tory. The Dueber collector was abandoned within a year. Defendants' expert only contended that it anticipated the claims of patent No. 403,362. The evidence submitted does not satisfactorily show that it so embodied the construction of the patent in suit as to perform its functions. The same may be said of the Wooster separator.

In view of the conclusions reached, I have refrained from discussing the construction of these devices, further than has seemed necessary in order to determine whether they are sufficient to relieve the defendants from a preliminary injunction under the rule.

It is further claimed that complainants have been guilty of laches in failing to prosecute a certain other suit on said patents, brought in 1891, in the circuit court for the Southern district of Ohio, and now pending therein, which is defended by said Lee. But the defendant therein only used a single dust collector, the character of which is disputed, and has discontinued its use; while these defendants are engaged in the business of selling and installing infringing collectors manufactured by said Lee, who defends this suit. It does not appear that, since the decision of Judge Grosscup sustaining the patents in suit, there has been any unreasonable delay in instituting this suit, or in asking for this preliminary injunction. In these circumstances, I think the complainants have the right to ask for this relief in this court, upon these adjudicated patents, irrespective of the condition of the other pending suit. The motion is granted.

HAY et al. v. S. F. HEATH CYCLE CO.

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

No. 255.

1. PATENTS—COMBINATIONS.
   When a combination is claimed, there arises an implied concession that the elements are old, and not separately patentable.
2. SAME—NEW RESULT—CHARACTER OF RESULT.
   In determining the patentability of a combination, the result to be taken into consideration is the immediate mechanical result of the device or combination.
3. SAME—INFLATING DEVICE FOR PNEUMATIC TIRES.
   The Johnson patent, No. 509,224, for an inflating device for pneumatic tires, covers a combination of but two elements, the clamp and the hose described, and is void because of anticipation. 67 Fed. 246, reversed.

Appeal from the Circuit Court of the United States for the District of Indiana.

This was a bill in equity by the S. F. Heath Cycle Company against Thomas Hay and V. B. Willets for alleged infringement of a patent for a device for inflating pneumatic tires. In the circuit court the patent was sustained, infringement declared, and a decree entered for complainants accordingly. 67 Fed. 246. The defendants appeal.

This is a suit for damages and to enjoin infringement of letters patent of the United States No. 509,224, for an "inflating device for pneumatic tires," issued October 24, 1893, to Hastings H. Johnson, assignor of the appellee. The re-

spondents (the appellants here) answered, denying invention and infringement, and setting up as anticipations the devices and inventions shown in letters No. 144, issued to Dexter Pierce, March 11, 1837; No. 2,537, to Thomas W. Harvey, April 6, 1842; No. 9,469, to A. C. and C. N. Clow, December 14, 1852; No. 20,298, to N. M. Phillips, May 18, 1858; No. 35,798, to Adoniram J. White, July 1, 1862; No. 46,295, to Anthony Clark, February 7, 1865; No. 80,770, to J. W. Russell, August 4, 1868; No. 143,907, to James P. Hyde, October 21, 1873; No. 183,408, to J. McGeorge, October 17, 1876; No. 193,721, to S. G. North and A. M. Norton, July 21, 1877; No. 210,716, to John Simpson, December 10, 1878; No. 318,091, to A. E. Dart, May 19, 1885; No. 396,625, to O. Thum, January 22, 1889; No. 411,708, to William B. Bradshaw, September 24, 1889; No. 413,392, to George J. Engert, October 22, 1889; and British patent No. 18,147, dated August 10, 1891, to William Hillman.

The following are the claims of the patent, which, with annexed drawings, corresponding to figures 2, 3, and 4, will be readily understood without the aid of quotations from the specifications: "(1) The combination, with an air-pump hose within the end of which the pneumatic tire nipple may be inserted, of means for compressing said hose about said nipple to form an air-tight joint between the tube, said means consisting in a loop, a follower, and a device for forcing in said follower, substantially as and for the purpose specified. (2) The combination with an air-pump hose wherein a pneumatic tire nipple may be inserted, of a loop surrounding said hose, a follower or gib adapted to operate within said loop, and a thumb screw arranged in the end of said loop pressing on the end of said gib, whereby said hose may be tightened on said nipple, substantially as and for the purpose specified."

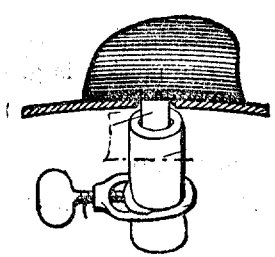

Fig. 2.

