Josiah P. Tucker, for petitioners.

Frank D. Allen, U.S. Atty., and Henry A. Wyman, Asst. U.S. Atty., for collector.

Colt, Circuit Judge. Whatever may have been the practice under former statutes, I am of the opinion that under the act of June 10, 1890, (26 St. p. 131,) no interest or costs can be recovered against the United States, because the suit is, in substance, brought against the United States, and the act makes no provision for such payment. Upon this point I can add nothing to the opinions of the attorney general under dates of August 7, 1891, and December 10, 1891. The items of interest and costs may therefore be stricken from the judgment in the present case.

KILBOURNE et al. v. W. PINGHAM Co.

(Circuit Court of Appeals, Sixth Circuit. June 6, 1892.)

No. 6.

1. Patents for Inventions—Process of Manufacture—Wrought Metal Sines.

In letters patent No. 240,146, issued April 12, 1881, to James Kilbourne, the specifications state that the invention consists of a "sink swaged or struck up from a single sheet of wrought iron or steel, without joint, seam, or interior angle." The claim is for "the herein-described sink, made of a single sheet of wrought steel or iron, without joint, seam, or interior angle, substantially as set forth." No other reference was made to the method of construction. Held, that the patent does not cover the process of construction, both because the claim did not embrace it, and because there was no sufficient description of the "manner and process of making," to meet the requirements of Rev. St. § 4888.

2. SAME-INVENTION.

There was no invention, either in the use of a single piece of material or in the absence of joint, seam, and interior angles; for numerous articles, such as butlers' trays, plumbers' sinks, flanged baking pans, and bidet-pans, were made from a single sheet of metal by the swaging operation, long before the patent.

8. Substitution of Different Material.

There was not patentability in the substitution of wrought steel or iron in lieu of cast metal.

47 Fed. Rep. 57, affirmed.

Appeal from the Circuit Court of the United States for the Northern District of Ohio, Eastern Division.

In Equity. Suit by James Kilbourne and the Kilbourne & Jacobs Manufacturing Company against the W. Bingham Company for infringement of patent. The circuit court dismissed the bill, and complainants appeal. Affirmed.

Statement by Swan, District Judge:

Appellant Kilbourne is the patentee and owner of, and the corporation appellant the exclusive licensee under, letters patent No. 240,146, issued April 12, 1881, on application filed December 28, 1880, for "certain new and useful improvements in sinks." This suit was brought to restrain the alleged infringement of that patent. The patentee in his specification states the nature of his invention thus: "My invention consists of a sink swaged or struck up from a single sheet of wrought

iron or steel, without joint, seam, or interior angle." He then sets forth wand defects in sinks made of cast metal, saying:

"Sinks of this kind are neither strong nor durable. They break easily and frequently in shipping or in storing them, and also in placing or setting them up in position for use. They are also liable to fracture or break if water should freeze in them, and, in order to give them the modicum of strength which they possess, a considerable amount of metal must be used in their construction, making them cumbersome and heavy, and increasing expense of manufacture."

He gives this description of his invention:

"I have discovered that the above specified defects can be completely removed by making the sink of wrought iron or steel, said sinks being swaged or struck up from a single sheet of such metal, as hereinbefore first specified. Such a sink is, of course, stronger than one of cast metal, and is not liable to be fractured or broken by a sudden jar or blow. It is cheaper than a castmetal sink, for the reason that much less metal is required in its construction, and it can, by the swaging operation,—as, for instance, by being struck up in a drop press,—be made more rapidly and economically. * * * The sink, being, as seen in the drawings, without interior angle, has practically equal strength at all points, and has no corners where sediment or dirt can gather."

The issue between the parties is confined to the first claim of the patent, which is thus stated:

"Having described my invention, what I claim and desire to secure by letters patent is: (1) The herein-described sink, made of a single sheet of wrought steel or iron, without joint, seam, or interior angle, substantially as set forth."

The answer denies the infringement charged, the value and utility of the alleged invention, and that the patentee was the original and first inventor or discoverer of any material or substantial part of the thing patented. It gives the names and residences of numerous persons who knew and used the thing patented prior to its alleged invention by Kilbourne. It also alleges that the article had been patented and described. prior to its supposed invention by Kilbourne, in some 30 prior American patents and one English patent, and specifies several printed publications circulated in the United States, in which it had been described, and pleads that the patented article had been in public use and on sale in this country for more than two years prior to Kilbourne's application. It also insists that, in view of the state of the art of manufacturing sinks, bath tubs, and many like articles long before said alleged invention, the letters patent fail to disclose any invention, and that the means claimed as original by said Kilbourne under his patent were common and well known.

