

MALLORY MANUF'G CO. V. MARKS AND
OTHERS.

Circuit Court, S. D. New York. October 19, 1881.

1. PATENTS FOR INVENTIONS—HATS—TWISTED
WIRE HOOPS.

A patent for an improvement in hats, where the claim is for a combination of the brim with a drooping spring hoop in the front and rear and elevated sides, and the means of producing such droop and elevation—the hoop being bent by twisting wire, until the required bend is obtained—in connection with the brim of the hat made of flexible material, is infringed by a similar device.

2. SAME—NOT ANTICIPATED BY PRIOR
INVENTIONS.

The existence before of straight, untwisted wires in hat brims, made of a flexible fabric, does not anticipate the patent; it requiring experiment and invention to pass from them to the arrangement of the patent, although previously known that giving a permanent twist to a resilient wire would permanently alter its longitudinal set.

Eugene Treadwell, for plaintiff.

Betts, Atterburg & Betts, for defendants.

BLATCHFORD, C. J. This suit is brought on letters patent No. 74,392, granted February 11, 1868, to George Mallory, for an “improvement in hats.” The specification says:

“Figure 1 represents a side view of a hat constructed according to my invention; figure 2 represents a perspective view of one of the springs of the same; figure 3 represents a top view of the hat; figure 4 represents an edge view of one of the springs of the same; and figure 5 represents a cross section of the hoop enlarged. The object of my invention is to improve hats made from flexible fabrics, such as cloth; and the invention consists of the combination of the brim of the hat with a drooping spring hoop, by which I mean a spring hoop bent or twisted in such manner as to impart a droop to the front and rear of the

brim, and an elevation to the sides thereof. The hat represented in the accompanying drawings embodies my invention when the hoop is formed of concavo-convex wire, the brim being strained and shaped by a spring-hoop, which is both concavo-convex and twisted, so as to give the 888 required droop at the front and rear. The hoop is best formed out of steel wire, which, by passage between rollers in a manner well known to metal workers, is formed rounding on one side and hollowing on the other, so that its transverse section is such as is represented at figure 5. A piece of this concavo-convex wire, of the proper length to form the hoop, is cut off and is bent in the following manner: Two vises are secured to a bench, at a distance apart a little less than the length of the piece of wire, so that it can be strained between them, its ends being gripped simultaneously in both. A forked support is also fixed upon the bench, midway between the vises, and the fork or slit in this support is made just large enough to receive the wire edgewise. The piece of wire is strained between the vises and in the fork. Then a forked instrument is applied to it midway between the center support and one of the vises, and the wire is partially twisted by means of this forked instrument, until the required bend is obtained. The instrument is then applied in like manner to the wire at the other side of the central support, and the partial twisting there is made equal to that imparted to the portion of the wire first twisted. The piece is then removed from the vises, and a sheet-brass clasp, *a*, similar to those used for skirt-hoops, is applied to one of its ends. The piece is then inserted in a tubular socket or case, *m*, formed in the rim of the hat, through an opening left for the purpose, and its ends are secured together by the brass clasp; or the hoop may first be formed by uniting the ends of the piece of the clasp, and then it may be sewed into a tubular socket in the rim of the hat. When the ends

of the hoop are united, it will be found that the hoop has the form, edgewise, shown at figures 2 and 4, and, when it is in the hat, the brim is compelled by the form of the spring to droop at the front, *b*, and rear, *c*, as shown at figure 1, and to rise at the sides, *d*. I generally apply two hoops to the brim of the hat body, placing one at about half the breadth of the brim from the crown, as shown at *n*; and, in forming the hoops and applying them to the hat-brim, I take care to make them sufficiently large, and to so apply them as to strain or stretch the brim by distention. My invention may be used by forming the hoop of straight untwisted concave-convex wire; also by using flat wire for the hoop, and twisting it as above described. The hat possesses the advantage resulting from the light weight of a concavo-convex hoop, as well as the stylish droop resulting from the twist of the hoop; and, besides, the rounded exterior of such a hoop tends to prevent the material bearing upon it from wearing away, as it has no sharp corner to cut the cloth.”

The claim is as follows:

“The combination of the brim of a hat with a drooping hoop, so that the brim is caused to droop at the front and the rear, and to rise at the sides, substantially as set forth.”

It is proper to determine, in the first place, the construction of the patent. It does not claim broadly a hat brim which droops at the front and rear and rises at the sides. It claims the combination of the brim of a hat with a drooping hoop, substantially as set forth, which combination produces the effect specified. The specification states what is meant by “a drooping hoop” in the claim. It means

