

post, and out of the way), in connecting the pad firmly to the post, shaping the body spring over the hips, giving free motion to limbs, and bringing it to the same level at the back and in front, permitting unhampered movements of the body above, seem, in this view, to be—although the parts are, by themselves, old—new and useful inventions, in the sense of the patent law; and the patent seems to be valid for a truss improved by these improvements. *Bonsack Mach. Co. v. Elliott* (C. C. A.; Second Circuit, June 28, 1895) 69 Fed. 335.

The patent can be valid only for what the inventors actually invented; and as this invention is not of a truss as wholly new, but only of a truss as improved, it can cover only the specific improvements, and these only as claimed. One claim is for a truss consisting essentially of parts named, including the screw-tapped hole above the slot, and the screw for securing the pad to the spring,—obviously meaning for securing the post to the spring. The other is for the combination of the same parts. Experts testify for the plaintiff that there is no patentable or substantial difference between the truss of the patent and that of the defendant. No such witnesses, or others, have testified to the contrary, or otherwise, for the defendant. The combination is not taken, for that is an entirety, and less parts are a different combination. But parts of the patented invention of the first claim are taken, by using the curved body spring, and the screw through the post into the pad, which are new, as the patent covers using them. To the extent that the defendant has taken and used the plaintiffs' patented invention, he has infringed upon their exclusive rights. *Sharp v. Tift*, 2 Fed. 697, 18 Blatchf. 132; *Rowell v. Lindsay*, 6 Fed. 290. Decree for plaintiffs.

UNION PAPER-BAG MACH. CO. et al. v. WATERBURY et al.

(Circuit Court of Appeals, Second Circuit. October 23, 1895.)

1. PATENTS—INVENTION—PAPER BAGS.

In making paper bags from a continuous tube there is no patentable invention in changing the sequence of previously known operations so as to bend inward the bellows fold as soon as the tube is distended, and thereby economize material. 58 Fed. 566, affirmed.

2. SAME.

The Deering reissue, No. 10,083, for an improvement in the manufacture of paper bags, is void for want of invention. 58 Fed. 566, 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 Union Paper-Bag Machine Company and the Hollingsworth & Whitney Company against James M. Waterbury and others for alleged infringement of a patent relating to the manufacture of paper bags. The circuit court rendered a decree for complainants, awarding an injunction and an accounting. 39 Fed. 389. Defendants afterwards filed a bill of review, and introduced new evidence, and, after a hearing thereon, the court va-

cated its former decree, and dismissed the bill. 58 Fed. 566. From this decree complainants appeal.

George Harding and Francis T. Chambers, for appellants.
Albert H. Walker and Frederic H. Betts, for appellees.

Before BROWN, Circuit Justice, and LACOMBE and SHIPMAN, Circuit Judges.

SHIPMAN, Circuit Judge. This suit in equity was founded upon the alleged infringement of reissued letters patent No. 10,083, applied for November 29, 1881, and granted April 11, 1882, to the Union Paper-Bag Machine Company, as assignee of the inventor, Mark L. Deering, for improvements in the manufacture of paper bags. The original patent, No. 227,350, was applied for May 10, 1879, and was granted to Deering on May 11, 1880. The application was thrown into interference with an application of Leinbach and Wolle for the same invention, who subsequently executed and filed in the patent office an acknowledgment of Deering's priority upon which his patent issued. A contract was at the same time made between these three persons for the sale of the patent to a corporation which Leinbach and Wolle said was about to be organized under the name of the New York Paper-Bag Machine & Manufacturing Company. The validity of the Union Company's title to the patent was assailed by a corporation organized in December, 1884, under the name of the New York Paper-Bag Machine & Manufacturing Company, in a suit in equity against the assignee in the Eastern district of Pennsylvania, which was decided in favor of the Union Company, and its title is not challenged in this suit. The Hollingsworth & Whitney Company is an exclusive licensee to make, use, and sell paper bags under said patent for certain territory, which includes the Southern district of New York.