Watson, Burr & Livesay and M. D. Leggett, for complainants. Briesen & Knauth, H. M. Turk, and Arthur von Briesen, for defendant. Before Jackson, Circuit Judge, and Swan, District Judge.

Swan, District Judge. Complainants claim the monopoly of making and vending under Kilbourne's patent the single article of sinks, "swaged or struck up from a single sheet of wrought steel or iron, without joint,

seam, or interior angle." The conceptions claimed as original, on which the validity of the patent is predicated by the argument, are: (1) The mode of construction; (2) the entirety of the material composing the completed article; (3) the use of the wrought steel or iron in the manufacture of the sink; (4) the interior form, without joint, seam, or angle.

1. If the first element of this claim were a new process, it is not sufficiently described to meet the requirements of section 4888, Rev. St. U. S., that an inventor shall make and file in the patent office a written description of his invention, and "of the manner and process of making, constructing, compounding, and using the same, in such full, clear, concise, and exact terms as to enable any person skilled in the art or science to which it appertains, or with which it is most nearly connected, to make, construct, compound and use the same. * * *" uity of the process, and the fact that the patentee does not expressly or by implication claim it, save the patent from this objection. of swaging metals into any required form was venerable long anterior to The drop press, drop hammer, dead stroke hammer, dishthis patent. ing ram, dies, die press, forcers, and stamping machines have long been familiar to metal workers as implements by which hollow ware in all its forms and varieties has been manufactured for over half a century, and are regarded in the art as simply equivalent machines or tools for swaging; that is, beating or drawing the ductile metals into desired shapes. The use of one or the other of these agencies is merely a preferential application by the workman of the power required for the work in hand. The variety of manufactures by this process has been limited only by the art of designing, the ductility of metals, and the possibilities of machinery. The inventor of a new design or material for an article of manufacture, or of a new device for the application of the power needed in this art, or the discoverer of a process for the treatment of refractory metals is entitled to the monopoly assured by the patent laws. These would be additions to our knowledge and contributions to the industry evolved from the inventive faculty. The appreciation and utilization of the efficiency of old methods, means, and material for the manufacture of domestic, mechanical, and agricultural wares "does not spring from that intuitive faculty of the mind put forth in the search for new results or new methods creating what had not before existed or bringing to light what lay hidden from vision; but, on the other hand, is the suggestion of that common experience which arose spontaneously, and by a necessity of human reasoning, in the minds of those who had become acquainted with the circumstances with which they had to deal." Hollister v. Manufacturing Co., 113 U. S. 72, 5 Sup. Ct. Rep. 717.

It is not enough that the new manufacture, because of the fitness of the material to the purposes of the article, has obviated innumerable objections inherent in prior manufactures and superseded them in the trade. It must possess an advantage and novelty in form or construction beyond the ability of a mechanic of ordinary skill and intelligence, or be the resultant of means or methods devised by the maker. "The law," says Judge Woodbruff in Smith v. Elliott, 9 Blatchf. 403, "gives no

monopoly to industry to wise judgment or to mere mechanical skill in the use of known means, nor to the product of either, if it be not new. These are within the proper field of competition, and open to all. general, they will in that competition be justly appreciated, and will command their proper remuneration if usefully employed. It is invention of what is new, and not comparative superiority or greater excellence in what was before known, which the law protects, and it is that alone which is secured by patent." The state of the art of metal working conclusively disproves Kilbourne's claim to a monopoly for the process used in this manufacture, and remits him for his reward to the quality of his wares. He has contributed nothing to its resources or machinery unknown before to the craft. He obtained his patent April 12, 1881. No model accompanied his specifications. From that date until some time in 1883 the sum of his achievements in this line of industry was the abstract conception of the adaptability and fitness of wrought steel and iron to this article of household furniture. mits that during this interval he expended thousands of dollars and ruined thousands of plates in endeavoring to make the sink.

"I made first small dies and then large ones; had to change and change again the shape of the dies, and almost despaired of success; but I had spent so much time and money on it that I persevered, and finally succeeded."

