

DECISIONS RELATING TO PATENTS.

THE MACKAY BOOT AND SHOE PATENTS DECLARED INVALID.

United States Circuit Court—Southern District of New York.

MACKAY *et al.* vs. JACKMAN.—SAME vs. SCOTT SOLE SEWING MACHINE COMPANY *et al.*—SAME vs. LEHMAN *et al.*

Wheeler, J.:

These suits are brought upon two patents originally granted to Lyman R. Blake, dated August 14, 1860, one, No. 29,561, for an improvement in the construction of boots and shoes, and the other, No. 29,562, for an improvement in boots and shoes. These were to run fourteen years, and August 13, 1874, were extended seven years. They were acquired by the orator, and the former was reissued in No. 9,043, dated January 13, 1880, and both have expired since these suits were brought.

Before Blake's inventions boots and shoes were made by pegging through the outer sole, upper, and inner sole, by sewing a welt to the inner sole and upper, and then sewing the outersole to the welt. Some very light shoes were made wrong side out by sewing through the inner sole, upper, and part way through the outer sole, and then turned, and some very low shoes were made by sewing common stitches directly through the inner sole, upper, and outer sole. Sewing parts of uppers and pieces of leather and cloth for other purposes together by chain stitches made by machine, by drawing loops of the thread through the material, without drawing the rest of the thread through, was then known and practiced; but no boots or shoes made by sewing the soles and upper together by such stitches nor any method of so sewing them together was then known. No means to which that place was accessible for setting the stitches had then been discovered.

Blake invented an improvement in sewing machines by which the soles and uppers of all kinds of boots or shoes could be sewed together without any welt by that kind of stitches, and it was not useful for nor adapted to sewing any other kind of stitches, nor in any other place. This improvement was patented to him in letters patent No. 20,775, dated July 6, 1858, and was highly useful to the public. He made boots and shoes on his machine, and was undoubtedly the first to produce such boots or shoes or to practice that mode of making them. He made application for a patent for this process of making boots and shoes and for the boots and shoes made by this process, as a new manufacture, June 30, 1859. The specification was returned to him for the erasure of one of the claims, with information that claims for the process and product could not be considered in the same application, July 30, 1859. He withdrew the claim for the product, with notice that he intended to renew it in a separate application, April 16, 1860, and did renew it, July 21, 1860. The machine patent was granted for fourteen years, was extended seven years, was owned by the orator, and expired July 6, 1879. The defendant, Jackman, took a lease from the orator of a sewing machine, with the right to use it under all three of the patents during the term of either, for license fees for all boots and shoes made upon it and operated under that license. Since the expiration of the machine patent the defendant, the Scott Sole Sewing Machine Company, has made machines for sewing these boots and shoes by this method, and sold them for use to the defendants in the other cases, who have used them. These bills are brought for relief against these acts as alleged infringement; and in the case against Jackman the bill covers any arrears of license fee there may be for the use of the machine, as this court has jurisdiction of that subject on account of the citizenship of the parties. No question as to that, however, is made for decision.

The machine patent appears to have always been of unquestioned validity. That was so related to the others that any question as to their validity would have been practically unavailing while that was in force, and no question appears to have been really made and contested about either until after that had expired, and the actual validity of these two patents as granted does not appear to have ever been contested until now.

Blake invented means for getting by the uppers and sewing the seams there notwithstanding the uppers. He used his means to sew the seams there and accomplished a great thing; but not because he had made a new kind of seam or given a seam any new quality, but because he had put a well-known seam in a difficult place. This was all due to the machine and its operation, and when he had patented the machine he had patented all there was of it. If, after he had made his machine, and before he had made a boot or shoe with it, some one else, knowing all about it, had, by hand or other known means, made boots or shoes by sewing the soles and uppers together with this stitch, that other person would not have been entitled to a patent for either the process of sewing or the boot or shoe, for there would have been no invention in either. After knowledge of a machine to make a shoe in a particular manner there would be no room for an invention of that manner of making a shoe or of a shoe made in that manner, and there would be no more room for the inventor of the machine than for any one else. It may be doubtful whether such a process or product as these is by itself patentable.

