

Syllabus.

actions were brought against the receivership generally or against the corporation by name, "in the hands of," or "in the possession of," a receiver without stating the name of the individual, it would more accurately represent the character or status of the defendant. So long as the property of the corporation remains in the custody of the court and is administered through the agency of a receiver, such receivership is continuous and uninterrupted until the court relinquishes its hold upon the property, though its *personnel* may be subject to repeated changes. Actions against the receiver are in law actions against the receivership, or the funds in the hands of the receiver, and his contracts, misfeasances, negligences and liabilities are official and not personal, and judgments against him as receiver are payable only from the funds in his hands. As the right given by the statute to sue for the acts and transactions of the receivership is unlimited, we cannot say that it should be restricted to causes of action arising from the conduct of the receiver against whom the suit is brought, or his agents.

The defence is frivolous, and the judgment of the Supreme Court of Illinois must be

Affirmed.

The CHIEF JUSTICE and MR. JUSTICE GRAY, having been absent when this case was submitted, took no part in its decision.

MAGOWAN *v.* NEW YORK BELTING AND PACKING COMPANY.

APPEAL FROM THE CIRCUIT COURT OF THE UNITED STATES FOR THE DISTRICT OF NEW JERSEY.

No. 30. Argued October 14, 15, 1891. — Decided October 26, 1891.

Letters patent No. 86,296, granted to the New York Belting and Packing Company, as assignee of Dennis C. Gately, the inventor, January 26, 1869, for "improvements in vulcanized india-rubber packing," involved invention, and were valid.

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The Gately packing explained in view of prior packings.

The fact considered, that that packing went at once into such an extensive public use, as almost to supersede all packings made under other methods, and that it was put upon the market at a price from 15 to 20 per cent higher than the old packings, although it cost 10 per cent less to produce it.

IN EQUITY. To restrain the infringement of letters patent, and for an account. Decree in complainant's favor, from which respondent appealed. The case is stated in the opinion.

Mr. F. C. Lowthorp for appellant.

Mr. B. F. Lee for appellee. *Mr. W. H. L. Lee* was with him on the brief.

MR. JUSTICE BLATCHFORD delivered the opinion of the court.

This is a suit in equity, brought in the Circuit Court of the United States for the District of New Jersey, by the New York Belting and Packing Company, a Connecticut corporation, against Allen Magowan, Spencer M. Alpaugh and Frank A. Magowan, to recover for the infringement of letters patent No. 86,296, granted January 26, 1869, to the plaintiff, as assignee of Dennis C. Gately, the inventor, for "improvements in vulcanized india-rubber packing."

The specification says:

"My invention relates to packing of the kind for which letters patent were issued to Charles McBurney on the 28th of June, 1859. This packing, which is usually employed in the stuffing-boxes of pistons, is composed of piles of cloth or canvas, cut bias, coated with rubber, and pressed together and vulcanized. When thus made, the packing is very solid, and possesses but little elastic property, so that, as it wears, there is some difficulty in maintaining a tight joint between it and the piston. To obviate this disadvantage is the object of my invention, which consists in forming the packing with a backing of pure vulcanized rubber, or rubber of sufficient elasticity for the purpose desired, which may be covered and protected by a strip of canvas or other suitable fabric.

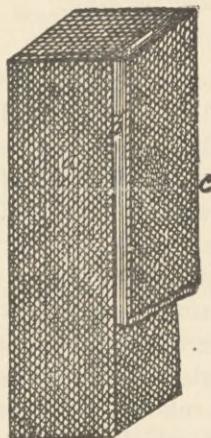
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"In the drawing *a* represents the ordinary packing-band, which is backed by the rubber strip *b*, the whole being vulcanized together, so as to be solidly united; and the rubber may be covered, if desired, by the canvas strip *c*, to protect it from injury.

"When the packing is placed in the stuffing-box and around the piston, and the follower is screwed down, so as to compress the packing, the rubber strip will also be compressed, and forced against the sides of the stuffing-box, and, as it cannot expand in the direction of the follower, it acts as a spring to hold the packing against the piston-rod, and to prevent leakage, compensating for any slight wear in the packing, and making a tight joint between the rod and the packing.