This confession not only demonstrates that the patentee has failed to disclose the secret of his process, and specify his invention in such a way that others of the same trade would be enabled to do the thing for which the patent was granted, without any new invention or addition of their own, has merely "set them a problem to solve," to use the phrase of Baron Alderson in Morgan v. Seaward, Webst. Pat. Cas. 174,—but also that the process was a mystery to himself, which, for two years after his patent had issued, baffled solution. The result of his experiments has justified his faith in the adequacy of "the swaging operation" to this manufacture, but the necessity for the experiments proves that the machinery of his success, which is patentable if original, was obviously a hard-born afterthought, which he had not conceived. But beyond this, there is no language in this patent which can by any latitude of construction be held a claim for the process, beyond the curt references to "the swaging operation," and one of its tools, the drop press, which are alluded to as well-known agencies or machinery equal to the manufacture of the article.

The argument that, under the case of Smith v. Vulcanite Co., 93 U. S. 492, the process detailed is made as much a part of the invention as are the materials of which the product is composed, has no applicability. There, as is said, "the properties of vulcanite were well known; but how to make use of them for artificial sets of teeth remained undiscovered, and apparently undiscoverable, until Cummings revealed the mode." The patent was sustained as a combination of process and product, both of which were new, though the materials were old. The process was fully detailed. The distinctions between that case and this are obvious. For the reasons stated, the claim for the process is untenable.

2. The record shows that neither the entirety of the material of which the sink is made, nor the absence of joint, seam, and interior angle, are new features in this class of manufactures. Butlers' travs, plumbers' sinks, flanged baking pans, bidet pans, and numerous other domestic and mechanical utensils were made by the swaging operation from single sheets of metal, long anterior to the plaintiffs' patent. All of these articles were jointless, seamless, without interior angles, strong, durable, cheap, and light, as compared with like utensils of cast metal; so elastic as largely to obviate injury to dishes placed or dropped therein; could be safely and easily handled, shipped, and set in position; subjected without detriment to extremes of heat and cold; were not affected by the freezing of their contents, nonodorous, and easily cleansed. In short, they remedied every objection to cast metal utensils which experience has developed and the specifications of this patent and the proofs of complainants have particularized. Defendant's exhibit bidet pans is a small bathing vessel, stamped or swaged from sheet metal, without joint, seam, or interior angle. These were made by Hodges, Taylor & Hodges, in Brooklyn, N. Y., as early as 1854; and also as early by Ketchum, of New York. They were usually from 18 to 20 inches long, 10 or 11 inches wide, and from 6 to 8½ inches in depth. The size was limited by the demand, not by difficulty of construction.

Defendant's exhibit baking pan is a type of an utensil which has been manufactured and sold at least since 1850, and has been made with and without flanges. Many sizes and varieties of this dish were made, and they were used for different purposes. Sheet tin was the material commonly used, but, where that was not obtainable of sufficient size, sheet iron was substituted. They were formed of a single sheet of metal. without joint, seam, or interior angle, by the wheeling process, which is defined as "simply raising articles of various forms and depths out of one flat piece of material,—copper, iron, brass, or any other material whatever in the form of sheets,"-by means of two co-operating wheels, one of which is adjustable, so arranged that by their pressure the metal forced between them could be given any desired form. The capacity of this process for the manufacture of household utensils of any depth or shape is practically unlimited. The usual depth of its manufactures was from eight to eight and a half inches. Defendant's exhibit butler's tray is another exemplification of these wares. It is in fact a portable sink for use in the dining room, formed of "a single sheet of wrought iron, without joint, seam, or interior angle," by the swaging operation. In shape, material, and manner of construction it is strikingly suggestive of the Kilbourne sink. The proofs are convincing that these were made as early as 1878, if not in 1876. Between the basin of this tray and defendant's flanged baking pan, which is as old as the tray, there is but little difference in shape. They were made in the same manner before the year 1880. They were 20 inches in length and 16 inches in width.

As long ago as 1846, British letters patent No. 11,073 were granted to Thomas F. Griffiths for an improvement in the form of dies, and a combination of the processes of shaping sheet metal by stamping and