There is, of course, no doubt but that a boot or shoe might be the subject of a patent as an article of manufacture, but there would have to be something new about it as such in the sense of the patent laws. Blake did not invent a boot or

shoe, nor a sewed boot or shoe, nor a boot or shoe sewed with this kind of stitches. All those were known and in use before. He invented a machine by which boots and shoes could be sewed with this kind of stitches in parts where they could not be so sewed before. The new effect was due to the operation of the machine. The patentability belonged to the machine, and not to the boot or shoe, as appeared before.

The court held substantially:

1. Where a person has invented a machine for sewing together the soles and uppers of boots and shoes by a chain-stitch without any welt, the stitch itself and the manner of forming it being well known, and the only new effect being the forming of the well-known seam in the well-known manner in a difficult place, theretofore inaccessible by any means that had been discovered, and the inventor had taken out separate patents for the machine, the process, and the product, *Held*, that the entire invention lay in the machine, and that the patents for the process and product were invalid for lack of invention.

2. After knowledge of a machine to make a shoe in a particular manner, there would be no room for an invention of that manner of making a shoe, or of a shoe made in that manner, and there would be no more room for the inventor of the machine than for any one else. It may be doubtful whether such a process or product as this is by itself patentable.

3. Mere mechanical operations like the looping and drawing threads to form stitches in sewing either by machinery or by hand do not amount to arts or processes, and such operations, apart from the means of performing them, do not appear to be within the reach of protection by the patent laws.

4. An article of manufacture, to be the subject of a patent, must be new as such in the sense of the patent laws, and must be the result of invention.

Let decree be entered for an account of license fees in the case against Jackman, and dismissing the bill as to the residue, and dismissing the bills, with costs, in the other cases.

United States Circuit Court.—Western District of Pennsylvania.

AN INVALID REISSUE.—SHERIFF *et al.* vs. FULTON *et al.*

Acheson, D. J.:

This suit is upon reissue letters patent No. 9,199, issued to Hugh Coll, May 18, 1880, the bill charging infringement and praying for an injunction, etc. The original letters patent, No. 110,205, were issued to Coll, December 20, 1870. The invention, as the original and reissue both recite, consists in improvements to a siphon pump, patented to said Coll, June 8, 1869.

The court held substantially:

1. An inventor, having in his original patent limited his claim of invention to a specified detail of construction, cannot, after a lapse of nine years, procure a valid reissue embodying the enlarged and comprehensive claims that might have been allowed in the original patent.

2. An acquiescence by the patentee and his assignees for a period of nine years in the terms of the patent as originally granted creates an equitable estoppel in favor of the public.

3. Doubtful whether, after a delay of nine years, the claim of a patent can be materially enlarged upon the suggestion that the original claim was defective in form and required amendment.

Bill dismissed.

Changes at Niagara Falls.—The Spouting Horseshoe.

A *Times* correspondent at Niagara notes that since the fall of Table Rock, thirty-two years ago, the Horseshoe Falls have lost that regularity of outline which suggested their name, and indentations in at least two spots give them an angular appearance not unlike the letter W in general shape. This is accounted for by the wearing away of the brink more rapidly at these two points than anywhere else along the entire edge of the Canadian falls. Another change, and one at which the natives of these parts greatly marvel, is the spouting of water by these same Horseshoe Falls. The older and more observing villagers solemnly declare that this curious spectacle has been growing more and more noticeable for the past three years, until it has become so well defined that the name of the Spouting Horseshoe is now applied to that portion of the Canadian Falls. None of them pretend to know the cause of this singular action of the waters. They content themselves with pointing it out as another curious freak of nature, bound to add a new attraction to the vicinity and to swell an income which has never been inconsiderable in the dullest of summers. It is best observed on a clear sunshiny day, when but little wind disturbs the surface of the river. From the center of the Suspension Bridge, which is a short quarter of a mile below the Horseshoe, the spouting is clearly visible. On such a day the clouds of vapor barely rise to a height of two-thirds of the falls, and the brink is never obscured by fine mist. Under such conditions the eye has an unobstructed view of the dark blue waters as they hurry toward the edge of the precipice, only to be transformed into a broad sheet of milky whiteness, when they take the plunge and disappear in the eternal clouds of mist that envelop the foot of the cataract. Suddenly there rises to a level with the top of the falls a mass of spray, increasing in volume and rising in height until from out their midst spout a number

