Case No. 17,641. [7 Blatchf. 126.]<sup>1</sup>

Circuit Court, S. D. New York.

Jan. 18, 1870.

# PATENTS-VALIDITY-INFRINGEMENT-HOOP SKIRT TAPE MACHINERY.

- The first three claims of the patent reissued to Jedediah Wilcox, as assignee, August 4th, 1863, on the surrender of the original patent granted to Bela A. Mann, as inventor, December 24th, 1861, for improvements in machinery for fastening clasps or spangles to the hoops and tapes of hoop-skirts, are valid.
- 2. The first claim of the patent granted to Joseph Baird, December 9th, 1862, for improvements in machinery for fastening clasps or spangles to the hoops and tapes of hoop-skirts, is valid.
- 3. The first claim of the Baird patent is not infringed by machinery constructed in accordance with the patent granted to Albert Komp, May 7th, 1867.
- 4. The third claim of the Baird patent is valid and is infringed by such machinery.

[This was a bill in equity by Jedediah Wilcox against Albert Komp for the infringement of letters patent Nos. 34,026 and 37,124, granted, respectively, to B. A. Mann, December 24, 1861 (reissued August 4, 1863, No. 1,518), and to J. H. Baird, December 9, 1862.] Final hearing, on pleadings and proofs.

John B. Staples, for plaintiff.

J. Van Santvoord, for defendant.

BLATCHFORD, District Judge. This is a suit brought for the infringement of letters patent. Four letters patent are set out and relied on in the bill, all of them being patents for improvements in machinery for fastening clasps or spangles to the hoops and tapes of hoop skirts. One is a patent granted to Thomas B. De Forest, November 4th, 1862, and owned by the plaintiff. One is a patent granted to Joseph Baird, December 9th, 1862, and owned by the plaintiff. One is a patent granted to Bela A. Mann, as inventor, December 24th, 1861. One is a patent granted to Chauncey L. Olmstead, October 31st, 1865, and owned by the plaintiff. The plaintiff brings the case to hearing only on the Mann and Baird patents, and withdraws his claim to recover in this suit on either of the other two patents.

The inventions set forth in the Baird patent are specific improvements upon those described in the Mann patent. The Mann patent will, therefore, be first considered. [The specification of the reissued Mann patent, which is signed by Mann, says: "Previous to my invention, the hoops of ladies' hoop skirts have been secured to the tapes by means of clasps, whose tongues are inserted through the tapes and clinched over the hoops. The operation of applying the clasps and clinching has been performed by hand, and, in some cases, pliers operated by hand have been used to effect the clinching by pressure.

The object of my invention is to enable the skirt clasp to be applied to the skirts and clinched with greater rapidity than has heretofore been practicable, and to dispense with the handling of the clasps, the application of the clasps in proper positions for clinching, and their subsequent clinching, being effected by machinery. To this end, the first part of my invention consists in a skirt clasp-feeding device, consisting substantially of an inclined plate, and one or more guide bars, or their equivalent, operating in such manner that skirt clasps which are supplied to the feeding device with their tongues in various positions relatively to the place of supply, are delivered by the device with their tongues in the same positions relatively to the place of delivery. The second part of my invention consists in the construction of a feeding device, operating substantially as above set forth, with an opening to permit the escape of misarranged skirt clasps. The third part of my invention consists in the combination of a hopper with a clasp-feeding device, and with a claspsupplying device, or their joint or several equivalents, the combination of these devices, as a whole, being such, that skirt clasps placed promiscuously in the hopper are secured in the clasp-supplying device with their tongues in the same positions relatively thereto, and are held therein in a row ready for the performance of a subsequent operation. The fourth part of my invention consists in the combination of a clasp-clinching device with a clasp-supplying device, the combination being such that skirt clasps supplied in a row are operated upon in succession by the clinching device. The fifth part of my invention consists in the combination, in one machine, of a hopper, a clasp-feeding device, a claspsupplying device, and a clasp-clinching device, or their joint or several equivalents, the combination, as a whole, operating in such manner, that skirt clasps placed promiscuously in the hopper may be clinched in succession upon articles submitted to the machine. The sixth part of my invention consists in the combination of a clasp-clinching device with a liberating device, which permits the disengagement of the clasp from the clasping machine. The seventh part of my invention consists in the combination of a clinching device for clinching clasps, and of a device for supplying it with clasps, with a treadle to control the same by the foot, so that, in the operation of clinching clasps to skirts, the hands of the operator are left at liberty to manipulate the skirt."

