

one of novelty, and there exist previous patents at all in relation to the same subject. The difficulty is very largely brought about by differences in the power to correctly perceive the mechanical bearing of the question. In the case cited (*Topliff v. Topliff*) the court upheld the invention secured by letters patent, while admitting expressly that the question was by no means free from doubt. I feel better satisfied with the result, as I recognize thereby that I do not deny the patentee the just fruits of his time, energy, and study, and also recognize that I have done no injustice to any one else.

NORTON et al. v. JENSEN.

(Circuit Court, D. Oregon. June 15, 1897.)

1. PATENTS—COMBINATIONS—MECHANICAL EQUIVALENTS.

The term "equivalent," as applied to inventions consisting merely of combinations of old ingredients, is special in its signification, differing somewhat from its application to an invention consisting of a new device, or an entirely new invention. In the former case it covers only such other ingredients as, in the same arrangement of the parts, will perform the same function, if they were well known at the date of the patent as proper substitutes for the one described in the specifications.

2. SAME—CAN-HEADING MACHINES.

In a can-heading machine, a device consisting of a disk moving horizontally upon which the can bodies are delivered in an upright position, so that completely filled cans can be automatically headed, is not an equivalent of an inclined chute down which the cans roll horizontally, in the special sense in which the word "equivalent" is used in relation to inventions consisting merely of combinations of old ingredients.

3. SAME—LIMITATION OF CLAIMS—REJECTIONS AND AMENDMENT.

Where a patentee is enabled to obtain his patent only by abandoning broader claims and inserting a precise description of a particular device, this latter device becomes essential to the claim allowed, and it does not avail him to say that he does not wish to limit himself to any particular form of construction, or to invoke a broad and liberal construction of his patent.

4. SAME—IMPROVED MACHINES—PRIMARY INVENTIONS.

An invention consisting in an improved machine does not become primary in its character by the fact that, as improved, it is the first of its kind.

5. SAME—RES JUDICATA.

Where, in a former suit, the court, by reason of the absence of evidence contained in the file wrapper, found the invention to be of a primary character, and gave the patent a broad and liberal construction, *held*, in a subsequent suit, between the same parties, in which the alleged infringing machine was made under a new patent granted since that adjudication, that the particular ground of controversy was not the same, so that the court was at liberty to give the patent its true and narrower construction, whereby infringement was avoided.

6. SAME.

The Norton patent, No. 267,014, "for certain new and useful improvements in machines for putting on the ends of cans," is not for a primary invention, and is not entitled to a broad range of equivalents. It is limited to the particular combination shown and described, and is not infringed by a machine made under the Jensen patent, No. 443,445, for an improvement in can crimpers and cappers.

7. SAME.

The Norton and Hodgson patent, No. 294,065, "for an improvement in can ending and seaming machines," is not for a primary invention, the machine not being the first to combine can heading and crimping, and is not infringed

by the machine of the Jensen patent, No. 443,445, in which the crimping device is distinct from the heading mechanism, whereas in the Norton machine the crimping process is performed in the heading mechanism.

This was a suit in equity by Edwin Norton and Oliver W. Norton against Mathias Jensen for alleged infringement of certain patents relating to automatic can-heading machines.

Munday, Evarts & Adcock and Snow & McCamant, for plaintiffs.
Dolph, Nixon & Dolph and J. T. Lighter, for defendant.

BELLINGER, District Judge. This is a suit for infringement of four letters patent, owned by the complainants, for automatically putting the bottoms and heads on tin cans. The complaint involves the following patents: (1) The Norton patent, No. 267,014, dated November 7, 1882, as to claims 1 and 2. (2) The Norton and Hodgson patent, No. 274,363, dated March 20, 1883, as to claims 6 and 7. (3) The Norton and Hodgson patent, No. 294,065, dated February 26, 1884, as to claim 14. (4) The Jordan patent, No. 322,060, dated July 14, 1885, as to claims 1, 2, 6, 7, 11, 12, and 13. The first of these patents, the Norton patent, No. 267,014, is upon what complainants claim to be the original invention of a machine for automatically applying tight exterior fitting can heads to can bodies. The Norton and Hodgson patent, No. 274,363, and the Jordan patent, No. 322,060, are for improvements upon the Norton patent, No. 267,014; and the Norton and Hodgson patent, No. 294,065 is for a combined can heading and crimping machine. It is claimed for this last invention that it is primary and generic, but this is contested by the defendant, who contends that it is merely for an improvement in can ending and seaming machines. The alleged infringing machine of the defendant, Jensen, is under a patent issued to him, and numbered 443,445, this being the second patent issued to Jensen for a can heading and crimping machine, and is dated December 23, 1890. Jensen's first patent is for "an improvement in can crimpers and cappers." It is numbered 376,804, and is dated January 24, 1888. This earlier patent was held by the circuit court of appeals, in a suit brought by these complainants against the defendant, Jensen, and one John Fox, to infringe the four patents now sued on. *Norton v. Jensen*, 1 C. C. A. 452, 49 Fed. 859. Complainants contend that the rights asserted by them in the two suits and the matters of defense presented in each are the same, and that the questions arising under the several patents are therefore *res adjudicata* between the parties.