burnishing into required shapes and designs. Speaking in his specifications of stamping plate and sheet metal in accordance with his process, he says: "A great variety of articles, it is well known, are now made by stamping, and by stamping combined with burnishing to form, and both these processes are well known." He appends to the specifications three illustrative drawings of articles stamped from single pieces of sheet metal and iron plate, of the same shape as the sinks made by complainant, and thus verifies his claim that "the workman will only have to vary his dies, forcers, and chucks in order to make articles of other sizes and forms." December 21, 1869, J. G. Knapp obtained letters patent for an improvement in sheet metals, flour, grain, and other scoops. His invention consisted "in forming the bowls in one piece of metal, without seams or joints, by stamping up sheets of metal into the form of troughs, with a flange around the top," etc. Letters patent were granted James Kidd, December 19, 1876, for an improvement in metal wheelbarrows, which consists in making the tray or body of the barrow of a single sheet of steel, struck up or stamped from a plate of steel or any other sufficiently ductile metal, by a dishing ram. On the same day. Kidd took out another patent for an improvement in dishing metals, by which plates of sheet metal "can be stretched or stamped into a dished or concave form, with any desired outline of the concave, and with a surrounding flange or strengthening edge." Farrington & Armstrong's patent of November 18, 1873, for improvement in sheet-metal coffins, furnishes another anticipation of Kilbourne's use of the single sheet of metal. They made these caskets of two pieces of wrought iron, by dishing or distorting the plain sheets or plates of iron by means of dies, into the required shape and depth. T. F. Rowland's patent of May 30, 1876, for an improvement in wrought iron vessels for buoys, etc., consisted in forming a complete hollow, welded vessel, of two hemispheres, struck up by dies from entire circular plates. These hemispheres were flanged by the same process, so that they could be welded to form the buoy or hollow vessel. Under Morris Wells' patent of January 2, 1866, for sheet-metal dies, seamless hollow ware was struck up from single sheets of metal by a series of dies. November 4, 1879, Hiram W. Ball received a patent for an improvement in road scrapers, under which the scoops of those implements were constructed of a single piece of steel, "having upturned sides and back, without seams, joint, or interior angle," swaged or formed to the required shape. Of this patent Kilbourne is the assignee. The similitude of language and ideas in Ball's and complainant's specifications, and the fact that Kilbourne is the assignee of the Ball patent, is at least suggestive of his appreciative apprehension of the prior manufacture. With Ball's patent before him, his ingenuity would not be taxed to discern the efficacy of the swaging operation to strike up a blank sheet of wrought steel or iron into a four-sided vessel "without seam, joint, or interior angle,"—the Kilbourne sink in short,—with as much facility as it produced Ball's three-sided scoop from the same metals. William G. Avery obtained a patent November 4, 1879, for an elevator bucket without joint or seam,

struck up from a single piece of metal, and formed with a flat bottom, curved front and sides, and flat back. It is useless to multiply examples of manufacturers from single sheets of wrought metals, possessing every merit and peculiarity claimed for this sink. The list might be indefinitely The catalogue of patented machines and process for swaging, stamping, and striking up household and miscellaneous utensils and conveniences which were jointless and seamless, and preserved the entirety of the material of the article, is as voluminous. The instances cited of the application of this art to common uses deprive these features of this sink to all claim to novelty. While an exact counterpart of Kilbourne's sink in shape had not been produced in wrought metal, its prototype in form appears in Bignall's cast-iron sink, for which letters patent were issued January 1, 1867, to L. C. and M. C. Bignall. is without joint, seam, or interior angle, and has a grooved or recessed flange in its upper and outer edge, projecting horizontally, into which the upholding framework or inclosure is fitted. The flat flange of complainant's sink serves the same purpose. The form or pattern, therefore, lacks originality.

3. The use of wrought steel or iron in lieu of cast metal is mere substitution of materials, which, whatever the degree of superiority given to the manufacture thereby, is not patentable. Hotchkiss v. Greenwood, 11 How. 248; Hicks v. Kelsey, 18 Wall. 670; Phillips v. Detroit, 111 U. S. 604, 4 Sup. Ct. Rep. 580; Gardner v. Herz, 118 U. S. 180-192, 6 Sup. Ct. Rep. 1027; Brown v. District of Columbia, 130 U. S. 87, 9 Sup. Ct. Rep. 437; Florsheim v. Schilling, 137 U. S. 64, 11 Sup. Ct. Rep. 20.

The decree of the circuit court dismissing the complainant's bill is clearly correct, and is affirmed, with costs.

THE JOHN C. FISHER.

THE TOM Ross.

Ross et al. v. GRUBBS.

(Circuit Court of Appeals, Third Circuit. April 22, 1892.)

COLLISION—RIVER STEAMER LANDING—BOAT AT WHARF.
 A large river steamer, which in landing, head on, swung her stern around so as to strike a smaller steamer, safely moored at an adjacent private wharf, where she had a right to be, is liable for the damages caused thereby.

2. Maritime Liens—Extinguishment—Giving Note.

In admiralty a note does not extinguish the lien of the claim for which it is given unless such is the understanding of the parties at the time. The General Meade, 20 Fed. Rep. 923, followed.

Appeal from the District Court of the United States for the Western District of Pennsylvania.