The essential parts of the Mann machine will now be described: There is a shallow sheet-metal box or pan, forming a hopper, to which a greater or less inclination can be given, which is open at its front end, and has a short vertical plate or ledge fitted obliquely at its front part and right hand side.

To the open front end of the hopper is attached the back end of a feeding plate, which has a greater inclination than the hopper has. The feeding plate is a plane with two bars attached at about right angles with each other. The bars are not in contact, there being a space between them. Each bar has a groove in the lower part of its face. The feeding plate and the bars, which latter act as guide bars, constitute the feeding device. The feeding plate has an oblong slot or opening made through it at its front part. This slot or opening, which is quite near to one of the two bars, permits the escape of misarranged clasps into a box placed beneath it. Next in order to the feeding device is the clasp-supplying device, in which the clasps from the feeding device are received and held in a row, to be supplied in succession, one by one, by means of a liberating device, to a clasp-clinching device. The clasp-supplying device is formed by two vertical plates and a groove. The plates are secured to the front side of a head or bar, with a small or narrow space between them, to receive and guide the tongues of the clasps. The plates overlap the edges of the groove which is made in the face of the head. The lower ends of the plates are curved, so as to project beneath the under part of the head. The liberating device is situated at the lower end of the clasp-supplying device. It consists of two plates or jaws held together by a spring, which permits them to be opened when a clasp is to be liberated. The clasps in the clasp-supplier are supplied to the clinching device. The clasp is compressed in such manner that the tongues are bent between the under side of the head before-mentioned and a clinching block of steel, which has a circular groove extending longitudinally in its upper surface. Guides are provided to receive the hoop to which the clasp is to be applied. The clasp has two tongues projecting from a plate. The clasps are placed promiscuously in the hopper, and gradually pass down upon the feeding plate, the jar or vibration of the machine, when in operation, constituting a sufficient shake motion. The clasps pass down the feeding plate against one of the bars, in an inverted position, and are conducted by it to the other bar. As the clasps pass down the bars, they arrange themselves with their tongues in the same positions with reference to the bars, the plates of the clasps fitting into the grooves of the bars, so that, when the clasps reach, in succession, the place of delivery, their tongues are in the same position relative thereto. In case any clasp has not arranged itself with its tongues in the proper position, it cannot pass by the slot in the feeding plate, which is so close to the lower bar, that the misarranged clasp tips over through the slot and falls into the box beneath. This lower bar conducts the clasps to the passage way of the clasp-supplying device, formed by the plates and the groove before-mentioned. This passage way may be filled with clasps, which are held in a row, with their prongs projecting through the space between the plates. The lowest clasp of the row has an upright position, with its tongues pointing down as the lower curved ends of the plates of the clasp-supplying device conduct it between the plates or jaws of the liberating device, which retain it in that position under the head and directly over the

