or put in operation. All the witnesses agree that the fan must be run at a very high rate of speed—not less than five or six hundred revolutions per minute—to make it effective as an air exhaust. The English machine, if operative, is primarily a chop or meal cooler; the complainant's, a bolter, and not possibly a cooler. English machine requires an interior perforated drum; the complainant's, a closed drum. The blades on the English machine are not continuous. They cover only about three-fifths the length The complainant's blades extend the entire length of the drum. of the drum, and must be continuous. The English machine shows disintegrator pins projecting inwardly from the cloth cylinder in the spaces between the ends of the blades, and calls for hollow gudgeons at each end of the perforated drum. It has no feed spout, or other means for supplying materials; nor does it show, nor is there suggested, any means for taking off the bran and offal. construction is such as to permit dust and fine flour to pass into the inner perforated drum, and be exhausted through the fan, and In all these, as well as in other, respects, it differs from the complainant's machine. The testimony is that these differences are material, and the fact is that, although defendants, called to account as infringers of complainant's patent, may be fertile in suggestions of how the English patent might be so modified and reconstructed and adapted as to amount to an anticipation, to one looking forward, and having no knowledge of complainant's machine, it would not suggest the slightest conception of the great improvement embodied in that machine. The English patent cannot be recognized as an anticipation. In the opinion of the court the complainant's patent is valid. The evidence clearly establishes that the defendants' machine is an infringement.

The decree will be for the complainant, with costs.

CURTIS v. ATLANTA ST. R. CO.

(Circuit Court, N. D. Georgia. December 17, 1892.)

Patents for Inventions—Infringement—Street-Railroad Chairs.

Letters patent No. 312,259, granted February 17, 1885, to Benjamin F. Curtis, were for a street-railroad chair, constructed of cast iron. The top was provided with a cheek at one end, having an inwardly projecting flange extending over the foot of the rail, and a short cheek, without a flange, at the other end. The flange clamped the foot of the rail, and the other cheek prevented the rail from slipping from its place. All chairs were cast alike, but were placed on opposite ends of the ties, in reversed positions, and were spiked to the ties. Held that, in view of the prior state of the art, this was not infringed by letters patent No. 316,995, granted May 5, 1885, to A. J. Moxham, for a wrought or forged metal chair of a box form, having diagonal lugs formed by cutting the metal, and shaping it in dies to fit the edge of the flanges of the largest sized rails, so that by skewing the chair the lugs would be made to clamp, and securely hold, the lighter and smaller rails.

In Equity. Suit by Benjamin F. Curtis against the Atlanta Street-Railroad Company for the infringement of letters patent No. 312,259, issued February 17, 1885, to Benjamin F. Curtis, for a "street-railroad chair." The alleged infringing chair was

made under letters patent No. 316,995, issued May 5, 1885, to A. J. Moxham, for a "rolled or forged metal chair for railroads." Decree for defendant.

Mayson & Hill, for complainant. Calhoun, King & Spaulding, for defendant.

NEWMAN, District Judge. This is a case of an alleged infringement of a patent for what is known as a "street-railroad chair." Speaking in general terms, the purpose of what is called a "street-railroad chair" is to elevate the rail on which the car runs above the cross-tie so as to make the paving blocks come flush with the rail, to permit of lowering the ties, and to do away with the old wooden stringer which was formerly used. A patent was granted to Curtis, the complaining party, February 17, 1885, on an application filed July 10, 1884; and the patent which is attacked in this proceeding as an infringement thereof was granted to one Moxham, May 5, 1885, on an application filed January 19, 1885. Moxham's claim appears as follows:

"(1) To provide a chair for railroad rails of varying heights, and wide base of little comparative weight. Chair to be rolled or forged metal. Chair to be spiked to cross-ties. (2) Chair to be of box form, constructed of rolled or forged metal, with diagonal lugs, formed as follows: Lips are first formed by cutting through or parting the metal in two lines at right angles. Said lips are then forced out into a die, and so shaped therein as to fit the two edges of the flanges of the rail. In thus forming the lugs, they are punched out without any loss or displacement of the metal. It being difficult, if not impossible, to obtain any one positive measurement or shape of lug to fit the flanges of rails to be used, the reason being that said flanges are seldom, if ever, exactly similar, the lips or lugs of ordinary chairs are made of full size,—that is, to fit the largest flanges,—and hence slip loosely over the smaller or lighter ones; also, being of wrought iron, less liable to injury from sledge hammers, when driving up the spikes, than a casting."

The claim of Curtis, as contained in his application, is in the following language:

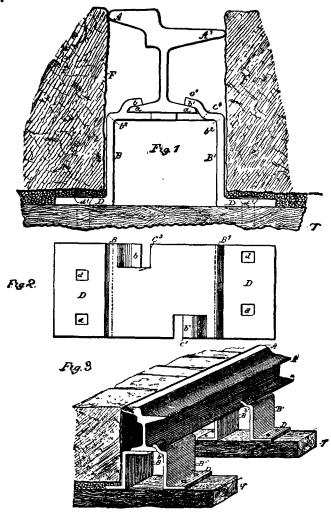
"(1) For the construction of a street-railroad chair, having for its object to provide a rail chair that will securely hold the track rails of a street railroad in place without the use of wooden stringers. (2) Chair to be constructed of cast iron. Top of the chair is provided with a cheek at one end, having an inwardly projecting flange which extends over the foot of the rail. The other end has a short cheek provided with vertical inner face, without flange. The flanged cheek clamps the foot of the rail, and the cheek prevents rail from slipping from its place. Chairs cast all alike, but placed on the ties in position, one the reverse of the other, i. e. cheeks having flanges will be outside of track rails, or furthest from each other. Chairs to be spiked to the ties."