"It would be manifestly impracticable to impart this quality of elasticity to the body of the packing, or that part which is in contact with, or bears against the rod, but by backing it with an elastic cushion, which, upon being compressed between the follower and the sides of the stuffing-box, acts as above described, the packing is possessed of every qualification required for its successful use, and a tighter and better joint is made than has heretofore been practicable."

The drawing is as follows :



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The claim of the patent is as follows:

"The combination, with the packing, such as herein specified, of an elastic backing or cushion of vulcanized india-rubber, substantially as and for the purposes set forth."

The patent so referred to, issued to McBurney June 28, 1859, was No. 24,569, and was granted for an "improvement in packing for stuffing-boxes of pistons." The specification and drawings of the McBurney patent were as follows:

"Fig. 1 is a plan of the packing in the sheet; Fig. 2, a strip as it is bent into a circle when it is in use. Fig. 3, a section through a stuffing-box with the packing inserted. The hempen packing heretofore employed in stuffing-boxes is not easily adjusted so as to produce a uniform pressure upon all sides of the rod, and an elastic, durable, and substitute for it has long been a desideratum. In experimenting for this purpose I have laid together a suitable number of plies of canvas or cotton cloth with india-rubber between them, forming a cake of packing, which was afterward cut into strips. This was found to be objectionable for three reasons: 1st, the longitudinal threads of the canvas rendered the strips of packing very difficult to bend so as to insert it into the stuffing-box; 2d, the short transverse threads prevented the packing from yielding with a sufficient ease when the follower was brought upon it; 3d, the longitudinal threads of the strips were drawn out of place by the motion of the rod, leaving the packing with an uneven surface. The same packing was then cut into rings, the inner circle of which was of the diameter of the rod and the other circle of a diameter just sufficient to fill the stuffing-box; but it is obvious that this method of cutting the packing is very wasteful of material, as each stuffing-box requires a ring of a particular size both upon its inner and outer circle, and, as the ends of the threads are exposed to wear at four points around the circle, while at the four intermediate points the sides of the threads are exposed, these rings wear very irregularly, and when worn they become useless. To remove all these objections is the object of my present invention, the nature of which I will now proceed to describe. I take 25 pounds of india-rubber, 2 pounds of sulphur, and 4 to 8 pounds

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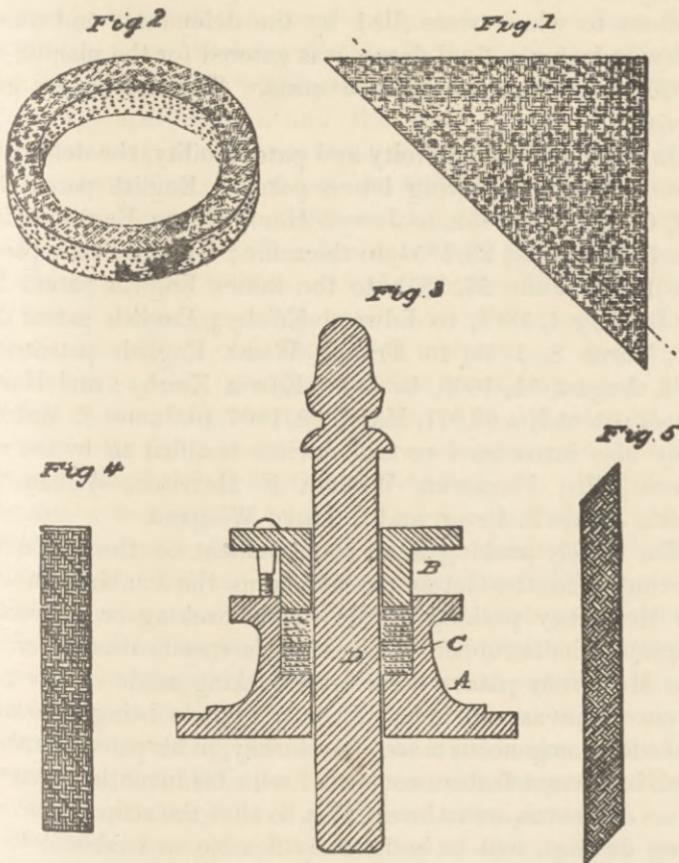
of silica or plumbago. With this compound, after it is suitably ground and mixed, canvas or other suitable fabric of cotton, linen or hemp is coated upon each side and a sufficient number of plies of such fabric are united by a heavy pressure or by rolling. The packing is then vulcanized, and to prepare it for use it is cut diagonally into strips (as seen in Fig. 1). These strips are then cut of the right length and are bent into rings (Fig. 2), which are inserted into the stuffing-box, as seen in Fig. 3, in which A is the box, B the follower, C' the packing, D the valve or piston-rod. In lieu of cutting the packing into short strips and bending it into rings, as above described, a longer strip may be wound spirally around the rod, the pressure of the follower bringing it to a uniform bearing upon the rod. It will be observed that, when cut diagonally, as above described, the ends only of all the threads are exposed to wear, by which it is caused to wear slowly and uniformly, whilst there are no longitudinal threads to resist the action of bending the strips, and they are consequently easily coiled within the stuffing-box; also, as there are no threads running transversely of the packing, it is easily caused to expand against the rod by pressure, and thus, as the packing wears, it may be again and again tightened up by bringing down the follower. In lieu of making the packing of continuous strips of canvas the latter may be cut into lozenge-shaped pieces, Fig. 4, which when matched together (Fig. 5) may be cut longitudinally, as upon the line $y\ y$, and produce the same effect.