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“a drooping spring hoop;” that is, “a spring hoop bent or twisted in such manner as to impart a droop to the front and rear of the brim, and an elevation to the sides thereof.” A droop at the front and rear of

the brim, and an elevation at the sides thereof, was not new, nor claimed as new. The means of producing such droop and elevation were claimed. The hoop must be a spring hoop. It must be a hoop having a spring action. It must both strain and shape the brim. The specification calls the hoop a spring, and says that it is the form of the spring, when it is in place in the brim, that causes the brim to droop at the front and rear, and rise at the sides. The droop is required to be so large—that is, so large circumferentially—and so applied as to strain or stretch the brim by distension, as well as to shape it. The specification also shows that when it says that the hoop is “bent or twisted,” it uses the word “bent” as synonymous with the word “twisted.” The hoop is so bent by twisting its material. The text says that the material is bent by twisting it in the manner described, and that it is twisted until the required bend is obtained. The remark, in the specification, that the “invention may be used by forming the hoop of straight, untwisted, concavo-convex wire,” must be rejected as not affecting the proper construction of the claim; and the hoop of the claim must be a spring hoop twisted substantially in the manner described in the patent. This construction is necessary to sustain the claim, in view of the state of the art, as shown. In addition, the brim of the hat must be made from a flexible fabric.

The answer denies infringement. The defendants, while admitting that their hat, Marks, No. 1, shows a spring hoop with a droop at the front and rear, and an elevation at the sides, combined with a brim of flexible material, contend that it is not shown that the droop was imparted to the wire of the hoop by twisting it in the manner described in the patent. This is not so. The plaintiff's expert, Mr. Renwick, says that the second device entering into the combination of the claim of the patent is a “hoop made of a resilient material, such as steel wire, and bent or twisted so as to droop at

the parts which correspond with the front and rear of the brim of the hat, and to rise at the parts which correspond with the sides of the brim.” He then says that the hoop in Marks, No. 1, “is a drooping spring hoop, apparently identical in its construction and in its characteristics with the drooping spring hoop which constitutes the second device of the said plaintiff’s patent.” This is *prima facie* sufficient. There is no evidence in contradiction of it. On the contrary, the cross-examination of said expert seems to proceed on the view tha 890 the wire in Marks, No. 1, is twisted. If this were not so, it was easy for the defendants to have shown it.

There was sufficient invention to support the patent. The existence of straight, untwisted wires before in brims made of a flexible fabric does not anticipate the patent. It required experiment and invention to pass from them to the arrangement of the patent, although it was known before that the giving a permanent twist to a resilient wire would permanently alter its longitudinal set. The Adams & Slicer patent of December 24, 1861, covered the giving such an excess in the length of a reed, wire, or other non-extensible, flexible article, over that of the outer edge of the brim of a hat so formed of an extensible material, that when said reed or wire should be inserted and forced into a case on said outer edge, it would give not only firmness to the brim, but also a rising curvature thereto of any desirable configuration. This was an attempt towards the result aimed at in the plaintiff’s patent, but the means were different. The means of the plaintiff’s patent were not obvious. They were much superior to those of the Adams & Slicer patent, as is shown by the great success which the Mallory brim at once met with. With all the knowledge which skilled men had as to the twisting and set of resilient wire, they groped about, trying all methods but the one which was the needed one to secure the desirable result.

Yet in this case, as in all other cases like it, it is said that the means were so obvious as not to amount to invention. The English patent to John Avery, No. 1,822, of 1856, only speaks of using a steel or other metal spring to give form and flexibility to a bonnet or bonnet foundation. There is no suggestion of twisting the wire. The English provisional specification of John Taylor and others, of March 23, 1860, No. 751, speaks only of giving a final shape, set, or finish to a hat brim by a frame made to the required shape, either of metal, wood, composition, or any suitable metal or material. It has nothing to do with the Mallory invention.

The French patent to Langenhagen and Hepp, of October 4, 1862, No. 56,002, speaks only of giving strength and stability to the edge of a braided hat by folding the edge and sewing into the fold a rush, a brass wire, or a spring of whalebone. This is of no importance. The patent to William H. Mallory, of September 8, 1863, No. 39,822, shows only flat steel hoops or springs inserted at right angles to the brim of the hat, in hems or tucks formed in the brim. The other patents put in evidence by the defendants were granted after the invention of Mallory was made. That was made in July or August,

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1863. The defendants claim to have shown that the Mallory invention was made by Carl Fischer in 1855, in New York, when he was working for Small & Stieglitz, and that Fischer then twisted wires in the manner described in the plaintiff's patent, and placed them in the brims of hats to the number of 70 or 75 dozen, and that such hats were sold. On all the evidence in regard to this invention by Fischer, it must be held that it has not been satisfactorily established. The defendants also set up a prior invention by Philip Lasky, in 1861 or 1862, and one by John H. A. Nissen, at the end of 1861 or the beginning of 1862. On the whole evidence these are not made out. The

foregoing views apply also to the suits against Isidor and Hein, David Fox and others, John S. Bancroft and others, and Patrick Corbit. They also apply, except as to infringement, to the suit against Marcus Marks and Abraham Marks, in which infringement is admitted by the answer. In the case against Marcus Marks and Abraham Marks, the answer sets up an agreement made by the plaintiff with the defendants on or about April 1, 1878, whereby the plaintiff licensed the defendants to make and sell hats under the patent. The evidence fails to establish such agreement.

There must be decrees for the plaintiff in all the suits, with costs.

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