clinching block. The hoop is placed in position, with the loop of the tape in the clinching block. Then, by the action of the foot of the operator on the treadle, the clinching block, with the hoop, is elevated, and the prongs of the clasp are forced through the edges or sides of the loop and through the tape, and, coming in contact with the concave surface of the clinching block, are bent in and clinched at the under side of the tape. After each clasp is clinched, the hoop is moved along and is secured to every tape of the skirt in the same manner, the clasps feeding themselves down in the passage way behind the plates of the clasp-supplying device by their own gravity. As each clasp is clinched, the plates or jaws of the liberating device are forced upwards and apart by the action of the clinching block, so as to liberate the clinched clasp, the plates or jaws instantly closing by the action of the spring. The clinching has been effected by the elevation of the clinching block, which then descends, to re-ascend again. There are seven claims in the patent: (1) "A claspfeeding device, consisting substantially of an inclined plate, and one or more guidebars, the whole operating substantially as herein set forth." (2) "The said feeding device, constructed with an opening to permit the escape of misarranged clasps, substantially as herein set forth." (3) "The combination of a hopper with a clasp-feeding device, and with a clasp-supplying device, the combination, as a whole, operating substantially as herein set forth." (4) "The combination of a clasp-clinching device with a clasp-supplying device, the whole operating substantially as herein set forth." (5) "The combination of a hopper, a clasp-feeding device, a clasp-supplying\* device, and a clasp-clinching device, the combination, as a whole, operating substantially as herein set forth." (6) "The combination of a clasp-clinching device with a liberating device, operating substantially as herein set forth." (7) "The combination of a clasp-clinching device and of a clasp-supplying device with a treadle operating substantially as herein set forth."

The value of the inventions embodied in the Mann patent is unquestionable. The tapes must be secured to the hoops, so as to prevent any sliding, in use, of the tapes on the hoops, and any falling away of the hoops from their proper positions, and the advantage of doing the work by machinery instead of by hand is obvious and is shown by the evidence. Before the invention of Mann this work was always done by hand.

It is claimed by the plaintiff that the machine

of the defendant infringes the first three claims of the Mann patent, in having substantially the same clasp-feeding device, with its inclined plate and guide-bars, and the opening to permit the escape of misarranged clasps, and substantially the same combination of hopper, clasp-feeding device and clasp-supplying device, that are found in the Mann patent, and all operating in substantially the same manner that is set forth in that patent. There can be no doubt that the defendant has bodily appropriated every thing that is embraced in the first three claims of the Mann patent. He has, in his machine, a clasp-feeding device, consisting substantially of an inclined plate and guide-bar operating in such manner that skirt-clasps which are supplied to the feeding device with their tongues in various positions relatively to the place of supply, are delivered with their tongues in the same positions relatively to the place of delivery. Such feeding device is constructed with an opening to permit the escape of misarranged clasps, and is so combined with a hopper and with a clasp-supplying device, that clasps placed promiscuously in the hopper are secured in the clasp-supplying device with their tongues in the same positions relatively thereto, and are held therein in a row ready for the performance of a subsequent operation. In fact, the construction of the defendant's machine, in respect to the hopper, the feeding device, the opening for escape and the clasp-supplying device, is scarcely varied in form from the construction shown in the Mann patent. The infringement of the first three claims of that patent is, therefore, clear.

The defence as to the Mann patent is placed mainly on two grounds: (1) That Mann did not invent what is claimed in his patent, but that it was, in fact, invented by one Samuel E. Wilmot and communicated to and wrongfully patented by Mann. (2) That the first three claims of the Mann patent are anticipated by what is found in letters patent of the United States granted to William H. Van Gieson, November 30th, 1858, for an "improved machine for plating nail-heads." And the first two claims of the Mann patent are anticipated by what is found in letters patent are anticipated by what is found in letters patent of the United States granted to M. Rhodes and J. O. Rhodes, May 8th, 1855, for a "machine for leathering tacks."

The evidence clearly shows that Mann was an original and independent inventor of what is claimed in the Mann patent; and the defendant wholly fails to show that anything that Wilmot did in the way of inventing or constructing a machine like Mann's was in any way made known to Mann before Mann made his invention. Besides, it is not shown that what Wilmot did, if it was prior in time to Mann's invention, amounted to anything more than a mere experiment, which was abandoned.

