

discover any importance in this difference, so far as respects the question involved. He thinks the jacket performs functions in the pneumatic system which it does not in the electric. If it does, this is not the result of any difference in the nature or character of the jacket, or the manner of its use, or of any merit in the complainant's work. If there is a difference in the functions performed it results alone from the difference in the nature of the conductors employed in the two systems. We are not satisfied, however, that the alleged difference exists. It seems to us that in both systems, the jacket performs the same service. The wires as well as the tubes, are liable to kink, tangle, stretch and break. There may be a difference in degree as respects the liability to stretch and break; but this is unimportant. Wire has, of course, a greater tensile strength than rubber, but all experience demonstrates that it will stretch and break, even by its own weight, when not properly supported. It is quite as liable to kink and tangle as rubber. It is indisputably clear, however, that the main purpose and effect of the jacket in the one system and the other are the same; and however much one may dilate upon the characterizing differences of the two systems, the fact remains that all the patentee did was to apply the old conductor coverings, long used upon the electric elevator signal, to the pneumatic signal, for the same general purpose. It follows that the bill must be dismissed.

MAHON *et al.* v. MCGUIRE MANUF'G CO. *et al.*

(Circuit Court, N. D. Illinois. May 2, 1892.)

PATENTS FOR INVENTIONS—BENDING BLOCK—PATENTABLE INVENTION.

Letters patent No. 337,006, issued March 2, 1885, to David C. Mahon and others, for a "bending block," consisting of a block or former adapted to the bending or shaping of the loop in guide rods for grain-car doors, are void for want of patentable invention.

In Equity.

Bill by David C. Mahon and others against the McGuire Manufacturing Company and William A. McGuire.

F. W. Parker, for complainants.

West & Bond, for defendants.

BLODGETT, J. This is a bill for an injunction and accounting by reason of the alleged infringement of patent No. 337,006, granted to complainants March 2, 1885, for a "bending block." The patent shows a block or former adapted to the bending or shaping of a portion of the guide rods called for by the patent granted William McGuire and Frank Jaeger, June 3, 1884, and December 1, 1885, for a "grain-car door." The guide rod called for by the McGuire and Jaeger patents is made of round rod iron, about three quarters of an inch to an inch in diameter,

and has a peculiarly shaped loop at the upper end, and the work of forming this loop on an ordinary blacksmith's anvil added quite considerably to the cost of the door. The device covered by this patent is a forming block, over which a part of the iron rod is bent to complete the loop. The peculiarity of this forming block is a J-shaped groove, which receives the iron rod as it has been shaped on the anvil, and the end of the rod is then bent round a nose or projection of the former to give it the required shape, and the end is then bent sideways and flattened by blows from the hammer to adapt it to be fastened to the car with facility. The patent contains four claims, all of which defendants are charged with infringing:

"(1) A bending block or former adapted to receive or hold (at the curvature of the iron) an iron, e'' , e''' , having a curvature, e' , the said block also having a part formed approximately like the curvature, c , of the said iron, in combination with a pin or lug arranged for contact with the said iron in the angle at the junction of the part, e''' , with the flattened portion, c' , substantially as and for the purpose specified. (2) A bending block or former having thereon one or more projecting parts, g, g , formed substantially as shown and described, and one or more projecting parts, h, h , arranged substantially as shown, with relation to the part or parts, g, g , in combination with one or more pins or lugs, F, F , for the purposes set forth. (3) A bending block or former having thereon one or more beveled or tapering projecting parts, g, g , and one or more beveled or tapering projecting parts, h, h , in combination with one or more pins or lugs, F, F , the said parts, h and g , being tapering or smallest at their outer ends or faces, all arranged substantially as shown and described, with relation to each other, for the purposes set forth. (4) A bending block or former having thereon one or more diagonal or inclined blocks, E, E , and also having upon one or both ends projecting parts, g, g and h, h , both arranged substantially as shown and described, in combination with one or more pins, F, F , for the purposes set forth."

The defenses are: (1) Want of patentable novelty; (2) noninfringement.