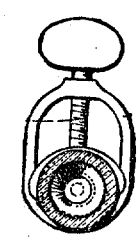

Fig. 3.

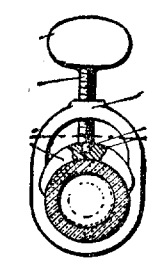

Fig. 4.

Chester Bradford (Harry Bowser, of counsel), for appellants.
A. C. Paul, for appellee.

Before WOODS, JENKINS, and SHOWALTER, Circuit Judges.

WOODS, Circuit Judge, after making the foregoing statement, delivered the opinion of the court.

There being no dispute here about infringement, the sole inquiry is whether the patent is invalid for lack of novelty. The claims, not differing essentially one from the other, are for a combination, but concerning the elements which compose it counsel and the experts seem not to be agreed. According to the testimony of the expert examined in behalf of the complainant the combination "includes an air pump and its hose, and a pneumatic tire and nipple, and mechanism for compressing the hose upon the nipple." This is manifestly erroneous. Two elements only are designated in the claims, namely,

the hose described and the means described for compressing the hose, the several parts of the compressing device being named as elements of the second claim. The hose is called "an air-pump hose," "wherein a pneumatic tire nipple may be inserted," but the pump and tire and nipple are not on that account to be read into the claims. This misconception pervades the testimony of the expert for the complainant, and especially his comparisons of the patent sued on with earlier patents. The hose couplings of the Clark and Thum patents, the lathe dogs of Phillips and of North and Norton, the pipe-vise of Bradshaw, and the snath holders of Clow and Simpson and Harvey, he seemed to think conclusively excluded from consideration, because they did not "show," "suggest," "mention, or hint at an air pump, hose, bicycle tire, or nipple." When asked what novelty there is in the device considered by itself, he answered "the shape of the follower, which enables it to compress the hose upon the nipple,"—a capacity, he added, "which is not found in the British patent or the 'choker' model, the nearest approaches to this clamping device."

When a combination is claimed, there arises an implied concession that the elements are old, and not separately patentable; and in this instance it is evident that the patentee did not understand that the novelty of his combination was to be found in the clamping mechanism. He asserts no such novelty in the specification, but, distinctly to the contrary, says: "The compressing device may be of various constructions, but that which I prefer, as least costly and most convenient, is shown to consist in an elongated loop," etc. Indeed, it is too plain to admit of discussion that the device shown, composed of a loop, a follower, or gib, and means, such as a thumb screw, for moving the follower, considered by itself, in the light of the prior art, contains no novelty even of form. In its physical parts, their order of arrangement and law of operation, it is completely anticipated by the various and familiar devices already mentioned. It is objected to the Clark hose clamp that it is heavy and unwieldy, but it is not invention to convert such a device into "a light, quick-acting, easily applied temporary fastening," capable of "being used in the confined space among the spokes of a bicycle wheel," without the aid of "wrench or screw-driver." The criticisms of the witness upon the hose clamp of the Thum patent are of the same character, and fail to touch the question of the mechanical identity of one device with the other. Of the lathe dogs or lathe-work holders of Phillips and of North and Norton it is said that they are intended to bite on opposite sides of the article to be held therein, and that, if used to compress a hose on a nipple, the joint between the opposite points of compression would leak; but, again, it obviously involves no invention to employ in such a device concave jaws, capable of compressing the hose equally at all points around the nipple, like the concave jaws of monkey wrenches which are used to grip and hold or turn the metallic pipes in common use as conduits of gas or water.

But still more striking and complete, even in appearance and in details of construction, is the anticipation found in the device shown

