

an air pump with a hose having an open end." The simple truth is that metallic couplings were not adjustable, and, in order to use a single pump and hose upon a variety of nipples, Johnson rejected the metallic coupling, and, in order to compress the end of the hose about the inserted nipple, brought into use, as the preferred means of accomplishing the result, the clamp described in his patent; and, if thereby he made an invention, he was entitled to claim broadly "the combination of a piece of open ended hose with the clamp described." The hose being described in the claims as an air-pump hose, whatever the effect upon the scope of the patent, cannot disguise or change the essential character of the combination, which is the same whether the hose is attached to or is to be used in connection with an air pump, water pump, siphon, or any other conceivable mechanism.

But, whether deemed to be broad or narrow, the combination is without patentable novelty. Like combinations, for the same or like uses, are common, and have been long practiced in the use of hose for conveying water, gas, and air. For a conclusive example we need only recur to the British patent of Hillman. That device, it is conceded, was used in connection with the nipples of bicycle tires, its position in use being between the metallic part of the nipple and the tire. The annexed illustration corresponds to figure



4 of the patent. With that device present in position on the nipple, the end of the nipple in the hose, and the necessity for tightening the joint developed, he would be a poor mechanic, indeed, who could fail to perceive that, by substituting a concave for the convex follower, he might convert the choker into the necessary clamp. It is evident that the clamp, without changing the form of the follower, could be used in lieu of the choker, and, if so used within British territory, would be an infringement of Hillman's patent. Necessarily it is anticipated by what it infringes.

The decree of the circuit court should be reversed, and the bill dismissed for want of equity; and it is so ordered.

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FERGUSON et al. v. ED. ROOS MANUF'G CO.

(Circuit Court of Appeals, Seventh Circuit. January 6, 1896.)

No. 267.

1. PATENTABLE INVENTION—CHANGING OLD DEVICE.

There is no patentable invention in the conception and making of a folding screen of three panels out of two panels of the old style, joined by means of crosspieces pivoted in any of the known modes, even where this results in dispensing with two of the six standards before employed, and producing a screen capable at once of standing by its own strength, and of adjusting itself to irregularities of surface.

2. SAME—REMOVAL OF SURPLUS MATERIAL.

Under ordinary circumstances the removal of surplus material, or needless parts of a physical structure, without changing the relation, connection, or operation of the essential elements, cannot involve invention.

**§ SAME—FOLDING SCREENS.**

The Campbell patent, No. 447,461, for an improvement in folding screens, is void for want of invention.

Appeal from the Circuit Court of the United States for the Northern Division of the Northern District of Illinois.

This was a suit in equity by Louis Ferguson, Harry Ferguson, and George W. Ferguson, Jr., against the Ed. Roos Manufacturing Company for alleged infringement of a patent for a folding screen. The circuit court dismissed the bill, and complainants appeal.

Clarkson A. Collins and Taylor E. Brown, for appellants.

John G. Elliott and F. A. Hopkins, for appellee.

Before WOODS, JENKINS, and SHOWALTER, Circuit Judges.

WOODS, Circuit Judge. This appeal presents the question of the validity of letters patent No. 447,461, issued March 31, 1891, to Ferguson Bros., assignees of James W. Campbell, for an improvement in folding screens. The usual defenses were pleaded, including anticipation by a number of prior patents. The bill, brought for infringement and to obtain an injunction, was dismissed because, in the opinion of the court, the letters did not cover a patentable invention.

Omitting the references to the drawings, the specification and claim of the patent are as follows:

"My invention consists of a folding screen having two panels, which, being pivoted to connecting bars, thereby form a third or central panel, one upright of each outside panel forming also an upright for the central panel; and the object of my invention is: First to lessen the cost of manufacture, and at the same time produce a screen as attractive in appearance as those now in the market; and, second, to make a screen that will more readily adapt itself to the inequalities of the flooring; and my invention further consists in certain novel features of construction to be hereinafter more fully described. \* \* \* A screen made as here described and illustrated will, on account of the manner of pivoting the panels together, very readily adjust itself to any inequality in the flooring, as a slight twist in the center panel would raise or lower the outer ones according to its direction. Such slight twist will not injure to any appreciable degree the structure as a whole, since the pivotal connection between the crossbar and side frames of the center panel will always admit of some play. What I claim as my invention is: The combination, with two outer panels having rigid frames, each consisting of two uprights and crossbars connecting the uprights, of an intermediate panel formed by a pair of crossbars pivotally connected at their opposite ends with the adjacent uprights or the rigid frames of the outer panels, substantially as set forth."

