag stitches and is carried through the fabrics of the field and back stars, and said back stars having their edges trimmed adjacent to but outside the line of stitching, in the manner set forth."

It will be seen that claims 1 and 2 cover the method, and claim 3 the article, described by the patentee. The patent in suit covers a form of what is known as appliqué, in which an emblem or design is applied in relief to a field or ground. It is admitted that the use of a zigzag stitch to secure a superposed fabric to a ground fabric, and to prevent the raw edge of the fabric from raveling, was not new, nor was it new to use such stitching to form a pattern on a blank underneath the ground fabric, and to cut away the portions of the blank around the lines of stitching. But complainant claims that he was the first to show how, by a single sewing operation, two stars could be practically sewed to a field so that the front and back stars should register exactly, raveling should be prevented, and a strip of each one of the three fabrics permanently united. present consideration of the questions at issue, it will be assumed that this statement, if limited to the flag-making art, is correct.

The evidence as to the state of the art shows that, in an English patent granted to William Madders in 1865, for improvements in embroidery, a class of single appliqué work is described, in which a face fabric cut in a certain pattern is first temporarily secured to a field, and is afterwards firmly fastened by buttonhole stitches passing

alternately through the field and across the edge of the face fabric, and then through both the field and the face fabric. 1880, various samples of patching and embroidery by appliqué work, stitched by machine, with the same kind of herring-bone or zigzag stitches as are described in the patent in suit, and stitched in the same way in order to prevent raveling, were exhibited at fairs, and sent to manufacturers and others in this country in connection with descriptive circulars advertising the Wheeler & Wilson sewing A similar method is shown in the Henderson provisional English patent of 1867 and the Lamprell provisional English patent Lamprell claims by his stitch to have secured one of the results claimed by Bowman,—the avoidance of stiffness. exhibits show samples of double appliqué work, employed long prior to the alleged invention. In the Wheeler exhibit both patterns were cut out before being applied, and were then secured by a stitch passing first through all three fabrics, and then through the field alone. In the exhibit "Steward Sample No. 1" the double appliqué was used to unite a stamped paper pattern, a field fabric, and a blank by an ordinary stitch.

Various witnesses, experts in embroidery and other needlework, testify to having performed for 10 years last past this double appliqué work, with and without a zigzag stitch, upon face fabric, field fabric, and blank, for making single letters, monograms, and other designs, to register alike on both sides of the field fabric, and to having afterwards cut away the superfluous material from the blank. Mary J. Hewitt, for 15 years employed by the Wheeler & Wilson Manufacturing Company to make samples of their sewing-machine work for exhibitions and fairs, produced a sample showing a "W. & W." in cloth, stitched on both sides of a piece of flannel, and testified that, in 1887, she put such a "W. & W." on a horse blanket for the Wheeler & Wilson Company, and described how it was done. She first cut out a "W. & W." in blue cloth, and pinned it on the upper side of the blanket, and put a broad piece of cloth on the under side. Then she stitched them together around the edge of the upper pattern, and, turning the blanket over, cut the under piece of cloth out along the line of stitches, so that the letters on one side registered with those on the other side. Then, in order to make the design more firm and more ornamental, she made a second row of stitching like She testified that the blanket was used by the company until they sold their horses, and she produced what she testified were the patterns used in outting out the design. She further testified that to carry a line of stitching across the surface of a superimposed material from one point to another, to unite two or more layers of material, was old and well known long before 1889. and was common in quilting and like operations. She also confirmed the testimony of other witnesses, that to secure a raw edge of material, and prevent it from raveling by a herring-bone or zigzag line of stitching, or whipping over the edges, was well known prior to 1879.

It appears that heretofore flags have ordinarily been made either by temporarily fastening stars on one side of a field, with the edges turned in, then sewing them on by hand or machine, and repeating the process on the under side, or by cutting away the field on the under side after sewing the star on the other side. Patent No. 257,222, granted to John Holt May 22, 1882, for a device for attaching stars to flags, describes a device for adjusting and pasting stars on both sides of a field, but it does not suggest, or in any way detract from the merit of, the claimed invention of the complainant.

It is claimed that the method covered by complainant's patent produces a better flag at a reduced price, and that it is now in general use all over this country. I think these claims are sustained by the evidence. Upon the whole evidence, the complainant seems to be entitled to a finding that he believed himself to be the first inventor of the patented process and result, and first applied this patented mode of operation to the making of flags, and that the art, as applied to flagmaking, and the article, were new and useful, and had not been thus used or patented before the date of his application for a patent, and were an improvement on the methods and results which preceded them. The question is whether all these circumstances, taken together, are sufficient to constitute invention, or to show patentable novelty in view of the state of the art as hereinbefore set forth.

The theory of the patent law upon this question seems to disregard the individual knowledge, skill, or training of the alleged inventor, and the extent of the exercise of his individual inventive faculties. Whether the alleged invention was a mere accident or the result of years of experiment, the vital question is always the same: Is the thing claimed by him such as would not have occurred to a person skilled in the art to which it relates? the purpose of determining this question, it must be assumed that the patentee was such a person, and had before him all the accumulated knowledge and experience of this country bearing upon the subject of inquiry disclosed to the public, from the working model in a related art which may border upon the field of abandoned experiment or lost art down to the embodiment of the principle in some other and distinct field, developed just before the inventive idea flashed upon the mind of the patentee. plication for a patent must, furthermore, be read in the light of all knowledge shed upon the world by foreign patent or printed publication. Underwood v. Gerber, 37 Fed. 682; Id., 149 U. S. 224, 13 Sup. Ct. 854. It may be said that the application of this doctrine is productive of hardship in a case like the present one. But, whether this is so or not, the rule is settled by repeated adjudications since Pearce v. Mulford, 102 U. S. 112.

