AMES AND OTHERS *V.* CARLTON SPRING-BED CO. AND OTHERS.

Circuit Court, N. D. Illinois. July 27, 1885.

1. PATENTS FOR INVENTIONS—NOVELTY—KNEPPLER SPRING-BED BOTTOMS.

Patent granted July 27, 1869, to Alois Kneppler, for an improvement in spring-bed bottoms, *held* void for want of novelty.

2. SAME—BOYINGTON SPRING-BED BOTTOM.

Patent granted May 24, 1881, to Levi C. Boyington, for an improved spring-bed bottom, *held* void for want of novelty.

In Equity.

Charles H. Roberts and *Manahan & Ward,* for complainants.

G. L. Chapin, for defendant.

BLODGETT, J. This is a bill filed to obtain an injunction and accounting for the alleged infringement by defendants of—*First,* a patent granted July 27, 1869, to Alois Kneppler, for an "improvement in spring-bed bottoms;" *second,* of a patent granted May 24, 1881, to Levi C. Boyington, for an "improved spring-bed bottom." Both these devices are applicable to what are known as woven-wire bed-bottoms, in which the bottom is constructed by extending a fabric made of coiled spiral springs from end-rail to end-rail of the frame. The Kneppler device seems to have been one of the early efforts to utilize the woven-wire fabric for bed-bottom purposes, and instead of suspending the fabric from end-rail to end-rail, leaving the sides free, the sides were more or less supported by a side rod or wire, which seems to have been supposed to be necessary in order to give the requisite degree of strength and form to the bed-bottom. Later inventors demonstrated that the best, if not the only, practicable mode of utilizing the woven-wire fabric for a bed-

bottom was by suspension from end to end, with no side fastenings. In the use of this fabric, suspended from end to end, such a degree of tension was necessary as would give the requisite amount of firmness to the bed, so that it would not sag or sink too much by the weight of the occupant, and, to some extent, the degree of tension thus required was found objectionable.

Kneppler placed underneath the coiled-wire fabric, vertical spiral springs, partly relieving the fabric from the burden of the occupant's weight, and dispensing, to some extent, with the necessity of so rigid an endwise tension upon the coiled-wire fabric. The Boyington device is the same in principle and mode of application as the Kneppler, with the exception that the coiled-wire fabric swings free from end-rail to end-rail; but he placed underneath the middle portion of the woven-wire fabric, between the side-rails, a series of vertical spiral springs, resting upon slats connected with the side-rails, so that the woven-wire fabric need not be stretched to the degree of tension required when no intermediate support is interposed; the claim of his patent being, "in combination with the end and side rails of a 786 bed-bottom, and spiral springs supported on slats connected therewith, a stretched woven-wire mattress connected permanently and directly with the end-rails, said stretched mattress having no other support than the end-rails and spiral springs, all substantially as and for the purpose specified."

The defenses interposed are, (1) want of novelty; (2) that the defendants do not infringe. It is admitted that the Kneppler device, as constructed and shown, was inoperative and useless, inasmuch, as has been before said, the side fastenings made the woven-wire fabric bag down in the middle, and assume what is termed by the witnesses a hammock shape. All that Boyington did was, in the light of the experience of other improvers of the woven-wire mattress bed, to

remove the side fastening from the Kneppler bed, and place Kneppler's vertical spiral springs under the middle part of the wire fabric as an auxiliary support, instead of relying wholly upon the tension of the fabric; and the only question, so far as the Boyington device is concerned, is, was there any invention in doing this, or was it a mere mechanical improvement? As has been already stated, other inventors before Boyington had made, successfully, woven-wire mattress beds by swinging the fabric from end-rail to end-rail; but, so far as disclosed by the proof in this case, none of them had placed an auxiliary support, either in the form of spiral or other springs, under the woven-wire fabric. Boyington took the Kneppler construction, removed the side fastenings and side-rods, and received his patent for so doing. It seems to me this was nothing but such a mere mechanical alteration of Kneppler's device as any person familiar with the use of the woven-wire fabric for bed-bottom purposes could have done at the date of Boyington's patent, because it had become well established at that time that the woven-wire fabric must be suspended from end-rail to end-rail, and that side fastenings were not only objectionable, but absolutely prevented the effective operation of the woven-wire fabric for the purposes of the bed-bottom. It is therefore my opinion that Boyington's change in the Kneppler mode of construction was only mechanical, and did not involve the use of the inventive or creative faculty.

As to the Kneppler patent, as already stated, it was wholly inoperative and useless in the form shown, and this leads me to consider for a moment whether the interposition of these vertical spiral springs underneath the coiled-wire fabric can be said to amount to invention. The proof shows that bed-bottoms had been constructed, prior to the date of the Kneppler patent, of coiled-wire springs set vertically upon slats, or otherwise fastened, so as to bear the weight of the

mattress and the occupant of the bed. In some cases these springs were interlaced, or fastened together, and in others they stood independently of each other; the mattress forming, as it were, a connecting web between them. In that case the coiled-wire springs were the only support of the mattress and the occupant of the bed. To interpose vertical 787 spiral springs underneath the coiled-wire fabric, after they have been used with an ordinary mattress, for the purpose of acting as an auxiliary support to the coiled-wire fabric, or to relieve the necessity of the severe strain or tension upon the coiled-wire fabric, seems to me not to have required inventive skill. The coiled-wire fabric and the spiral springs perform no new function, and a bed-bottom composed of coiled-wire fabric and spiral springs combined, as shown either in the Kneppler or Boyington devices, is but an aggregation of old parts, where no new function is performed by either of these elements by bringing them together, but each continues to perform the same function it did when used in accordance with the old art.

The proof also shows a patent for a bed-bottom, granted to P. P. Simmons, April 21, 1868, antedating the Kneppler by over a year, in which a fabric composed of transverse wooden slats and longitudinal wires was stretched from end-rail to end-rail, and supplemented by vertical spiral springs placed underneath the same. It is true that the fabric shown in the Simmons patent differs from that shown in the Kneppler and Boyington patent; but, after the introduction of the woven-wire fabric for bed-bottom purposes, there was no possible room for invention in substituting the woven-wire fabric for the wooden slat and wire fabric in Simmons' device; and when that was done you had exactly, in construction and mode of operation, the Boyington bed, and all there was of merit in the Kneppler bed.

I am therefore of the opinion that this patent is void, and that the bill in this case should be dismissed for want of equity.