If the word "rigid" were omitted this claim would, in effect, be the same as one which was rejected upon reference to the "patent to Broughton, No. 425,290, April 8, 1890, fire screens, in view of Carey and Carey, No. 421,383, February 18, 1890, fire screens; there being," in the opinion of the examiner, "no invention in applying the method of hinging two panels together, as shown in Fig. 3 of Carey and Carey, to a structure of three panels, as shown by Broughton." It is not deemed important to determine the exact force of the word "rigid" as used in the claim (a point on which there has been some discussion), but it seems to mean simply that the standards and cross-pieces of the outer panels shall be firmly and rigidly united, in con-

trast with the pivotal connection of the crosspieces of the middle panel with the standards on either side. If the crosspieces of the outer panels were pivoted so as to move freely upon the standards, the screens would be liable to fall and less capable of ornamentation. Figs. 2 and 3 of the patent show a special means for pivoting the panels to the upper and lower connecting bars respectively, which, according to the last clause of the specification, would seem to have been designed to affect in a particular way the relative movements of the panels; but nothing is made of this feature of construction in the claim, unless it be by force of the words "substantially as set forth," and that is not asserted by counsel for the appellant. If it were, the proof of infringement would fail. On the contrary, the position of counsel for the appellant is, and it is not understood to be disputed, that the claim covers any form of pivotal connection between the crosspieces of the middle panel and the adjacent standards of the rigid panels. Proceeding on that assumption, we are not able to see, even if the prior art, except as it is disclosed in the patent, be disregarded, that there is invention in the conception and making of a screen of three panels out of two panels of the old style joined by means of crosspieces pivoted in any of the known modes. It needs only to take an old-fashioned screen of three panels hinged together and cut away from the middle panel those portions of the sides or standards between the hinges; and, if the hinges are in line with the crosspieces, the portions above and below the hinges may also be removed, unless permitted to remain for the purpose of ornamentation. In either case the result is the construction shown in the patent. Under ordinary circumstances, the removal of surplus material or needless parts of a physical structure, without changing the relation, connection, or operation of the essential elements, cannot be invention, and it certainly could not be to make the change suggested in the old forms of screens, though with the result of dispensing with two of the six standards before employed, and producing a screen capable at once of standing by its own strength and of adjusting itself to irregularities of surface; and if, for sake of economy or of elegance of appearance, it was desirable to dispense with the hinges commonly in use, available substitutes were not unknown or difficult to find. Changes equally simple, and perhaps more obvious, in many of the devices of the prior art, would bring them explicitly under the terms of the claim in question. In the clothes drier of Bassett—patent No. 127,948, issued June 18, 1872—a construction in exact conformity with the claim is shown. The space between the rigid panels, it is true, is narrow,—the drawing shows about one-fifteenth of the width given to the panels,—and the connecting bars are called hinges, but they are in truth bars, with clips at either end, designed to be bent into grooves around the standards, and need only to be lengthened to produce the full-sized inner panel. The patent of Brigham, No. 110,952, dated January 17, 1871, shows a clothes drier of two rigid panels connected by pivoted crossbars, and with slight alterations, which any mechanic could make without affecting materially the relation of the parts, it needs

