tric motion for setting or folding the legs of the same bed. Such transmission is so common to all the arts as to cause me to conclude this is not admissible. Therefore I must keep the complainant strictly to the combination in detail, as described in its patent, so far as touches the issue in this particular case.

Combinations of an inward and downward movement of the head of the bed, with levers so arranged as to transmit to the legs the result of this movement for the purpose of setting or folding them, seem to have long anticipated the invention owned by the complainant; and the introduction of the additional element of suspending instead of supporting the bed, while useful, does not seem to me to involve such degree of novelty as to sustain any claims except very narrow ones. The inventor's merit in the case at bar relates only to the precise method used by him to secure compactness and simplicity. Therefore, while the complainant is, of course, entitled to the benefit of the rule of equivalents, they must be such as relate to details, excluding such as concern broad principles well known in many branches of the mechanical arts.

As it is not denied that respondents may lawfully carry the head of their bed by suspension, and combine with that the inward and downward movement in the precise method in which they do each, I think I must hold that they may transmit the resultant force by ordinary appliances, and that they have done no more than this. The cases cited by me in *Masten* v. *Hunt*, 51 Fed. Rep. 216, and *Dederick v. Seigmund*, 51 Fed. Rep. 233, seem of use here. Let respondents draw a decree of dismissal, with costs, and submit it to the court, with proof that it has been served on the complainant.

HUNT *v.* GARSED.

(*Circuit Court, E. D. Pennsylvania.* June 8, 1892.)

PATENTS FOR INVENTIONS—NOVELTY—PNEUMATIC CONDUCTORS FOR ELEVATOR SIGNALS.

Letters patent No. 307,049, granted October 21, 1884, to John Hunt for an improvement in pneumatic conductors for elevator signals, are invalid, for there is no patentable novelty in inclosing a number of rubber tubes, each individually communicating with the signaling mechanism in an elevator and with one of the floors of a building, in a jacket to keep them from kinking, stretching, and breaking, when wires used for electric signaling in elevators had been inclosed in the same way and for the same purposes, and tubes had previously been used for operating the signaling mechanism in elevators.

In Equity. Suit by John Hunt against Robert P. Garsed to restrain the infringement of letters patent No. 307,049, of October 21, 1884, granted to complainant. Bill dismissed, and patent declared invalid.

A. S. Browne, for complainant.

A. B. Houghton, for defendant.

BUTLER, District Judge. The patent is for an improvement in pneumatic conductors for elevator signals, and is described by the patentee himself as follows:

"Indicators in elevator cars for showing from which floor of the building a call has been sent are now operated according to one or another of two systems, either by electricity, requiring circuit wires and a battery or by pneumatic means, requiring the interposition of air tubes extending from the push buttons on the several floors of the building to the indicator on the car. It is to the latter system that my invention relates. It is essential to this system that the several push buttons be made each to operate a bellows for compressing or rarefying air, that an air tube extend from each bellows to the car, and that the car be provided with an indicator, having as many bellows and drops as there are floors and air tubes, and that such bellows be connected with the corresponding air tubes. The several air tubes, in order to reach the moving car must be made flexible for a portion of their length, and be attached to one end of the elevator shaft, preferably to the middle thereof, and at the other end to the car, their flexible portion hanging freely beneath the car. From the bellows behind each push button, a small lead pipe is carried, and these several pipes are carried along the elevator shaft to its middle, at which point they are connected to as many small rubber tubes, the opposite ends of which are fastened to the elevator car and connected with a second set of small lead pipes which lead to the pneumatic indicator. These rubber tubes, prior to my invention, were supported only by the attachment of their ends to the walls of the shaft and to the car, and were all independently attached and hung separately and independently from the car. As their length is necessarily somewhat in excess of half the height of the elevator shaft, in order to accommodate the vertical movement of the car, it is obvious that when the car is at the bottom of the shaft almost their entire length hangs from their point of attachment to the middle of the shaft, and that when the car is at the top of the shaft almost their entire weight hangs from their point of attachment to the car. In either case a considerable weight of rubber tube has to be supported from the point of attachment and transmitted through the end portion of the tube, the effect of which is to strain and stretch the tube, which consequently rapidly deteriorates. By having also, as many separate and independent rubber tubes hanging beneath the car as there are floors to the building (often eight or more) there is considerable liability of their becoming entangled, kinked, or knotted, and in their swinging, of being caught against projecting parts and being injured. My present invention was designed to obviate these defects, to which end it involves assembling or grouping all of the flexible rubber tubes into a cable, fastening them together so that they shall not hang or swing independently, furnishing them with a flexible support, which shall relieve them of the strain of upholding their own weight, and wrapping or covering them, so as to protect them from injury. These results I attain in my preferred construction by the simple expedient of winding around all the tubes together a tubular textile covering or envelope."

The complainant's expert says:

"The invention introduced by the patent in question comprises the grouping or assembling together of the tubes, and their connection with a parallel supporter, which carries their weight or a greater portion of it, and relieves the tubes themselves of that strain. By this relief from strain or stretching, the life of the tubes is increased and their deterioration by the formation of pin holes and cracks is greatly reduced. According to the patent, this parallel supporter is constructed by preference in the form of a tube, within

which the rubber tubes are inclosed, so that they are externally covered and held in proper relation to one another so that they cannot swing independently and are protected from abrasion."

The foregoing quotations have been made because they show the nature and scope of the alleged invention, and the patentee's views respecting them, as briefly as they can be stated.

The defense attacks the patent on the ground, principally, that it covers nothing new.

We find all the elements of the combination to be old. The only one having the semblance of novelty is the so-called "pneumatic cable." This however is also old. A claim for it was made; but on objection by the office it was abandoned. The elements specially covered by the fourth claim are not new in the connection stated, and the claim was not pressed on the argument. Is the combination itself new? In the complainant's brief the single consideration involved is stated as follows:

"In view of the ordinary composite electric cables for elevators, having a plurality of conducting wires with an outer inclosing and insulated covering, did it involve invention, and was it patentable to group a plurality of pneumatic tubes and support and protect them by a parallel flexible supporter, such as an inclosing tubular covering."

Every element except the so-called "cable" was previously combined in the same way for similar use, in pneumatic elevator signals, and the only difference between the "cable" and the element it supplants is that it consists of several rubber tubes inclosed in the jacket, while previously the tubes were separate and independent of each other. In other words the only change which the patentee effected in the old pneumatic combinations consists in inclosing the tubes within the jacket.

Long before the date of the patent, a substantially similar combination, in all respects, was in general use for electric elevator signals. It is true that wires were there employed as conductors, instead of the tubes, used in the pneumatic system. When the electric system was first adopted the wires were allowed to hang separately; and precisely the same difficulties were encountered that attend the use of tubes hung separately in the pneumatic system. They tangled, kinked and were liable to strain and break. To overcome the difficulty, they were grouped and inclosed in a jacket having its ends properly attached, to support the wires and keep them in proper position. This jacket was sometimes composed of one material and sometimes of another,—occasionally almost, if not quite, identical with that used by the complainant.

Substantially all the complainant did, therefore, was to apply to the pneumatic tubes the jacket previously applied to the electric wires. The purpose and effect in the one case are materially the same as in the other. We do not see in this anything requiring the exercise of invention. The complainant's counsel dwells on the difference between the electric and pneumatic systems of signaling, but we are unable to

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,