

"It consists in an improved pulp digester, in which the metal shell, corroded by the acid solution employed, is protected against its attacks by a continuous coat or lining of cement of proper thickness applied upon the interior of the shell; the term 'cement' including any material or mixture of materials which resists the acid solution under high heat and pressure, and which is capable of being made plastic and adhesive to the digester shell, and so compact as in practice to prevent the acid solution from reaching the iron shell in consequence of the high steam pressure used in the process."

We have not been inattentive to this proposition, but, for the reasons we have explained, we cannot give the patent so broad a construction. Therefore, we have not undertaken to determine what would be the result of the case if this position of the complainant could be sustained. Let there be a decree dismissing the bill, with costs.

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TANNAGE PATENT CO. v. ZAHN.

(Circuit Court of Appeals, Third Circuit. December 2, 1895.)

No. 8, Sept. Term, 1895.

1. PATENTS—PROCESSES—ANTICIPATION—ANALOGOUS USE.

A process of tanning leather by a saturation with an acid, and then converting the acid into oxide by chemical reduction, is not anticipated by a similar process for dyeing fabrics and wools, though the ingredients may be the same, for the arts of dyeing and of leather-making are wholly unallied, and the doctrine of double use is inapplicable. 66 Fed. 986, reversed. *Potts v. Creager*, 15 Sup. Ct. 194, 155 U. S. 606, applied.

2. SAME.

A process for treating gelatine or gum or compounds containing these substances so as to render them insoluble in water cannot be considered as anticipating a process for tanning leather, where it appears that the former process never has been, and never can be, used to convert hides into leather. 66 Fed. 986, reversed.

3. SAME—PROCESS OF TANNING LEATHER.

The Schultz patents Nos. 291,784 and 291,785, for processes of tanning leather, consisting substantially in saturating the hides with compounds of metallic salts, such as a solution of bichromate of potash, and then treating the same with a compound containing hyposulphurous acid as a reducing agent, held not anticipated, valid, and infringed. 66 Fed. 986, reversed.

Appeal from the circuit court of the United States for the District of New Jersey.

This was a bill by the Tannage Patent Company against William Zahn for infringement of patents for processes of tanning leather. The circuit court dismissed the bill on the ground that the patents were lacking in novelty. 66 Fed. 986. Complainant appeals.

Geo. R. Blodgett and Chas. Howson, for appellant.

Rowland Cox, for appellee.

Before ACHESON and DALLAS, Circuit Judges, and BUTLER, District Judge.

DALLAS, Circuit Judge. This suit was brought upon two patents (Nos. 291,784 and 291,785) granted to Augustus Schultz on January 8, 1884, for processes for "tawing hides and skins." Each of these patents contains a single claim, as follows:

No. 291,784: "The within-described process for tawing hides and skins, said process consisting in subjecting the hides or skins to the action of compounds

of metallic salts, such as a solution of bichromate of potash, and then treating the same with a compound containing hyposulphurous acid (or, as it is otherwise called, 'thiosulphuris' acid), such as a solution of hyposulphite of soda or of potash, in the presence of hydrochloric acid."

No. 291,785: "The within described process for tawing hides and skins, said process consisting in subjecting the hides or skins to the action of a bath prepared from a metallic salt, such as bichromate of potash, and then to the action of a bath capable of evolving sulphurous acid, such as a solution of sulphite of soda, in presence of another acid, such as hydrochloric acid, substantially as described."

The defenses mainly relied upon were (1) insufficiency of specification, and (2) want of novelty. The learned judge held the specifications to be sufficient, and his opinion amply supports that conclusion; but he dismissed the bill on the ground that the patents were invalid for lack of novelty of their subject-matter, and in this we think there was error. For the purposes of this case he properly treated the processes of the two patents as being "practically alike," and directed his attention to determining "what was the exact discovery of Schultz." His understanding that it was a process or "a mode of treating certain material to produce a given result" was undoubtedly correct, but we are unable to acquiesce in the view which he took of the process itself. It is not a process for the treatment of any material whatever, to produce a varying or indefinite result. It is a process solely for "tawing hides and skins" by subjecting them to chemical action, with the definite object of converting them into leather. It may be conceded that, abstractly considered, "saturation with acid, and the converting of that saturating acid into oxide by chemical reduction, must \* \* \* be always the same" chemical operation; but it does not follow that when that operation is applied to different materials to accomplish dissimilar results the process must be in every instance identical. The question is not whether the agents employed, and their influence each upon the other, are the same, but whether the same practical result, or a sufficiently related one, is produced in the one case as in the other. Tried by this test, one class of the references relied on to show anticipation was clearly without relevancy. In "dyeing and printing on fabrics" and in the "treatment of wools" the end finally accomplished is not at all analogous to that of manufactured leather. The same ingredients may be used to reach the one result as the other, but they are not used for a like purpose. They do not affect the different materials in the same way, and the product evolved in the one case is wholly unlike the change effected in the other. The fact that hides are substituted for fabrics or wool, and that the thing produced is leather, and not dyed fabric or treated wool, distinguishes the two processes. The art of dyeing and of leather-making are wholly unallied, and therefore the doctrine of double use has no pertinency. Some of the observations made by the supreme court in *Potts v. Creager*, 155 U. S. 606, 15 Sup. Ct. 194, are directly in point. It was there said:

"On the other hand, if the transfer be to a branch of industry but remotely allied to the other, and the effect of such transfer has been to supersede other methods of doing the same work, the court will look with a less critical eye upon the means employed in making the transfer. \* \* \* Indeed, it often requires as acute a perception of the relation between cause and effect, and as much of the peculiar intuitive genius which is characteristic of great inventors,

to grasp the idea that a device used in one art may be made available in another, as would be necessary to create the device de novo."