It is a mistake to suppose, as is contended by the counsel for the defendant; that the first claim of the Mann patent covers every clasp-feeding device which consists substantially of an inclined plate and one or more guide-bars, whether the whole operates or not substantially as set forth in the Mann patent in order to be within such claim, the inclined plate and the guide-bars must operate in substantially the same manner, as a whole, as

the inclined plate and the guide-bars of Mann, in feeding clasps of substantially the same character as the clasps shown in the Mann patent. So, also, to be within the second claim of the Mann patent, such inclined plate and such guide-bars must operate in substantially the same manner, in connection with the opening for the escape of such clasps as are misarranged, to permit such escape, as in the patent of Mann. And, to be within the third claim of that patent, the combination must be substantially one of such a hopper, and such a feeding device, and such a supplying device, as are shown in the Mann patent and must, as a whole, operate in substantially the same manner as the combination named in such third claim does, in feeding and supplying such clasps as are shown in such patent. The erroneous view taken, on the part of the defendant, as to the scope of the claims of the Mann patent, is the foundation of the position assumed on the part of the defendant, that Van Gieson's patent anticipates the first claim of the Mann patent because the former describes a machine for feeding the shells or clasps which go around the heads of nails used on trunks, which machine has a feeding device consisting of an inclined plate and one or more guide-bars, and because such feeding device is, therefore, a clasp-feeding device consisting of those instrumentalities. The same thing is true in regard to the claims made by the defendant that Van Gieson's patent anticipates the second claim of the Mann patent because the former describes an opening for escape in the feeding device, and that Van Gieson's patent anticipates the third claim of the Mann patent because the former describes a hopper, a feeding device, and a supplying device. The same remarks are true in respect to the views urged on the part of the defendant in regard to the Rhodes patent for the machine for leathering tacks.

In the clasp-feeding device of Mann, which forms the subject of the first claim of the Mann patent the upright face of the guide-bar is separated from the surface of the inclined plate by a space into which the head of the descending clasp enters as far as the tongues on the clasp will allow, so that the tongues rest and slide against the upright face of the guide-bar, and the entire clasp, consisting of head and tongues, is thus guided to the lower end of the inclined plate with the tongues in the position required to enable them to enter properly the clasp-supplying device. In Van Gieson's shell or clasp-feeding device, the upright face of his V-shaped funnel is not separated from the surface of the inclined plate by any space. There is, therefore, in Van

Gieson's device no provision for allowing the tongues of a clasp to arrange themselves against the upright face of the funnel, and no provision for guiding the clasp to the lower end of the inclined plate, with their tongues in the position required for entering properly a clasp-supplying device. In Van Gieson's machine, there are two inclined plates, with a space between them for feeding nails, which slide down the plates suspended by their heads, with their points hanging down between the plates. In the Mann machine, the inclined plate supports the clasps with their heads downwards, and their points upwards. The \* mode of operation of each of the two feeding devices of Van Gieson is different from the mode of operation of the feeding device of Mann, and neither one of Van Gieson's feeding devices can be used to feed the clasps which the feeding device of Mann feeds. The feeding device in the Rhodes patent operates on the same principle as the nail-feeding device in the Van Gieson patent, and in a substantially different manner from the feeding device in the Mann patent.

Although the Van Gieson machine and the Rhodes machine have each of them an opening to permit the escape of misarranged articles, yet, inasmuch as neither of those machines has the feeding device of Mann, they do not present the same arrangement or combination that is found in the second claim of the Mann patent.

So, in regard to the third claim in the Mann patent, there is not found in the Van Gieson machine any combination of hopper, clasp-feeding device, and clasp-supplying device, which operates, as a whole, substantially like the combination, in the Mann machine, of those three instrumentalities, as there found. There is not in the Van Gieson machine any such clasp-feeding device, or any such clasp-supplying device as is found in the Mann patent.

It follows, therefore, that neither one of the first three claims of the Mann patent is invalidated by anything that is found in the Van Gieson patent or in the Rhodes patent.