Claims 1 and 2 of Norton's patent, No. 267,014, being his amended claims after the patent office had rejected his original claims, are what are known as "combination claims," and are as follows:

(1) "In a machine for applying to can bodies heads fitting outside the same, the combination of a device for sizing the exterior diameter of the can body to conform to the interior diameter of the can head, and holding the same so sized while the head is applied, said sizing and holding device having its end enlarged to fit the exterior diameter of the can head, so as to leave an annular space between it and the can body for the reception of the flange of the can head, with a device for forcing the can head into said annular space, and thereby applying the head outside the can body, substantially as specified."

(2) "In a machine for applying to can bodies heads fitting outside the same,

the combination of a chute or device for delivering the can bodies to the machine, with a movable device for clamping the can body and sizing its exterior diameter to conform to the interior diameter of the can head, said clamping and sizing device having its end or mouth enlarged to leave an annular space between the same and the can body clamped therein for the reception of the flange of the head, a chute or device for delivering the can heads to the machine, and a device for forcing the can head into said annular space at the end of said clamping and sizing device, substantially as specified."

In the case of *Norton v. Jensen*, above referred to (1 C. C. A. 452, 49 Fed. 859), the circuit court of appeals, having concluded that Norton's invention was prior to that of Pierce, held that Norton's invention must be "considered as being of a primary character, standing at the head of the art as the first machine ever invented for applying tight, exterior fitting can heads to can bodies automatically," and that the appellees were entitled to a broad and liberal construction of the claims of their patent. But in the more recent case of *Wheaton v. Norton*, 17 C. C. A. 451, 70 Fed. 837, the same court says:

"The contents of the file wrapper, not in evidence in the case of *Norton v. Jensen*, 1 C. C. A. 452, 49 Fed. 859, show that Norton, in his application for the patent, claimed to have invented, not an automatic or any other kind of machine for putting ends on fruit or other cans, but to have invented 'certain new and useful improvements in machines for putting on' such ends."

In the first case, the court, misled as to the fact by what appeared in the case, concluded that Norton's machine stood at the head of the art. It appears from the wrapper, not in evidence in that case, but introduced in the case of *Wheaton v. Norton*, that Norton's claims 1, 2, 3, 4, 5, and 6 were rejected by the patent office on the ground that they were anticipated by other inventions, mainly those of Pierce. These rejected claims are as follows:

"(1) In a can-ending machine, the combination of a clamping mold conforming to the exterior of the can body, a piston for forcing the cap or end piece upon the body, and devices for operating said mold and piston, substantially as specified. (2) In a can-ending machine, the combination of a clamping mold conforming to the exterior of the can body, and chamfered away at the end so as to give room for flange of the cap or end piece, a piston for forcing the end piece upon the body, and devices for operating both mold and piston, substantially as specified. (3) In a can-ending machine, the combination of a clamping mold conforming to the exterior of the can body, a chute for admitting the can ends, a piston for applying the ends to the body, and devices for operating both mold and piston, substantially as specified. (4) In a can-ending machine, the combination of a series of clamping molds, mounted and rotating about a common center, devices for opening and closing said molds, a piston or pistons for each mold, and a device or devices for operating said pistons, substantially as specified. (5) The combination, with a movable can-clamping and discharging mold, of a device for forcing the can end upon the can body while clamped in said mold, substantially as specified. (6) The combination, with a clamping mold for the can body, of a chute or device for delivering the can bodies to said mold, a device for presenting and retaining the can end in position at the mouth of the mold, and means for forcing the can end upon the can body, substantially as specified."

Norton did not contest this ruling of the patent office, but acquiesced in it, and amended and limited his claims so as to conform to it, and his invention is therefore not entitled to the broad and liberal construction accorded it in the case of *Norton v. Jensen*, and so the court held in *Wheaton v. Norton*, saying, among other things, that "the complainant's (Norton's) patent is by the record in this case

placed in a very different position from that occupied by it in the case of Norton v. Jensen." Instead of the broad and liberal construction allowed the Norton invention in the former case, the court of appeals in Wheaton v. Norton applied the rule laid down in Sargent v. Lock Co., 114 U. S. 63, 5 Sup. Ct. 1021, that "in patents for combinations of mechanism, limitations and provisos imposed by the inventor, especially such as were introduced into an application after it had been persistently rejected, must be strictly construed against the inventor, and in favor of the public, and looked upon as in the nature of disclaimers." Such is the rule applied without exception in the construction of patents. And so the supreme court says, in McCormick v. Talcott, 20 How. 402:

"If he [the patentee] be the original inventor of the device or machine called the 'divider,' he will have a right to treat as infringers all who make dividers operating on the same principle, and performing the same functions by analogous means or equivalent combinations, even though the infringing machine may be an improvement of the original, and patentable as such. But if the invention claimed be itself but an improvement on a known machine by a mere change of form or combination of parts, the patentee cannot treat another as an infringer who has improved the original machine by use of a different form or combination, performing the same functions. The inventor of the first improvement cannot invoke the doctrine of equivalents to suppress all other improvements which are not mere colorable invasions of the first."

And in the case of Proctor v. Bennis, 36 Ch. Div. 740, the court, in referring to this rule, says:

"Where there is no novelty in the result, and where the machine is not a new one, but the claim is only for improvements in a known machine for producing a known result, the patentee must be tied down strictly to the invention which he claims, and the mode which he points out of effecting the improvement."

In the case of Norton v. Jensen, the court, upon the ground that Norton's invention was of a primary character, says that, Norton being the original inventor, he would have the right to treat as infringers all persons who make devices or machines operating on the same principle and performing the same functions by analogous means or equivalent combinations, even though the infringing machine may be an improvement of the original, and patentable as such; and the court accorded to Norton the benefit, under the broad and liberal construction to which upon such a state of the case he was entitled, of the doctrine of equivalents. And upon such a construction the court held that the fact "that by rounding and sizing the can body by external pressure, and by centering and guiding the can head accurately in line with the can body, the entire circumference of the can body could be entered simultaneously into the can head by forcing its two parts squarely together," was Norton's discovery, and that the can-body mold was his invention. As to both of these matters, if one can possibly be the subject of discovery and the other of invention, the decision is erroneous in view of the very different position in which the Norton patent is placed in Wheaton v. Norton from that occupied by it in the former case. It can only be because of the liberal construction erroneously accorded the Norton patent as an original invention standing at the head of the art that the Jensen tapering hole and can-head recess were

held to possess all the general features of the so-called "Norton Mold," "though different in form." The latter could not be identified or recognized from a description of the former. There is nothing in either that suggests the other. Nor can the Jensen tapering guide and sizing hole be held an infringement of the Norton mold, unless Norton is entitled to claim every form of sizing and guide device invented after his patent. No one would think of designating the Jensen device as a mold, nor the mold of the Norton combination by any other name. The latter clamps the entire can body, except at the end where the can head fits upon it, and holds it immovably. The Jensen device does not clamp the can body in any part, nor close around it. It is comprised of two semicircular plates, probably five-eighths of an inch thick, mounted upon a table through which there are two fixed tapering holes, opposite each other. Each of the plates has on each side one-half of a conical hole, conforming with the fixed tapering holes in the table, so that when the ends of the plates meet over the fixed hole, the two half holes in the plates will form with the fixed hole an entire conical guide or hole of a depth of about one inch. The end of the can body is sized by this conical hole to fit the can head; not by the clamping process of the Norton machine, but by a scraping action brought about by pushing the end of the can body through the conical hole. In their brief filed in this case, complainants' attorneys, speaking of the old Jensen machine in litigation in the former suit, and of the differences between that machine and the machines shown in the drawings of the patents sued on, say: "Thus as to the difference in shape and movements of parts, the mold of the old Jensen machine was very different from the Norton mold in form." In the Jensen sizing device in the old machine there was a recess for centering the can head, and this gave to the device the only resemblance it bore to the mold of Norton's combination, since, though not so deep, it corresponded in feature to the large diameter in such mold. The Jensen device is, therefore, unlike the mold used by Norton in its general features and in its mode of operation. Its construction involves the use of the inventive faculty, and it is an improvement "upon any can-heading machine previously constructed, and a very useful invention," and was so declared by a majority of the court in *Norton v. Jensen*.

It is only by giving the very broad and liberal construction to the Norton patent that was not allowed it in *Wheaton v. Norton*, that the Jensen mechanism, consisting of a feed fork by which the can bodies were pushed along a horizontal passageway, in a vertical position, to the heading machine, was decided to be an infringement of the Norton chute. If in any case the can-conveying mechanism of the first Jensen can be considered the equivalent of the Norton chute, it cannot be so considered where the patent is one for improvements upon combination claims. The doctrine of equivalents is allowed to patentees of inventions consisting merely of combinations of old ingredients. But, as stated in *Imhaeuser v. Buerk*, 101 U. S. 655, "The term 'equivalent,' as applied to such an invention, is special in its signification, and somewhat different from what is meant when the term is applied to an invention consisting of a new device or an entirely new machine." The rule as to equivalents in such cases is stated by the court as follows:

"Patentees of an invention consisting merely of a combination of old ingredients are entitled to equivalents, by which is meant that the patent in respect to each of the respective ingredients comprising the invention covers every other ingredient which, in the same arrangement of the parts, will perform the same function, if it was well known as a proper substitute for the one described in the specification at the date of the patent. Hence it follows that a party who merely substitutes another old ingredient for one of the ingredients of the patented combination is an infringer if the substitute performs the same function as the ingredient for which it is so substituted, and it appears that it was well known at the date of the patent that it was adaptable to that use. Gill v. Wells, 22 Wall. 1, 28."