"The compound which I have given above is that which I prefer for the manufacture of the packing, but both the ingredients and the proportions in which they are used may be variously modified without altering the spirit of my invention. Even the vulcanizing process may be dispensed with, and I do not, therefore, restrict myself thereto, but what I claim as my invention and desire to secure by letters patent is a packing for stuffing-boxes composed of canvas and india-rubber, as set forth, and cut diagonally, as described."

The answer to the bill denied infringement, and alleged that Gately was not the first and original inventor of the thing patented, referring to various prior patents, and setting up that,

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in view of the state of the art at the time of Gately's alleged invention, the claim of the patent was too broad, covering more than that of which Gately was the first and original inventor; that the specification failed to distinguish sufficiently what was novel from what was old in the art, and was not



distinct and clear; and that, in view of the state of the art, what was described and claimed in the patent exhibited no invention on the part of Gately. Issue being joined, proofs were taken, and the case was heard before Judge Nixon, then the district judge, who entered an interlocutory decree in favor

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of the plaintiff for an account of profits and damages and a perpetual injunction. The court, in its opinion, 27 Fed. Rep. 362, held that the patent had been infringed by the defendants, and decided, in view of the exhibits put in to show anticipation and want of patentability, that the combination of Gately involved invention. On the report of the master, exceptions to which were filed by the defendants and waived and withdrawn, a final decree was entered for the plaintiff, for \$9026.66 profits and \$742.05 costs. The defendants have appealed.

On the question of novelty and patentability, the defendants introduced the following letters patent: English patent No. 384, October 14, 1852, to Joseph Henry Tuck; English patent No. 1865, August 25, 1854, to the same; United States patent No. 13,145, June 26, 1855, to the same; English patent No. 19, January 4, 1865, to Edward Keirby; English patent No. 647, March 8, 1865, to Francis Wise; English patent No. 2064, August 11, 1866, to John Edwin Keirby; and United States patent No. 63,071, March 19, 1867, to James P. McLean. They also introduced certain devices testified to by the witnesses Allen Magowan, William F. Harrison, William W. Smith, James S. Lever, and S. Lloyd Wiegand.

The Gately packing is an improvement on the McBurney packing; and the Gately patent claims the combination with the McBurney packing of the elastic backing or cushion of vulcanized india-rubber which Gately's specification describes. The McBurney patent describes a packing made of alternate layers of canvas and india-rubber, the whole being vulcanized into one homogeneous mass. McBurney, in his patent, explains as an important feature connected with his invention, that the layers of canvas are to be cut bias, so that the strip of packing, when finished, will be sufficiently flexible to enable it to be bent around the piston-rod and placed in the stuffing-box with comparative ease, which would not be the case if the canvas were cut along the line of any one thread. The packing, after being thus made, is to be so used that the ends of the threads are exposed to wear — that is to say, are to lie against the moving surface of the piston-rod. Gately says, in his specifi-