See, also, *National Cash-Register Co. v. Boston Cash Indicator & Recorder Co.*, 156 U. S. 502, 15 Sup. Ct. 434.

Of the remaining references it will suffice to mention the patent which was mainly discussed by the court below, and as to which the defendant's expert testified that it more nearly resembles the process of the patents in suit than any other of the patents and publications referred to. The patent alluded to was granted December 15, 1856, to Joseph Wilson Swan, for "improvements in the treatment of gelatinous tissues of gelatine and gum, and of compounds containing such substances." In his specification, Swan said:

"My invention consists in the use of salts of the sesquioxide of chromium; as, for example, sulphate of the sesquioxide of chromium, or the substance known in commerce as 'chrome alum,' as a means of rendering gelatine or gum (Senegal or Arabic), or compounds containing those substances, insoluble in water. My invention is applicable to various uses; for example, to the fixing of pigments and dyes in printing and dyeing textile fabrics, when the pigment or dye is thickened with gelatine or gum; to the tanning of skins and hides; to the fixing of photographs mounted with gelatine; to the fixing of prints produced in gelatinous ink; to the rendering insoluble of gelatine used as a glaze or varnish, or for the purpose of waterproofing; to the production of sheets of insoluble gelatine; and to the preparation of photographic paper, sized with gelatine or gum. \* \* \* In tanning I immerse the skins or hides in a solution containing about one per cent. of chrome alum, or in a solution of chromate or bichromate of potash, or other suitable chromate or bichromate, and I decompose the said chromate or bichromate in the skin or hide by means of oxalic or other acid, so as to produce by the decomposition and reduction of the said chromate or bichromate the required compound of chromic oxide."

Swan supposed that the process which he described might be applied to tanning, as well as to the other "various uses" which he enumerated; but it has been clearly proved that in this he was mistaken, and it is probable that he was led into this mistake by erroneously assuming that any treatment which would accomplish what, apparently, was his primary and general object,—the rendering of gelatine insoluble,—would also convert hides into leather. But leather never has been made by the Swan process, and it never can be; and this fact alone demonstrates its insufficiency as an anticipation, and, of course, indicates—as has, however, been independently shown—that the Swan process and that of the patents in suit are substantially different. Swan's description was not designed to suggest the Schultz method, and it certainly never did suggest it to any one.

As we have already said, we deem it unnecessary, as did the court below, to discuss the other patents which were introduced to defeat the patents of Schultz. Our examination of them has satisfied us that, if the Swan patent was not an anticipation (and we are clearly of opinion that it was not), none of the others can be taken to conflict with the claims of Schultz, or would justify the characterization of his performance as skillful merely, and not inventive. To the art of leather-making he supplied a method which was new and highly useful, and which was far from being obvious. The decree of the circuit court is reversed.

## BRAY et al. v. UNITED STATES NET &amp; TWINE CO. et al.

(Circuit Court, S. D. New York. December 19, 1895.)

## 1. PATENTS—INVENTION—FLY-BOOKS FOR ANGLERS.

The Bray patent, No. 333,384, for an improvement in fly-books for anglers, consisting in a combination wherein the principal feature is a coiled spring which, by compression between the coils, holds the snells straight and in such a manner that each can be removed without disturbing its neighbor, discloses patentable invention.

## 2. SAME—EQUIVALENTS.

A coiled spring is not necessarily the mechanical equivalent of a leaf spring; and its substitution for the latter may involve invention, where it does not perform the usual functions of a coiled spring, and the combination produces a new and beneficial result.

This was a suit in equity by Mellen Bray and others against the United States Net & Twine Company and others for infringement of a patent for an improvement in fly-books for anglers.

Odin B. Roberts, for complainants.

Frank v. Briesen, for defendants.

COXE, District Judge. This action is based upon letters patent, No. 333,384, granted to Mellen Bray, December 29, 1885, for an improvement in fly-books for anglers. The object of the invention is to prevent the snells attached to the flies from becoming set in coils and to keep them straight and ready for use whether they be long or short. This is accomplished by an arrangement which enables the angler to place his flies in the book and remove them therefrom quickly and without disarranging the other flies which the book may contain. The invention is sufficiently described in the claims, as follows:

"1. A page for carrying artificial flies, having a catch or catches extending across the page, to hold the hooks, and provided with a coiled spring, parallel to the line of said catch or catches, to receive and hold the gut between its coils, substantially as described.

"2. A page for carrying artificial flies, provided with a raised catch or catches extending across the page, to hold the hooks, and further provided with a coiled spring parallel to the line of said catch or catches, to receive and hold the gut between its coils, substantially as described.

"3. A page for carrying artificial flies, having a catch or catches extending across the page, to hold the hooks, and provided with a coiled spring parallel to the line of said catch or catches, to receive and hold the gut between its coils, said spring being free to move laterally on a support passing through it, substantially as described.

"4. A page for carrying artificial flies, provided with a raised catch or catches extending across the page, to hold the hooks, and further provided with a coiled spring, parallel to the line of said catch or catches, to hold the gut between its coils, said spring being free to move laterally on a support passing through it, substantially as described."

The defense is lack of invention. Infringement, if not admitted, is conclusively proved. The elements of the claim considered separately are old but the combination is new and performs new functions and produces better results than anything which preceded it. The invention, of course, is not a great one, but Bray has placed in the hands of anglers the device for which they had long been look-