We come now to the consideration of the Baird patent. The specification of that patent says: "A machine for applying clasps to the hoops of hoop skirts was invented by Bela A. Mann, by which machine the clasps, thrown promiscuously into the hopper, are fed to a clasp-supplying device, from which they are applied in succession to, and clasped upon, the hoops of the skirt that are presented to the machine. In this machine, the parts are so arranged that, in the operation of clasping, the whole skirt which is being operated upon is raised at the application of each clasp. This arrangement is objectionable, and the object of my invention is, to permit the skirt to remain in one place during the operation of applying all the clasps, by which means the operation of clasping is greatly facilitated. My invention consists, first, in the combination of a rest for the hoops of the skirt, with clasp-feeding and clasp-supplying devices, by means of a moving clasp-carrying device, which receives the clasps in succession, and carries them to the skirt-hoop presented to the machine. The second part of my invention consists in constructing the clasp-carrier in such manner, and

in so combining it with the clasp-supplier, that it not only carries the clasp, but also forms a gate which prevents the escape of clasps from the clasp-supplier. The third part of my invention consists in constructing the clasp-carrier in such manner, and in so combining it with the hoop-rest, that it not only carries the clasp, but also forms one of the members by which the clasp is applied to the hoop. The general appearance of the machine in which I have embodied my improvements is similar to that of Bela A. Mann, as it contains a hopper, a clasp-feeding device, a clasp-supplying device, and a clasp-clinching device." The specification then describes the hopper, the feeding device, the opening for escape, and the supplying device. They are those of the Mann patent. The clasp-carrier consists of a slide moving vertically in guides, and fitted, at its lower end, with a pair of jaws, which jaws are at a sufficient distance from the end of the slide to form a receptacle to hold the plate of a single clasp with its tongues projecting down between the lips of the jaws. Means are provided for opening the jaws to permit the clasps to escape. The jaws are drawn towards each other by a spring, to hold the clasp until they are opened. Below the slide is the skirt-rest, which is a grooved block of steel immediately beneath the lower end of the slide, so that, when the slide is depressed, carrying the clasp in its jaws, the tongues of the clasp are clinched by being driven against the grooved block. The grooved block forms a hoop-rest and supports the hoop, and is furnished with a guide to ensure the application of the clasps at the proper places. The upper surface of the hoop-rest is convex, and the lower surfaces of the jaws of the slide are bevelled, so that the striking of the two against each other opens the jaws and permits the clasp held by them to pass between them. They are then withdrawn by the rise of the slide. The slide is worked by a foot-treadle, and is returned to its highest position by a spring. When it is at that position, the receptacle within its jaws is opposite to the mouth of the clasp-supplying device, so that it then receives a clasp, which is pushed edgewise into it from the lower end of the clasp-supplier, by the pressure of the column of clasps above, the lower end of the clasp-supplier being bent for the purpose. The face of the slide moves in close proximity to the mouth of the clasp-supplier, so that it forms a gate which closes the mouth of the clasp-supplier, and prevents the escape of clasps improperly. The specification says: "The movement of the clasp-carrier need not necessarily be in a straight line, because it is obvious that it might be made to move in the are of a circle, provided the hoop-rest be

properly located to present the hoop to receive the clasp. All that is necessary is, that the clasp-carrier should be moved in such manner, that it will receive clasps from the clasp-supplier, and carry them onward in the machine, to be subsequently clinched upon the hoop." The claims of the patent are these: (1) "The combination of a hoop-rest, a clasp-feeder, a clasp-supplier, and a moving clasp-carrier, the combination, as a whole, operating substantially as set forth." (2) "The combination of a clasp-carrier with the clasp-supplier, in such manner that the clasp-carrier forms a gate or stop to prevent the escape of clasps, the combination, as a whole, operating substantially as set forth." (3) "The combination of a clasp-carrier with the hoop-rest, in such manner that the clasp-carrier forms one of the members by which the clasp is clinched upon the hoop." It is not alleged that the defendant's machine infringes the second claim of the Baird patent, but it is asserted that it infringes the first and third claims.