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cation, that this McBurney packing did not possess a sufficient amount of elasticity to operate satisfactorily in all conditions — that is, the gland of the stuffing-box would not force the packing with such tightness against the piston-rod that a tight joint would result. The improvement of Gately consisted in the combination with the McBurney packing of a vulcanized rubber backing of pure gum — that is, gum free from layers of canvas, which backing was to lie between the portion of the strip of packing which was made in accordance with the McBurney specification, and the walls of the stuffing-box. Gately states that this backing is to be vulcanized to that portion of the packing which is to be subjected to wear, and the whole is to form one homogeneous mass which can be put into and taken from the stuffing-box as a single piece. The portion of the strip which is made according to the McBurney patent furnishes a wearing surface, the character of which always remains the same and is not altered under wear; and the pure rubber at the back furnishes an elastic backing, which serves always to keep the wearing portion of the packing in close contact with the piston-rod, when such pure gum backing is pressed upon by the gland of the stuffing-box. By this combination a new article results, namely, one which presents always the same character of surface under wear, and one which has sufficient elasticity to make a tight joint. The union by vulcanization of the front and back portions of the strip of packing serves also to insure the position of the packing in the stuffing-box, which result would not be attained if the front and the back portions were formed separately and placed in the stuffing-box as separate articles, the result of such union being that the ends of the threads of the parts submitted to wear must always be in contact with the piston-rod.

We think there was patentable invention in producing this article of Gately's, in view of everything put in evidence by the defendants, and in view of the McBurney patent. In the United States patent to Keirby, and the English patent to Keirby, the packing shown differs from the Gately packing in that the wearing surface is not entirely on one side of the strip of rubber which gives elasticity to the packing, but

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the rubber is in the centre of the portion which is to be subjected to the wear of the piston-rod. One of the features of the Gately packing consists in locating the rubber between the part of the packing which is to be exposed to wear and the walls of the box: and the elastic portion is located where it will not be subjected to wear. Moreover, neither of the Keirby patents shows layers of canvas cut bias and so arranged in the packing strips that the ends of the threads are the parts submitted to wear: and neither of them shows layers of canvas cut bias, located so that the ends of their threads will wear upon the piston-rod, and secured to one another and the rubber core by vulcanization; but on the contrary, as the Keirby packings wear they are continually presenting to the piston-rod surfaces having new characteristics.

The Wise packing is similar to the packing of the Keirby patents, except that outside of the canvas or other fabric an exterior metallic armor is provided, which takes the wear of the piston-rod. All that is above said in relation to the packing of the Keirby patents is true of the Wise packing, and in addition, it was intended in the Wise packing that the metallic exterior should be the wearing portion and should make the joint between the packing and the piston-rod. None of these packings show anything which bears upon the Gately invention, except that they show piston-rod packings, but not having the construction or the characteristics found in the Gately invention. As before remarked, the McBurney patent describes only that part of Gately's invention which forms the wearing surface of the Gately packing.

The McLean packing was made up of two parts, one consisting of vulcanized rubber and the other of cork. Of course the front and back portions of this packing could not be united by vulcanization, and the two parts were secured together by a metal strip, which was wound around both the cork and the rubber. In using this packing, the metal strips were first subjected to wear, and, when they were worn through, the cork took the wear; and when this occurred the rubber backing and the cork wearing portion were no longer secured the one to the other, but became separate and independent pieces

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in the stuffing-box. The character of the wearing surface altered, until such time as the two parts were left free in the box. When the packing was removed from the box, it would come out in two pieces, the rubber back being one piece and the cork front the other piece. This packing does not show such a wearing portion as the Gately patent shows, and is not a homogeneous article, made one by the vulcanization of the parts together, but is a compound article made up of two pieces so tied or secured together that, after a slight amount of wear, the parts cease to perform the purposes for which they were originally intended. The Gately packing is made at the beginning and sold as one homogeneous strip, and exists as such until it is rendered useless by extreme wear, and taken from the stuffing-box; and even at that time it is still a unit, and not two separate pieces disconnected from each other.

The Tuck patent of 1852 describes canvas coated with rubber, unvulcanized, which canvas is to be rolled upon itself and used in the stuffing-box in connection with rigid wearing surfaces, the object of the canvas being to force such surfaces into contact with the piston-rod. This patent does not show a single feature of the Gately invention.