In order to understand the improvement for which Curtis was allowed a patent it is necessary to examine what is known as the "Johnson Patent," the application for which was filed June 2, 1884, and patent allowed May 26, 1885. This application, it will be seen, was filed before either the Curtis or Moxham application. The Johnson claim is as follows:

"(1) To provide a rail chair for railroad rails, which shall be readily fitted to the bottom flanges of the rails at any points in their lengths. Chairs to be spiked to ordinary cross-ties. Principally designed for street-railroad tracks. Serves the purpose of permitting the sinking of the cross-ties to any desired depth below the surface of the street. (2) Invention consists of a

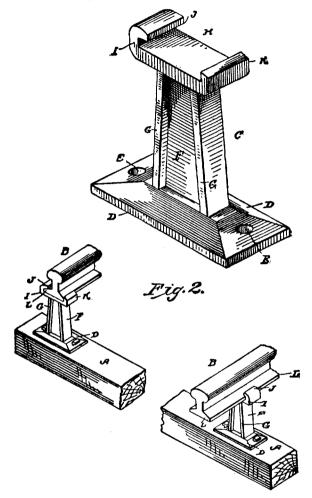
cast-iron or other cast-metal chair. Chair to have lugs placed diagonally upon its seat. Chair to be placed upon rail at any point, and skewed around until a perfect lock is made of the flanges of the rail under the lugs of the chair."

It will be perceived that the difference between the Moxham and the Curtis claims is that the Moxham chair is to be of box form, constructed of rolled or forged metal with diagonal lugs. These two lugs are so arranged as to grasp the flange of the rail on either side, and also so arranged that the rail can be laid across it diagonally, and then turned so as to make a perfect fit, and be held securely, or the chair itself may be turned so as to secure the same results.



In the Curtis claim there is only one lug or flange, (both expressions seem to be used for the same contrivance,) while on the other

end of the chair there is what is called a "cheek," and the manner of its use is to place the chairs on opposite ends of the cross-ties, and reversed in their position.



The improvement in the Moxham patent was in having a thin plate of wrought iron, which could be pressed into the proper shape, and then lugs cut out, and pressed into position, as described in the claim; and it is an improvement over the Curtis chair, in that it has two lugs which clamp the flange of the rails on both sides, and hold it squarely in position. An examination of the Moxham chair, one of which has been brought into court as an exhibit, (as well as one of the Johnson and Curtis chairs,) shows very clearly the advantage of the Moxham chair as to lightness and availibility for easy use, as well as simplicity of its construction; the same being of wrought iron, in-

stead of a casting, and therefore not liable to break if inadvertently stricken when driving up the spikes. It is contended, in addition to this, and with apparent right, that it is so constructed as to make it easy to pave up to, as there is no projection except the lower portion, which is attached to the tie, which is more clearly understood by reference to a cut accompanying the application. The Johnson patent has two lugs so arranged as to clasp the flange of the rail on either side, and, so far as this feature of the chair is concerned, the Moxham chair could with more reason be claimed to be an infringement of the Johnson patent than that of Curtis. It seems perfectly clear that there is no infringement whatever by the Moxham chair of any improvement which Curtis made on the Johnson chair.

It is claimed on behalf of Curtis that his chair was in actual use on the street railroads in Atlanta before the application for the Johnson patent was filed, and that under the law he has priority, notwithstanding the Johnson application was filed first, Curtis having applied within two years. The evidence does not support this claim. At the most the evidence on this subject is uncertain. The evidence as to former use ought, undoubtedly, to be clear and convincing, and such is not the case here.

Under the authorities, Curtis must be held to the claim of improvement contained in his application, (see Keystone Bridge Co. v. Phoenix Iron Co., 95 U. S. 274; White v. Dunbar, 119 U. S. 47, 7 Sup. Ct. Rep. 72; Bragg v. Fitch, 121 U. S. 478, 7 Sup. Ct. Rep. 978;) and so considering it, in connection with the Moxham claim, and with the light thrown on both by the claim in Johnson's application, it is evident that there is no infringement of the Curtis patent by the Moxham patent.

There must be a decree for defendant, with costs.

HANLON v. PRIMROSE et al.

(Circuit Court, S. D. New York. May 25, 1893.)

1. Patents for Inventions—Suit for Infringement—Demurrer for Want of Patentability.

On demurrer to a bill for infringement the patent will be declared invalid, for want of novelty appearing on its face, only where the case is free from doubt; and the court will only take judicial notice of matters within the field of common knowledge.

2. Same—Novelty—Devices for Producing Stage Effects.

Letters patent No. 263,900, issued September 5, 1892, to William Hanlon, covering devices for producing stage effects, consisting of a stationary frame, representing a ship on rockers, so arranged, in combination with sliding wings, curtains, and other contrivances, as to present the illusion of a ship moving out of a dock into rough water, and putting to sea, are not void, on their face, for want of patentable novelty.

8. Same—Pleading—Demurrer.

In a bill for infringement the omission to aver that the invention had not been patented or described in any printed publication in this or any foreign country before the date of the invention is a defect of form, which may be taken advantage of by special demurrer.