able, if they are of an inventive character. The necessities of the new underrunning trolley system called for the improvement, but the idea of pivoting the contact arm to a rotating support, to which the spring is also attached, rather than to the car, must have been within the capacity of the ordinary mental equipment of the skilled mechanic. A railroad turntable, or a rotating office chair with a tension-spring attachment, did not probably tell the inventor how to make his rotating support. These are simply instances of the widespread character of pivoted and rotating supports; and when Van Depoele had advanced to the point in his improvement where he said, "I must advance another step, and make the contact arm freely rotate," the universality of mechanism of this sort made the mechanical task an easy one. It follows that the conclusions which Judge Townsend reached are confirmed, and that the bill should be dismissed, with costs.

WESTINGHOUSE AIR-BRAKE CO. v. NEW YORK AIR-BRAKE CO. et al. (Circuit Court, S. D. New York. May 9, 1898.)

1. Patents—Construction of Claims—Prior Art.

The Dixon patent, No. 382,032, for improvements in air brakes, which describes in claims 3 and 5 a modification of the prior Westinghouse patents (Nos. 360,070 and 376,837), consisting in dispensing with the passage from the train pipe and brake cylinder, and locally venting the train pipe directly to the atmosphere; and, if these claims are not void for want of novelty, they are yet technical, rather than valuable, ones, and should not be extended by construction beyond their literal import.

SAME.
 The Westinghouse patent, No. 538,001, for improvements in air brakes, construed, and held not infringed.

This was a suit in equity by the Westinghouse Air-Brake Company against the New York Air-Brake Company and others for alleged infringement of certain patents for improvements in air brakes.

George H. Christy and Fredk, H. Betts, for complainants. Fredk. P. Fish and Charles Neave, for defendants.

WALLACE, Circuit Judge. The patents upon which this suit is founded are for improvements in air brakes, infringement being alleged of claims 3 and 5 of letters patent No. 382,032, granted May 1, 1888, to Theron S. E. Dixon, and of claims 5 and 6 of letters patent No. 538,001, granted April 23, 1895, to George Westinghouse, Jr.

The patent of Dixon, so far as it is found in the two claims in controversy, describes a modification of the automatic air brake of the prior patents to George Westinghouse, Jr., Nos. 360,070 and 376,837, which consists "in cutting off and dispensing with the passage from the train pipe and brake cylinder, and locally venting the train pipe directly to the atmosphere through a passage or port." Westinghouse vented his train pipe into the brake cylinder.

Whatever theoretical advantages may reside in the modification, the improvements have not been of sufficient practical value to displace the Westinghouse brake, and those which are the subject of the two claims are of no commercial value.

What was done by Dixon was to interrupt the passage in the West-

inghouse brake, and is thus described by him in his specification: "I cut off and dispense with all communication between the train pipe and the brake cylinder, and in lieu thereof provide an open air port, H, through which, when the local discharge is taking place, the air will vent from the train pipe directly." H is a passage opened by a quick-action vent valve, just as the passage in the Westinghouse brake is opened by his quick-action vent valve, viz. by the impact of the triple-valve piston at the extreme end of its traverse. As illustrated in the drawings, there is a poppet valve in the passage, H, which is pushed out of the way by the train-pipe air ad-

mitted by the quick-action vent valve.

Dixon was not the first to effect a local discharge in automatic air brakes by venting them to the atmosphere, but he was the first to conceive the utility of doing so in the way in which he did it, and of modifying the organization of the Westinghouse brake to that extent. Local venting of train pipes was old in the air-brake art. was perfectly well known that a quick serial application of the brakes throughout a train of cars could be effected in an automatic air-brake system by venting the train pipe at each car to the atmos-Westinghouse himself, in one of his earlier patents,—No. 217,838,—had pointed this out, and had devised a crude arrangement of devices to accomplish it. He concluded that it was desirable to vent the train pipe into the brake cylinder, and thus utilize the air, which would be wasted if vented to the atmosphere, to assist in charging the brake cylinder and actuating the brakes; and for this purpose devised the apparatus of No. 360,070, subsequently improved by the mechanism of No. 376,837. Dixon conceived that in such an apparatus the vent from the train pipe would not be as rapid or complete as it would be into the atmosphere, and accordingly modified the mechanism of the apparatus of Westinghouse. His change may have accelerated the serial brake action in emergency applications, but it did so at the expense of the advantage introduced by Westinghouse of actuating the brakes in part by direct train pressure.

In the Dixon air brake it is of the utmost importance that when the train-pipe vent has once been opened it shall promptly close after releasing a small quantity of the train-pipe air to the atmosphere, not only to prevent an unnecessary waste of air, but especially to enable the brakes to be released. As is stated by one of the expert witnesses for the complainant, any organization which is not provided with means for doing this "would be a practically inoperative device in an automatic air-brake system," and would be "a complete failure." The inventions specified in claims 3 and 5 do not include

these means.