The Tuck patent of 1854 shows nine forms of packing, none of which are vulcanized. All of the forms consist practically of a rubber core and canvas rolled around such core. In some cases the core is located centrally and in some at one side of the roll; but in all the canvas is rolled upon itself or upon the core, and, when the packing is in use and is subjected to wear, the character of the surface presented to the moving piston-rod is continually changing, it being part of the time a rubber surface and part of the time a canvas surface.

The Tuck patent of 1855 shows five different forms of packing, which are, in substance, copies of five examples shown in the Tuck English patent of 1854. There is no vulcanization referred to in this patent of 1855, and the wearing surface is composed of canvas cut on the bias, and rolled around the elastic or rubber portion, which itself is saturated with rubber. The rubber core is not insisted upon as a necessity; but the patent says that it is used at times for the purpose of giving greater elasticity to the packing.

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All three of the Tuck patents show packing which was different in principle from the Gately packing, in that the wearing portion was of such a character that it was continually changing in its conditions during the wear of the packing, and did not, like the Gately packing, present continuously to the piston-rod a surface having the same characteristics. In the Gately packing, the wearing portion of it is not formed by rolling canvas either upon itself or upon a rubber core, but is formed of layers of canvas secured to themselves and to the rubber backing by vulcanization. In fact, the Gately packing could not be made if it were impossible to vulcanize rubber, whereas all of the Tuck packings are capable of being made independently of vulcanization, their structure being such that canvas is used as a binding or cementing means in connection with any adhesive compound to keep the packing together and to form the strips. In the Gately packing the parts are kept together and in place solely by reason of the fact that the rubber has been subjected to vulcanization, thus making the packing a homogeneous whole, and not a strip rolled up upon itself and thus kept together. Therefore, none of the patents introduced by the defendants show the Gately invention. It is true that McBurney shows a part of the combination or article patented by Gately, and McLean shows a rubber backing; but the invention of Gately was new and patentable.

As to the other evidence and exhibits put in by the defendants, none of them show a rubber backing of pure gum and a front wearing portion united by vulcanization to the back portion, so as to produce a homogeneous article; but they all show something which Gately dispensed with, that is, an elastic core and a wrapping of fibrous or textile material around such core. Where the packing has a covering of textile material wrapped around the elastic portion of the packing, the wearing surface presented to the piston-rod cannot continuously, as in the Gately packing, be identically the same surface in character, nor can such feature exist, unless Gately's or McBurney's wearing portion and the elastic backing are united as a homogeneous whole by the process of vulcanization.

Within the requirements of *Atlantic Works v. Brady*, 107

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U. S. 192, 260, we think that Gately made a substantial discovery or invention, which added to our knowledge and made a step in advance in the useful arts; that within the case of *Hollister v. Benedict Manufacturing Co.*, 113 U. S. 59, 73, what Gately did was not merely the work of a skilled mechanic, who applied only his common knowledge and experience, and perceived the reason of the failure of McBurney's packing, and supplied what was obviously wanting; and that the present case involves not simply "the display of the expected skill of the calling," involving "only the exercise of the ordinary faculties of reasoning upon the materials supplied by a special knowledge, and the facility of manipulation which results from its habitual and intelligent practice," but shows the creative work of the inventive faculty.

The defendants made two forms of packing, one of them identically the packing of the Gately patent; in the other, a little over one-half of the packing was constructed identically in accordance with the Gately invention, and a little less than one-half was so constructed, except that the canvas was not cut on the bias. This feature made the packing relatively stiffer and injured it; and, even as it was made, like surfaces, or surfaces of the same character, were presented to the piston-rod throughout the entire wear of the packing in the box.

It is remarked by Judge Nixon in his opinion, as a fact not to be overlooked and having much weight, that the Gately packing went at once into such an extensive public use, as almost to supersede all packings made under other methods; and that that fact was pregnant evidence of its novelty, value and usefulness. *Smith v. Goodyear Dental Vulcanite Co.*, 93 U. S. 486, 495, 496; *Loom Co. v. Higgins*, 105 U. S. 580, 591. It may also be added, that the evidence shows that the Gately packing was put upon the market at a price from 15 to 20 per cent higher than the old packings, although it cost 10 per cent less to produce it.

The decree of the Circuit Court is

Affirmed.

The CHIEF JUSTICE and MR. JUSTICE GRAY did not hear the argument and took no part in the decision of this case.