only to be stood on end to be the counterpart of Campbell's construction. In the Hurd patent, No. 185,927, issued January 2, 1877, which is also for a clothes drier, there is a rigid panel, and pivoted upon one of its side pieces, or standards, is a second panel, and, if the second panel were pivoted to another rigid panel upon the other side, and the intermediate bars, useful in a clothes drier, but needless in a screen, removed, the exemplification of the claim in question would be complete. Only the framework of the screen is covered by the patent, and the analogy between the frames of clothes driers and screens is evident. Campbell is shown to have been familiar with the construction and actual manufacture of both. But some of the earlier patents in evidence are for fire screens; for instance, that of Carey and Carey, No. 421,383, issued February 18, 1890, and that of Broughton, No. 425,290, of April 8, 1890. The latter may not in itself be an anticipation, because not issued until after the screens of the patent had been manufactured; but it is shown that screens of the same form had long been in use. It is composed of three rigid panels, connected by straps, which need only to be lengthened, as in the case of Bassett's clothes drier, to produce the third or central panel of the patent in suit. Fig. 3 of the Carey and Carey patent shows a screen of two panels, one of which is rigid and the other has its crossbars joined rigidly at one end to a standard and pivoted at the other end to one of the standards of the first panel. A third panel, like the second, and pivoted to its side, it is conceded, might be added without invention; and it is equally clear that without invention the crossbars of the second panel could be pivoted at both ends, and the third panel made rigid. Any mechanic would do it whenever presented with a reason or motive for doing it. He would need to devise or invent nothing, but simply to duplicate on the right of the second panel what he had before him on the left of it.

Many pages of brief and of expert testimony have been devoted to immaterial differences between the device in question and the constructions of the earlier patents, but, as we have had occasion to remark before, it is more important to observe what are the features of essential identity between devices than to descant upon those which are merely accidental, and might be substituted one for another, or entirely removed, without disturbing the relation of parts or the principles of construction or operation. *Temple Pump Co. v. Goss Pump & Rubber Bucket Manuf'g Co.*, 18 U. S. App. 229, 7 C. C. A. 174, 58 Fed. 196; *De La Vergne Bottle & Seal Co. v. Valentine Blatz Brewing Co.*, 14 C. C. A. 77, 84, 66 Fed. 765.

The decree of the circuit court is affirmed.

## INMAN MANUF'G CO. v. BEACH.

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

## PATENTS—VALIDITY AND INFRINGEMENT—BOX MACHINES.

The Beach reissue, No. 11,167 (original No. 447,225), for improvements in machines for attaching stays to the corners of boxes, held valid and infringed both as to claims 1, 2, and 3, which cover broadly every device for affixing stay strips to the outside of box corners by the combined action of a feeding mechanism, a cutting mechanism, and a pasting mechanism, in combination with any opposing clamping dies whose faces diverge, and also as to claims 4, 5, and 7, which have the same combinations, with the added element of a turning-in feature, and contemplate the affixing of the stay strip to both the outside and the inside of the box corner. 63 Fed. 597, affirmed.

Appeal from the Circuit Court of the United States for the Northern District of New York.

This is an appeal from an interlocutory decree of the circuit court, Northern district of New York, November 13, 1894, enjoining defendants (appellants), Horace Inman, John Warner, and A. A. De Forrest, trading together as copartners under the name of Inman Manufacturing Company, from infringing claims 1, 2, 3, 4, 5, and 7 of complainant's patent, reissue No. 11,167, dated May 26, 1891, for "improvements in machines for attaching stays to the corners of boxes."

Edmund Wetmore, W. A. Redding, and A. W. Kiddle, for appellants.

John Dane, Jr., for appellee.

Before WALLACE, LACOMBE, and SHIPMAN, Circuit Judges.

LACOMBE, Circuit Judge. The complainant, who is the inventor, filed his application June 10, 1885. Interference in the patent office delayed the issue of the patent (No. 447,225) until February 24, 1891. The reissue, No. 11,167, May 26, 1891, differs from the original only by the correction of an error in the drawings.

The specification states that:

"It has been customary heretofore in making paper or strawboard boxes to apply a stay or fastening strip over the joints at the corners of boxes, which strip is pasted down on the outside of the box, or is folded over the edge of the box, and is secured by paste both outside and inside of the corner, and such work, as far as I am aware, has heretofore been done by hand. My invention relates to a machine for doing this work."

The specification then goes on to describe the machine in connection with the drawings. Its essential features are as follows: To a frame of suitable form there is affixed a block, B, having two oblique faces on its upper surface, upon which the inside of the corner of the box is to be placed. Above this block, B, there is located a vertically reciprocating plunger, G, with a die at its end having divergent faces, so arranged as to engage surface to surface with the divergent faces of the block when the plunger descends. Thus, when in operation, the block fits into the inside of the box corner, and the plunger die fits over the outside of the same. Suitable shaft-