in the British patent of Hillman. It consists of a loop, a D-shaped follower fitted to the loop on the inside, and a thumb screw, by the turn of which the follower is moved one way or the other; and, like the device in question, it is used for the purpose of compressing a hose inserted within the loop. The sole difference is that the side of the follower next to the hose is convex, instead of concave, the design being to so compress the tube by turning the screw as to prevent any escape of the air or gas. The essential nature of this contrivance—its mechanical identity with the device of the patent—is not affected by the suggestion that it takes the place and performs the office of a valve. It is not a valve, and does not operate like one. It is a screw clamp, designed to compress a rubber tube, not about a nipple or inner tube, it is true, but so as to close the passage; and in the mode of adjustment, construction, and operation of its parts, except that the convex side of the follower impinges on the tube, it is identical with the device under consideration. It is a choker, and, as the opinion below states, "the choker devices are constructed and intended for use with the nipples of bicycle tires, and are used for the purpose of choking the nipple after the tire has been inflated, and thus preventing the escape of gas"; but while the opinion concedes the manifest truth, that, by changing the form of the follower, this device could be used in the combination of the patent in suit, it is added as a matter to be borne in mind "that the complainant is not claiming the clamping device alone, but is claiming it in connection with other elements, the entire combination producing a single unitary result, namely, the inflation of any bicycle tire." 67 Fed. 246, 250. If this proposition were conceded, the result accomplished, it is to be observed, was not new. The successful inflation of any and all bicycle tires had already been accomplished, and the means employed had been the same and in the same combination, excepting solely the difference between the earlier couplings and this clamping device. The passage quoted and other expressions in the opinion show that, in the judgment of the court, the combination of the claims included, besides the clamp and hose, the air pump, and perhaps the tire and nipple, as asserted by the expert and by counsel. If that were so, the unitary result of inflating any bicycle tire might be said to have been made possible; but actual inflation, it is evident, could only be produced in single successive instances, and in each instance the particular tire operated upon would constitute, for the time being, an essential part of the combination. In other words, the invention consists of a combination of elements or parts, say five, four of which were contrived and are employed to produce a stated effect upon the fifth, which plays no part in the operation except passively to receive the effect. The pump, hose, clamp, and nipple are employed to inflate the tire, which upon completion of the operation is detached, and the combination thereby dissolved, to be reconstructed only by the incorporation of another tire or a reincorporation of the one detached. Only when in use can the combination be complete, and every use involves a reconstruction and dissolution of the combination. If there has ever been granted a patent for such a combination of mechanical elements, designed to expend their force

among themselves, and to effect or affect nothing beyond, it has not come to our knowledge; but whether, if granted, it could be upheld, need not now be considered.

These claims, as we have seen, are for a combination of two elements, the clamp and the hose described. Whether, in a true and proper sense, there is a combination, we do not stop to consider. The result which the patentee sought to accomplish was to dispense with the metallic couplings theretofore used, and provide means of fastening the open end of the hose of an air pump directly upon nipples of various sizes. "It is my object," says the specification, "to provide a universal air-pump hose and couplings, which may be employed for inflating the tires of any machine." But, as touching the question of patentability, it is no more to be said of this mode of coupling that it was designed for, results in, or produces the ultimate inflation of any or all tires, than it would be to say of a coupling for fire hose that it was designed for and resulted in the throwing of water or the extinguishment of fires. It is the immediate mechanical result of the device or combination which is pertinent. That result here is the making of a direct air-tight connection between the hose of an air pump and the nipples of pneumatic tires, and the question is whether there is patentable novelty in the means devised for accomplishing that result. The result itself is not novel. The clamp, considered alone, contains nothing essentially new in construction, operation, or result; and it hardly need be said that the hose is not new, though it is affirmed in the brief for the appellee that it was "absolutely new with Johnson to provide an air pump with a hose having an open end into which the nipple of a pneumatic tire may be inserted." Besides the repetition of the assumption that the pump is included in the claims, this statement is at fault. Before the date of this patent metallic couplings, inserted in the ends of hose, and so constructed as to be screwed upon or into the nipple of the tire to be inflated, were doubtless in common use, but open-ended hose could not have been unknown. From necessity, in the course of the manufacture or preparation of hose for any use, their ends were open before couplings could be inserted, and often afterwards, when, by accident or design, the couplings had been removed. There could be, therefore, no novelty in a hose with open end, whether connected at the other end with a pump or not. Even if in some way air-pump hose had always come into existence attached to air pumps at one end, and supplied at the other with metallic fastenings, and never before had been seen with open ends, it could hardly be thought to require more than mechanical skill to remove a misfit coupling, and insert the nipple directly in the hose; and, that done, it would need only the grasp of the operator's hand, or the application of some familiar form of clasp, to make the union air-tight. Indeed, the manufacture or production of hose with metallic fastenings necessarily involved the idea and presence of hose with open or free ends into which nipples of different sizes could be inserted; so that even without proof or suggestion that such hose had been used, either with or without other clamp than the hand of the operator, it would be impossible to concede that this patentee was the first "to provide

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.

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.