In addition to the common knowledge, which might be enough, the proof shows that long before this patent, it was old to give shapes to rods or bars of wood or metal by bending them about a pattern or former; Mr. Barnes, who was called as an expert witness for the defendants, saying:

"By 'bending blocks' I understand is meant what is technically called a 'former,' a former being a block, frame, or mass of wood or metal which has a contour, groove, or surface which either has the same, or approximately the same, general shape, outline, or alignment as the work to be produced. Such formers, and formers in general, have been commonly used since the earliest history of metallurgy. Some of the most complicated formers were used several hundred years since in forming ornamental iron work, a class of work which is at this day performed more commonly in drop presses and dies. Probably the largest use for formers is in bending pipes of copper or iron after filling them with rosin or sand for the connections required in ships and on locomotives; also in the formation of hand railings and ornamental pipe work. Such formers have a contour or shape, either in grooves or sections of grooves, formed by stops either loose or fixed on the formers, the alignment of which corresponds in a general sort of way to the alignment of the work to be produced. In carriage work, in order to obtain duplication

and symmetry, it is absolutely necessary to use such formers—sometimes several of them—to produce one piece. It is not uncommon, however, to produce most complicated forms from common rolled iron by means of a former, having first prepared the metal, if necessary, to more readily assume some particular complex shape. Such formers are not necessarily arranged to bend metals only in one plane, as conical spirals and other forms lying in several planes are often produced in this way. This is often done in preparing pipes for distilleries, and in the manufacture of conical springs.”

This testimony is corroborated by that of several practical mechanics in the record, and it may be also said to be a matter of common knowledge that formers have been used from time immemorial to bend various farm implements, like scyth snaths, plow handles, etc. It will be borne in mind that these patentees did not invent the guide rod nor the loop upon it; the only device of their patent being a former, about the end or horn of which the loop of the rod is bent. It seems to me nothing can be more obvious than that only mechanical skill is called into action in making a core or former around which an iron rod is to be bent to bring it to some desired shape. The shoemaker bends his leather around the last to adapt it to the shape of the wearer's foot. The farmer bends a tough, flexible piece of wood around a former shaped like the neck of his ox, to make an oxbow for his yoke. The thills and other parts of vehicles are shaped by bending over formers. In 1 Appl. Mech. Dict. (66th Ed. p. 701, tit. “Bending,”) is a description of the mode of forming the links for ship cables by bending them round an oval former. The simple problem is to make a form which shall give the required shape to the rod of iron or wood to be bent around it. It may, in some cases, require a superior order of mechanical skill to make a former which shall hold one portion of the iron rod in place while the other portion is bent round the forming core, as in the case of these guide rods. One part of this loop, it appears, must be formed by the smith with the hammer upon a plain anvil. This being done, the patentee cut a groove in an iron block of such shape as to receive the rod, with the part already made with the hammer, and the portion placed in this groove is held very firmly, while the end to be operated upon is bent round the nose or end of the block which projects beyond this groove. Clearly, only the skill to cut this groove and shape the nose or end of the block to give the required shape to the loop was called for to make this former.

These patentees are intelligent men, well skilled in their art and trade as blacksmiths. They knew, from experience, that it was old to bend iron over a former like a mandrel or the horn of an anvil to give it the desired shape, and the problem presented them was to make a former which would give a final shape to the loop of this guide rod, and thereby cheapen its construction. They knew all they had to do to accomplish this was to make a forming block which would hold the partly formed loop in the shape it had received from the hammer, while the rest of the loop was completed by bending the rest of the rod round the former, and their efforts in that direction resulted in the bending block of the patent. Other persons working at the same problem made devices which the testimony shows would do the work, that is, give the

required shape to the end of the rod, but they were not as good working blocks as that made by these patentees.

It is urged in behalf of complainants that the fact that these other persons failed, or did not succeed as well as these patentees in producing a former for the purpose, shows that the device involved invention. But it seems to me the failure resulted from want of skill. In *Butler v. Steckel*, 137 U. S. 21, 11 Sup. Ct. Rep. 25, it was held that it does not require invention to produce a former or die when the former is old; the court saying:

"It is true, I doubt not, that it required considerable mechanical skill to make a die which would cut a bretzel from dough so as to imitate a hand-made bretzel, because the hand-made bretzel is somewhat clumsily shaped, as the parts are bent, twisted, and laid upon each other; and it was undoubtedly a matter requiring some study, effort, and experiment to make the shape of the die correspond to the external formation of the bretzel. This, however, seems to me not to involve invention, but mere mechanical skill. A cutter might be compelled to experiment some,—that is, cut several dies,—but that is not invention."