The machine of the defendant, in the particulars in which it is alleged to infringe such first and third claims, is constructed substantially in accordance with letters patent granted to the defendant May 7th, 1867. The mouth of the groove in the clasp-supplier is closed by a spring-latch, which prevents the clasps from leaving the clasp-supplier spontaneously. Prom the clasp-supplier, one clasp after another is transferred to a clasp-carrier which swings up and down on a pivot through an are of ninety degrees or nearly so. The face of the clasp-carrier is provided with a groove, which is just wide enough to pass over the spring-latch before-mentioned, and, when the clasp-carrier is swung upwards, it strikes the spring-latch and opens it, and a single clasp is transferred from the clasp-supplier to the clasp-carrier. The motion of the clasp-carrier is then reversed, and, as it goes down, the clasp is reversed or brought into the proper position to allow its points to penetrate the tape placed on an anvil at the end of its range of motion. The anvil has a semicircular groove, so that the points of the clasps can penetrate the tape, and they are clinched by the action of a hammer, which is worked by appropriate machinery, and which, by striking the clasp-carrier, causes it to clinch the tongues of the clasp against the anvil beneath. In the Baird machine, as in the Mann machine, the lower ends of the plates of the claspsupplier are curved, so that the lowest clasp in the row of clasps in the clasp-supplier has its tongues pointing downward as it enters between the plates or jaws of the liberating device, and in that position it descends vertically and enters the tape. The plate or head of the clasp is, therefore, in the Mann and Baird machines, changed, in the clasp-supplier, from a vertical to a horizontal position. In the defendant's machine, the plate of the clasp is in a vertical position when it leaves the clasp-supplier and enters the clasp-carrier, and it is changed to be in a horizontal position, with the tongues of the clasp projecting downwards, by the motion of the clasp-carrier through the arc of a circle.

The first claim of the Baird patent claims "the combination of a hoop-rest, a clasp-feeder, a clasp-supplier and a moving clasp-carrier, the combination, as a whole, operating

substantially as set forth." The machine of the defendant has substantially the same hooprest, the same clasp-feeder, and the same clasp-supplier, that the Baird machine has, and it has a moving clasp-carrier. But its moving clasp-carrier does not operate substantially in the manner that the Baird moving clasp-carrier operates, as described in the Baird patent. That patent describes the clasp-carrier as consisting of a slide moving in guides, and, although, in its description and drawings, it represents such slide as moving vertically, it states that its movement need not necessarily be in a straight line, but that it may be made to move in the are of a circle. The slide and guides may be curved, so that the slide will move in the are of a circle, but still the clasp-carrier must be substantially a slide moving in guides. Although the defendant's clasp-carrier moves in the are of a circle, yet it is not substantially a slide moving in guides, and does not operate in substantially the same manner as the Baird moving clasp-carrier. Therefore, the combination, in the defendant's machine, of his hoop-rest, clasp-feeder, clasp-supplier and clasp-carrier, does not, as a whole, operate substantially in the same manner as the combination, in the Baird patent, of the hoop-rest, clasp-feeder, clasp-supplier and clasp-carrier described therein. It follows, that the first claim of the Baird patent is not infringed.

In the defendant's machine, the clasp-carrier is combined with the hoop-rest in such a manner that the clasp-carrier forms one of the members by which the clasp is clinched upon the hoop. It is, in the defendant's machine, the blow of the hammer upon the top of the clasp-carrier which clinches the points of the clasps against the hoop-rest or anvil. The third claim of the Baird patent is, therefore, infringed by the defendant.

There is nothing in the Van Gieson patent or the Rhodes patent that anticipates what is covered by the third claim of the Baird patent, nor is it anticipated by any thing found in the De Forest patent or the Mann patent.

It results, that there must be a decree in favor of the plaintiff for a perpetual injunction and an account of profits, as respects the first three claims of the Mann patent and the third claim of the Baird patent, and for the costs of this suit.

<sup>1</sup> [Reported by Hon. Samuel Blatchford, District Judge, and here reprinted by permission.]