The original patent contained a single claim for a process. The reissued patent contained two claims, as follows:

"(1) The herein-described process or method of forming paper bags by making in a sheet of paper or blank the folds, B and C, then pasting together the two sides, A¹, A², forming a bellows-sided body or tube of the bag, then spreading open one end of said body or tube, then forming the inwardly-projecting triangular folds, H, H, side laps, G, G, and laps, I, J, which latter are secured in place by pasting or otherwise, substantially as described. (2) A bag consisting of a bellows-sided tube having a satchel bottom and inward triangular folds, which form part of its two sides when distended."

The first claim does not materially differ from the claim of the original patent. The cause was tried before Judge Wallace, who decided that the second claim was an unwarrantable enlargement of the original patent; that the first claim was valid, and had been infringed; and that the usual decree for an injunction and an accounting should issue upon filing a proper disclaimer of the second claim. 39 Fed. 389. This disclaimer was filed. The defendants then brought a petition for leave to file a bill of review for the purpose of introducing newly-discovered evidence, and an order was granted that they have leave to file such a bill, and introduce their

new evidence, and that the injunction be suspended until the hearing upon the bill of review. A volume of new testimony was thereupon taken, which presented a new case on the part of the defendants. Upon the hearing before Judge Coxe, he vacated the former decree, and dismissed the complainants' bill without costs, upon the ground that, upon the undisputed state of the art as shown in the new testimony, the Deering improvement was not a patentable invention. 58 Fed. 566. From this decree the present appeal was taken.

By the process or method described in the Deering patent, a "rectangular sheet of paper becomes, by successive foldings and the pasting of adjoining edges, a paper box having a flat bottom of rectangular form and open top." It "can be folded into a flat piece of paper, and thus a large number can be included in a bundle, occupying but a small space, in a convenient form for transportation, and ready for immediate use." The grocer takes one from the bundle, and holding it by its open mouth, "gives it a flip through the air," when, distended by the air, it becomes a box, which stands upright and unsupported upon a comparatively firm bottom. The patent did not describe any automatic mechanism for the manufacture of the bags, and none existed, but machinery has been invented with great ingenuity, by which Deering bags have been produced in vast quantities, with great cheapness, and have become a universally known article. The patented method consists of the following successive operations: The paper is folded in the manner necessary to form a flat bellows tube, and the edges which form the longitudinal seam of the tube are pasted together. One end of the flat tube is then opened, and the portion which is to be used in making the bottom is marked by a crease, is turned up at right angles to the body of the bag, and is distended. The inwardly-turned triangular folds and side flaps of the bottom, which are the distinctive features of the Deering bags, are next formed. These folds are formed of portions of the material of the bellows folds, and the side laps are formed also of portions of the like material, and of parts of the flat sides of the bellows-folded tube. The two triangular laps of the bottom are then folded over and pasted, and thereby the folds of the bottom of the bag are secured. This process does not demand a support or former within the bag body during the course of manipulation.

Turning now to the state of the art at the date of the Deering invention, in 1877, the bellows-folded tube and square-bottomed bag had been shown in the machine patent to Luther C. Crowell, No. 123,812, dated February 20, 1872, and the satchel-bottomed bag had been shown in the machine patent to William Webster, No. 146,372, dated January 13, 1874. But the Wittkorn bag was the important addition to the knowledge in regard to the history of this manufacture which the new proofs furnished. It was shown that Henry Wittkorn, a paper-bag manufacturer in Philadelphia, from April, 1873, to 1887, manufactured by hand, and sold during the year commencing April 1, 1874, paper bags which were made in the following way: A rectangular paper tube was folded around or was slipped over a rectangular wooden block. Sometimes the tube had been formed into a bellows tube before it was placed upon the block, and

sometimes the bellows formation was made after the bag was completed. One end of the tube—being the end which was to form the bottom of the bag—projected above the edge of the block “a distance equal to the breadth of the sides of the tube. The front flap was then folded down on the end of the block, completely covering it, and the side flaps were at the same time doubled over into triangular flaps of double thickness. These flaps were pressed in between the front and rear flaps, the rear flaps being at the same time folded down upon the end of the block, and pasted to the front flap, thus completing the bag.” They were afterwards collapsed by turning the bottom against the front, and at the same time collapsing the tube into bellows folds, so that the bags became flat pieces of paper, which were easily packed in bundles. These two collapsing operations created inward triangular folds between the bottom and the bellows-formed sides. The manufacture and sale of bags made in this way was publicly carried on as a business by Wittkorn and his workmen. These bags were distended by “a flip through the air,” when they became square-bottomed rectangular boxes. Their existence as an article of manufacture is not denied. Samples of them are in evidence. Among others, a sample of a particular style of hominy bags, which were used by one Kelly, a grocer, is well known in the case as “Wittkorn’s Exhibit No. 5.” In this description of the Wittkorn manufacture, mention of his bag with a paste-board bottom is omitted, as of less importance than the bag represented by Exhibit No. 5.