And the same principle is announced in *Peters v. Manufacturing Co.*, 130 U. S. 626, 9 Sup. Ct. Rep. 643; in *Pennsylvania Railroad Co. v. Locomotive Engine Safety Truck Co.*, 110 U. S. 494, 4 Sup. Ct. Rep. 220; and in *Florsheim v. Schilling*, 137 U. S. 64, 11 Sup. Ct. Rep. 20,—it is held not to involve invention to so change old devices as to adapt them to similar or analogous operations; and in *Burt v. Ivory*, 133 U. S. 349, 10 Sup. Ct. Rep. 394, it is said: "Neither is it invention to combine old devices into a new article without producing any new mode of operation."

With the view I take as to the question of patentability of this device, I do not deem it necessary to consider the question of infringement, although I may say that as the pins or lugs, F, F, are elements of all the claims of complainants' patent, and as defendants do not use these pins, I doubt if the charge of infringement is sustained, as it is necessary to the working of the complainants' machine that the pins shall be removable; and hence the raised portion of defendants' block around which the part to be flattened is bent does not perform the same office in the defendants' machine that is performed by the pins, F, F, in the complainants' machine; and certainly, if a patent can be sustained at all for such a device as this, it must be for the specific construction. I do not, however, intend to dispose of the case on the question of noninfringement, but, as that question is distinctly made in the pleadings and proof, it is but just, at least, that I shall intimate my views upon it. The bill must be dismissed for want of equity.

NORTHROP'S EX'RS v. RASNER *et al.*

(Circuit Court of Appeals, Third Circuit. August 16, 1892.)

1. PATENTS FOR INVENTIONS—LIMITATION OF CLAIMS—PRIOR ART—METALLIC CEILINGS.

Letters patent No. 330,916, issued November 24, 1885, to Albert Northrop, for an improvement in metallic ceilings, if valid at all, must, in view of the prior state of the art, be limited to a ceiling made of panels, in which the chief characteristics are (1) the formation on two or more sides of the panels by means of molded edges which fit into each other, of a channel along which leakage water may flow and be discharged at orifices made by cutting away the corners of the panels, the orifices being concealed by rosettes so constructed as to aid in discharging the water; and (2) the widening of alternate sides of each panel into flanged edges, which lie loosely upon each other, so as to allow expansion and contraction by heat and cold. 48 Fed. Rep. 449, affirmed.

2. SAME—INFRINGEMENT.

The patent is therefore not infringed by ceilings made of metallic panels generally having partially raised surfaces surrounded by moldings gradually flattening out into flat edges, which are nailed rigidly to the furring strips, such moldings forming no continuous channel for the discharge of water, and each panel having rosettes at the corners, which serve the purpose of ornaments only. 48 Fed. Rep. 449, affirmed.

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

In Equity. Suit by the executors of Albert Northrop against Rasner & Dinger for infringement of patent. The circuit court sustained the patent, but held that it must be strictly construed, and that defendants did not infringe it, and therefore dismissed the bill. 48 Fed. Rep. 449. Complainants appeal. Affirmed.

W. Bakewell & Sons, for appellants.

D. F. Patterson, for appellees.

Before *ACHESON* and *DALLAS*, Circuit Judges, and *GREEN*, District Judge.

GREEN, District Judge. The bill of complaint in this cause alleges infringement of letters patent No. 330,916, which were granted to the complainants' testator, Albert Northrop, November 24, 1885, for an improvement in metallic ceilings. The object of the invention, as declared by the inventor, was to provide a sectional metallic ceiling of such construction that it should be of small initial cost in its manufacture; that it might be readily applied; that it would present a neat and finished appearance; and, further, that it would provide for the escape of any water that might flow upon the upper surface of the ceiling by reason of a leaky roof or defective water pipe in the ceiling, or other cause. With these objects in view, the inventor declared that his invention consisted in certain features of construction and relative arrangement and combination of parts, as he set forth and described in the specifications of the letters patent. The ceiling which it was intended to protect by these letters patent is composed of a series of panels, joined together. Each panel is constructed with a molding on each one of its sides, which is so curved as to form a channel. As the moldings are counterparts of each other, the molding on the edge of one panel will fit within the