It is difficult to escape the conclusion that any competent mechanic skilled in the air-brake art could easily, and without the exercise of any inventive faculty, change the Westinghouse brake of patents Nos. 360,070 and 376,837 by opening a vent to the atmosphere in the air passage from the train pipe to the brake cylinder, either by the method of Dixon or by other methods equally available. In Westinghouse's certificate of addition of February 11, 1888, to his French patent of March 29, 1887, he shows how this can

be done by an "unimportant change" in the slide valve of No. 360,070. If the claims are not void for want of patentable novelty, the defendants are entitled to prevail upon the issue of infringement. In any view of the facts, Dixon was not a pioneer, but was merely an improver upon the prior mechanism of Westinghouse, not alone for accomplishing the same general result, but also for effecting the specific result of locally venting the train pipe to the open air in an automatic air brake. If the claims cover inventions, they are technical, rather than valuable, ones, and ought not to receive a liberality of interpretation which will extend them beyond their literal import.

The claims themselves recognize the limitations imposed upon the scope of the patent by the prior art. The specification contemplates the use of a piston so constructed as to have two strokes, and which moves through a preliminary traverse upon a service application of the brakes, and a supplementary or final traverse for an emergency application, and completes the service application upon the primary traverse, and before entering upon its emergency traverse. This piston is an element of both claims. In the mechanism of the defendants the piston has but one stroke, making a single traverse

for both service and emergency application of the brakes.

The third claim recites as one of its elements "a valve which opens said passage when the main valve-operating piston opens the emergency port," viz. when communication between the auxiliary reservoir and the brake cylinder is open. In the mechanism of the defendants the valve (71) that opens the vent passage is opened at or near the first part of the stroke of the triple-valve piston, and before any communication between the auxiliary reservoir and the brake cylinder is established. The train pipe is thereby vented to the atmosphere upon service applications as well as upon emergency applications, and at the commencement of the operation of setting the brakes.

The fifth claim has as a constituent a vent valve which is "operated by the final movement of the piston. B, when applying the As has been said, the valve in the mechanism of the defendants is not operated by the final movement of the piston. piston lettered B in the drawings differs so materially from the piston in the mechanism of the defendants that the latter has been made the object of attack in the second patent in suit, in which the

claims were obviously prepared for that express purpose.

The second patent in suit—No. 538,001—is not infringed by the mechanism of the defendants unless the claims are given a construction not warranted by the specification. The application for that patent was pending in the patent office when the defendant the New York Air-Brake Company sent to the complainant certain blue prints of the air brake which it was about to manufacture and was manufacturing when this suit was brought. Thereafter the pending application was amended by inserting six new claims. The patent is, so far as these claims are concerned, a transparent attempt to appropriate a combination of which Mr. Massey was the

The valve mechanism described in the specification is such as is

adapted to be used in conjunction with the well-known form of triple valve in an air brake as an auxiliary means of venting the train pipe into the brake cylinder. It is arranged within a casing of the brake cylinder, and is actuated by the triple valve. The claims cannot be expanded to cover inventions not suggested by the specification.

The bill is dismissed, with costs.

## ST. LOUIS CAR-COUPLER CO. v. NATIONAL MALLEABLE CASTINGS CO.

(Circuit Court of Appeals, Sixth Circuit. March 8, 1898.)

No. 527.

- 1. Patents—Combinations—Implication as to Elements.

  Where all the claims are for combinations only, this implies that all the rest is old, or, at least, that the patentee does not claim the elements separately.
- 2. Same—Subsequent Patent—Presumption of Patentable Difference.

  The granting of a subsequent patent for a similar machine or device affords a presumption of a patentable difference between the two.
- 8. Same—Patentability of Combination.

  To sustain a patent for a combination each element of which is old, considered separately, there must be some peculiar combination of these elements, producing new and useful results.
- 4. Same—Automatic Car Couplers.

  The Lorraine and Aubin reissue, No. 10,941 (original, No. 369,195), for an automatic car coupler, which is intended as an improvement on couplers of the Janney or Master Car Builders' type, is only sustainable, if at all, by confining it to the precise form shown in the specifications and delineated in the drawings, and is not infringed by a coupler made in accordance with

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

the Tower patent, No. 541,446. 81 Fed. 706, affirmed.

The complainant below and appellant here is engaged in the manufacture and sale of an automatic car coupler, generally known as the "St. Louis Coupler," and made under and in accordance with reissued patent No. 10,941, dated June 26, 1888. The original patent was No. 369,195, dated August 30, 1887. Both the original and reissue were to Madison J. Lorraine and Charles T. Aubin. The object of the bill was to restrain an alleged infringement of said reissued patent by the defendant company, which is engaged in the manufacture and sale of a rival car coupler, under a patent to C. A. Tower of June 18, 1895, and numbered 541,446. This patent is for an improvement on the patent issued to the same patentee, June 5, 1894, and that was an improvement on the patent issued to the same patentee, October 24, 1893, No. 507,511. Upon a final hearing, before Taft, circuit judge, the bill of complainant was dismissed, upon the ground that the Tower device did not infringe the Lorraine and Aubin The opinion of the circuit court is reported in 81 Fed. 706. The defenses were noninfringement, invalidity of patent for want of novelty and patentable invention, and that the reissued patent is void for unlawful extensions of the claims of the original patent.

The character of the reissued patent to Lorraine and Aubin is thus stated in the specifications: "Our invention relates to that class of car couplings known as 'vertical plane,' and having a pivoted outwardly opening coupling head or clutch and an extended arm or buffer. The object of our invention is to provide a vertical plane coupling free from complicated parts, locking by means of a simple automatic gravity pin, requiring no adjusting and made in one piece; to provide a vertical plane coupling in which, when a coupling-head is unlocked and released, said coupling-head, by reason of its own weight,