Applying this principle to the case at bar, we find the patentee claiming a method and result, in connection with fastening emblems to flags, which had been previously employed to fasten letters to blankets, patterns to embroidery, and patches to fabrics. It seems to me that, if there had been presented to practical needleworkers, such as those who have testified in this case, the problem of how to economically and methodically attach stars to

a flag, it must have occurred to them to repeat, with a cotton blank, the operation already performed with a woolen or paper And, if the well-known zigzag stitch was better adapted than a double line of stitches to secure the edges, by having it sewed crisscross from the star to the fabric to prevent raveling, or if the surface of the star would lie flatter by stitching from point to point, as in the method claimed to be covered by the first claim, it seems to me it must have occurred to them to stitch stars in that way, just as it had occurred to them to stitch other fabrics, and to plush embroiderers to vary their stitching so as to make ornamental edges for fabrics. Mr. Steward, one of defendants' witnesses, testified that in 1880 he employed the method described in the patent in suit in attaching stars to flags for a dealer in flags, and that he kept samples of said work for a number of years, when they were destroyed, with a mass of other accumulated samples. Charles F. Herbert, an embroidery and needlework expert, another of defendants' witnesses, testified that for more than 10 years he had performed this class of work, both with straight and zigzag stitches, in applying designs and monograms to banners, and for other purposes. Neither of these witnesses produced any samples of the originals of such work the truth of this testimony were established, it would, perhaps, be sufficient to defeat the patent. But I do not understand that the presumptions of validity arising from the grant of the patent are to be rebutted by such unsupported testimony, nor that the presumption of knowledge of the art, applied in determining the question of patentable novelty, extends to an abandoned experiment, such as was testified to by Steward.

But the evidence of these apparently disinterested witnesses is relevant and persuasive in support of the claim that the application of their experience and knowledge to produce what may have seemed invention to Bowman, the flagmaker, should have occurred to him, and would have occurred to any person skilled in the art of appliqué work. Lace Co. v. Schaefer, 1 U. S. App. 118, 1 C. C. A. 488, 50 Fed. 106. Such an application of old processes to the new result of affixing emblems to flags seems to be referable to the skill of the workman rather than to the genius of the inventor, and to be, therefore, an analogous use. The fact that the new form of result has not previously been contemplated or achieved is not sufficient to support the claim of patentable novelty unless such result is substantially distinct. Such a result is "only the display of the expected skill of the calling, and involves only the exercise of the ordinary faculties of reasoning upon the materials supplied by a special knowledge, and the facility of manipulation which results from its habitual and intelligent practice." Holister v. Manufacturing Co., 113 U. S. 59, 5 Sup. Ct. 717; Thompson v. Boisselier, 114 U. S. 1, 5 Sup. Ct. 1042; Underwood v. Gerber, supra.

In Manufacturing Co. v. Cary, 147 U. S. 623, 13 Sup. Ct. 472, the complainant's patent claimed a process of tempering wire for furniture springs. The same process had previously been applied

to different purposes, but it was claimed that the application of it by the patentee produced better results and covered a wider range of subjects than had been previously known. It further appeared that the patentee, being a manufacturer of furniture springs, had observed certain defects therein, had discovered that they could be obviated by the patented process, and that this discovery had revolutionized the art of making furniture springs. But the court, reviewing the previous cases on this question, held that, the principle involved having been already developed, the new application was merely another use of the knowledge pos-It seems to me that the reasessed by those skilled in the art. soning of this decision is conclusive against the first two claims This view is also supported by the followof the patent in suit. ing recent cases: Aron v. Railway Co., 132 U. S. 89, 10 Sup. Ct. 24; Johnson Co. v. Mills Co., 2 C. C. A. 506, 51 Fed. 762; Fox v. Perkins, 3 C. C. A. 32, 52 Fed. 205; Lace Co. v. Schaefer, supra; Wilson v. Copper Co., 4 C. C. A. 484, 54 Fed. 495; Underwood v. Gerber, supra.

That a more thorough doing of what had been done before, or the production of a new fabric with higher finish, tighter weaving, or greater beauty of surface, due to the observation or skill of the workman, is not sufficient to sustain a patent, is held in Ansonia Brass & Copper Co. v. Ecctrical Supply Co., 144 U. S. 11, 12 Sup. Ct. 601; that the mere carrying forward of an original conception resulting in an improvement in degree simply is not invention, is settled. Mill Co. v. Walker, 138 U. S. 124, 11 Sup. Ct. 292; Trimmer Co. v. Stevens, 137 U. S. 423, 11 Sup. Ct. 150. These decisions seem to determine the nonpatentability of the article

covered by the third claim.

These views render it unnecessary to consider the evidence as to the general use of the patented process and article. In a doubtful case, such evidence may suffice to turn the scale in favor of the patentee, but not in a case where there is clearly no patentable novelty. Duer v. Lock Co., 149 U. S. 216, 13 Sup. Ct. 850; Grant v. Walter, 148 U. S. 547, 13 Sup. Ct. 699; McClain v. Ortmayer, 141 U. S. 419, 12 Sup. Ct. 76.

· Let a decree be entered dismissing the bill.

BAIN et al. v. SANDUSKY TRANSP. CO. et al.

(District Court, E. D. Wisconsin. March 29, 1894.)

Admiratry Jurisdiction—Torts—Arrest of Seamen on shore.

Where seamen have deserted, and are found on shore, their wrongful arrest and imprisonment there by procurement of the master is a tort not maritime in character, and admiralty has no jurisdiction of a libel to recover damages therefor.

Libel by John Bain and others against the Sandusky Transportation Company and another to recover damages for wrongful arrest and imprisonment.