of well-defined jets which mount upward many feet and then melt away in vapor. Assuming 150 feet, the generally recognised figure, to be the altitude of the Horseshoe Falls, these jets seemingly must shoot upward to a height of 200 feet. They certainly add a variety to the scene, and attract at once the attention of visitors. The duration of this phenomenon, if such it can be called, is from 10 to 15 seconds. The clouds of vapor, like volumes of white smoke, continue to fill the air above the Horseshoe for full half a minute after the jets have lost all outline, and then they, too, gradually die away, and for about 10 seconds longer the spot is again free from all turbulence, and nothing but a stretch of waters as far as the rapids is presented to the view. Sometimes these jets of water drop their tassel-like tips in a graceful arch, inclining toward the Canadian shore, and again they fall over upon the brink of the Horseshoe. The regularity with which these slender, tapering jets appear and disappear is one of the features of a peculiar exhibition which promises to excite as much attention as any disturbance in the outline of the falls themselves that has been noted in recent years.

Manufacture of Wine from Raisins in France.

British Consul Taylor, of Marseilles, states, in his last report, that since the first appearance of the phylloxera in the vineyards of France, there has been a steady diminution in the quality of wine produced, and in a tabular statement, he shows that the quantity produced in 1880 amounted to 29,677,472 hectoliters, against 56,406,363 hectoliters in 1877, and this year itself was, by several millions of hectoliters, less than the average of previous years. To make up for this deficiency, a novel product, made out of dried raisins, was introduced. In the year 1880, at the port of Marseilles alone, 36,394,527 kilogrammes of raisins and dried currants were imported, and according to Consul Taylor, all the raisins or currants coming from the East, viz., over 30,000,000 kilogrammes, were used in the preparation of this raisin wine; and when it is taken into consideration that 100 kilogrammes of raisins are capable of yielding 325 liters of wine, an idea may be formed of the quantities of wine of this description which have been manufactured at Marseilles alone. It appears that the process employed in the manufacture of wine out of raisins does not differ in any material degree from that in the manufacture of ordinary grape wines. It is assumed that the grape in going through the process of desiccation loses none of its original elements, save the water which enters into and forms about 80 per cent. of its composition. By restoring this lost water, the raisin becomes capable of yielding the same liquor as before it was dried. The raisins are carefully cleansed and freed from all impurities, and then allowed to soak in a tub with a quantity of water equal to the quantity of wine that is to be manufactured, distilled water, when possible, being used. The time during which the raisin is to soak is forty-eight to fifty hours in winter and about forty hours in summer. It is frequently and carefully stirred, and is sufficiently soaked when it has resumed the appearance of a fresh grape, and when being pressed between the forefinger and thumb, it breaks with a report. This being done, the usual course for the preparation of wine is strictly followed, a little more care only being required. The raisin is crushed in the usual way, and placed in the fermenting tub, being well stirred at the beginning, in order to separate the grains from each other, and to commence a regular fermentation. The "must" is kept at a temperature of 15° Centigrade, and the cellar at an invariable temperature of from 15° to 20° Centigrade. When properly conducted, the fermentation is completed in twelve days, and the raisin wine is then ready to be drawn and put into casks, the usual process of sulphurizing, clarifying, etc., being followed. The wine is then claimed to be composed of exactly the same principles as fresh grape wine, but differs from it by its color, as it is invariably white, or at the best, straw-colored. The wine produced in the Bouches du Rhône district is dark red, strongly alcoholized wine, and accordingly the raisin wine is colored by artificial means, and frequently with deleterious compounds, some of the dyeing stuffs used for the purpose being, it is said, extremely injurious to health. Consul Taylor states that scarcely a week passes at Marseilles without a large quantity of wine thus adulterated being condemned by the local authorities and poured out into the sea. The raisin wine is also largely used in its natural state, that is to say, without being colored by artificial means, by simply mixing it with red wines that are so deep in color that the addition of a certain quantity of raisin wine improves both. The central administration, which at first denounced the manufacture of raisin wine in France as an offense, and made the manufacturer liable to a prosecution for falsification of wine, has now, and for some time, entirely changed its view of the matter. All the hindrances opposed in the beginning to this branch of industry have been removed, and at the present time there is no distinction made between the raisin and the grape wine, both productions being submitted to the same charges and duties, and recorded under the same headings in all the official books and returns.

PROFESSOR EDWARD C. PICKERING, of Harvard College, says that, in undertaking to measure the intensity of the light of the satellites of Mars, he had occasion to need an extremely small hole. A hole about the twenty-five-hundredth part of an inch in diameter was finally secured.