Testimony from Wittkorn and Jasper A. Smith, one of his partners during the year ending April 1, 1874, was introduced for the purpose of showing that before 1877 Wittkorn used other methods of manufacture, one, at least, of which closely resembled the Deering process. Testimony from a number of witnesses was also offered to show the anticipation of Deering by one John T. Besserer, who died in 1879. No sample bag known to have been made by either of these methods prior to the date of the patented invention was introduced in evidence. The methods spoken of by Smith, and the alleged anticipation by Besserer, are not established with sufficient strength; and Wittkorn’s testimony, taken in connection with the surrounding circumstances and probabilities, does not satisfy the mind of the existence of a perfected invention at the time of which he speaks. So far as questions of fact are concerned, we prefer to rest upon facts the existence of which must be admitted.

The prominent question which presents itself at the outset is whether the improved method of manufacture contained the necessary requisite of invention. The improvement did not consist in the use of a bellows-folded tube, nor in the substitution of a satchel bottom for the square bottom of the Wittkorn bag, nor in the fact that Deering did not apparently use a block or former, but made his bags when the tube was collapsed. The Wittkorn bag had a firm bottom, composed of six folds. His system of folding was liberal in its use of paper; and a system which should introduce greater economy of material, if consistent with sufficient strength for ordinary practical purposes, would be an improvement. This improvement Deer-

ing presented by his conjointly-made triangular folds and side laps, which used a part of the material of the bellows folds, economized the paper, and made the bottom less bulky than when these triangular folds were turned in by the turning over of the bottom and the flattening of the tube. We concur with Mr. Edward S. Renwick, the complainants' expert, who says, in view of the preceding machine-made bags and of the Wittkorn bag, that the distinguishing feature of the Deering process is "that the inwardly triangular folds and the side laps adjacent thereto are completely formed by a conjoined operation, simultaneously, or thereabouts, before the last two laps of the satchel bottom of the bag are made." Was it, then, invention, the Wittkorn system being obvious to the public, and the successive steps by which it produced a bag ready for the market being known, to change the order in which, and the manner of folding by which, the triangular folds were made? Wittkorn's were made after the bottom was closed and pasted, by flattening the bellows sides and turning the bottom. Deering formed his folds and side laps by a conjoint operation before the last two laps were folded. After the Wittkorn method of manufacture had been in public use, it could not need inventive genius in a skilled bag maker to change the sequence of operations so as to bend inward the material of the bellows fold as soon as the tube was distended, and thus economize material. We are clearly of opinion that, in view of the knowledge which the Wittkorn bag had added to the art of paper-bag manufacture, the Deering process was a mechanical, and not an inventive, modification of pre-existing methods.

The record and the briefs of counsel plentifully presented other questions of law, which we think do not, in view of the character of the improvement, demand a decision. The point was made by the complainants that sufficient proof was not made under the bill of review that the Wittkorn and Besserer defenses were in fact newly discovered, and could not have been ascertained earlier by the exercise of due diligence. We concur with Judge Coxe that it sufficiently appears that the evidence was not only discovered after the hearing before Judge Wallace, but that it could not, by the exercise of ordinary diligence, have been discovered sooner. The decree of the circuit court dismissing the bill without costs is affirmed, with costs of this court.

JOHNSON CO. v. PENNSYLVANIA STEEL CO.

(Circuit Court of Appeals, Third Circuit. October 28, 1895.)

No. 20.

PATENTS—INVENTION—STREET-RAILWAY SWITCH.

The Moxham patent, No. 333,474, for a railway switch for street cars, and which covers a device that is merely an adaptation of a previous railroad switch, is void for want of invention over the previous patent of May, 1885, to the same inventor, for a switch intended for the same purpose. 67 Fed. 940, affirmed.