The new Jensen differs from the old in respect to the can-conveyor device. In the new machine the can bodies are conveyed by a revolving disk to the heading mechanism. The resemblance claimed by complainants between this device and that of the first Jensen is in the fact that it is a positive conveyor, and much stress is put upon this point in Jensen's cross-examination, the assumption being that, inasmuch as the feed-fork device of the first machine was held to infringe the gravity chute of Norton, therefore any positive conveyor, regardless of form or mode of operation or of inventive skill in construction, is within the adjudication that has been had; in short, that the decision is an adjudication that all positive mechanism by which can bodies and can heads are moved to the heading device is within the domain of the Norton patent. And this gravity chute is not an invention by Norton. He has merely adopted it, to the exclusion, if his claim is upheld, not of a particular device, but of every possible contrivance by which can bodies and heads may be moved to the heading mechanism in the can-heading process. This claim is extensive enough to wholly exclude invention from this particular field. The doctrine of equivalents does not admit of such an application as this. An invention that moves can bodies by a conveyor is not necessarily the equivalent of the Norton chute; at least in the special sense in which the doctrine of equivalents is applied in cases like the one on trial, where the complaining patentee's invention is limited to a mere combination of old ingredients. Expert witnesses called by complainants testify, in effect, as they have with reference to other features of the Jensen machine, that the Jensen rotary disk is the equivalent of the Norton gravity chute, and that it is a familiar mechanism for the use to which it is put in the Jensen machine. But in the determination of this question the obvious fact cannot be overcome by such testimony. Experts are usually but special advocates, to be found on every side of every question of sufficient importance to engage their services. After all, the ultimate fact must depend upon the judgment of the court, not upon the conclusion of witnesses.

The Jensen carrying device is not, in my judgment, an equivalent or substitute for the Norton chute. It is not in any sense within the description of an equivalent within the rule laid down in the case cited. It is not such a case as where a weight is substituted for a spring, or a lever for a screw; these ingredients being at all times well-known substitutes for each other. In all such cases the ingredient used may be said, for obvious reasons, to include whatever is at the time of the patent a known substitute for it. The Jensen device, as already shown, consists of a disk moving horizontally, upon which

the can bodies are delivered in an upright position, thus enabling completely filled cans to be automatically headed. The Norton chute is a mere incline, down which the cans roll horizontally. The positive conveyor does not copy the principle of operation of this gravity incline. Whatever may be said in comparison of the conveyor in the first Jensen with Norton's chute, the utmost liberality of construction cannot make the conveyor in the new machine the equivalent of Norton's device, in the sense contended for. The fact is patent to the understanding that a mechanism by which cans are moved by positive force in a vertical position, is not the equivalent of an incline down which they roll horizontally by force of gravity. It does not admit of argument, and the testimony of witnesses to the contrary is mere impertinence.

In his amended application Norton makes substantially two claims which distinguish his invention from the claims made in his original application, and disclaimed by him in his amended application. These are (1) the new use of the mold to size the exterior of the can body, and (2) the annular space between the can body and mold, conforming to the thickness and width of the flange on the can head or end, into which annular space the head is forced. Of these two elements, Norton, in his amended specifications and claims, says: "None of the references show a mold or clamp for the can body having an annular space between the can body and the mold into which the head is forced, nor do any of the references show sizing the exterior of the can from the outside, both of which are essential features of applicant's invention." In providing the annular space, the end of the mold, according to the specifications of the Norton patent "is chamfered away interiorly to give room to the flange of the cap or can end to pass outside the can body." It is only necessary to examine the claims rejected by the patent office and disclaimed by Norton to see how the patent issued to him is limited, and to understand precisely what his invention is. The contention of complainants is that the enlargement in the end of the mold, which Norton, in his specifications, says is produced in his invention by "chamfering" the mold "away interiorly," constitutes the annular space of his machine. But the prior inventions had a mold "chamfered away at the end so as to give room for the flange of the cap or end piece." In the second claim of his original application he claimed the enlargement in the end of the can mold produced by "chamfering away the mold at the end so as to give room for flange of the cap or end piece" as a feature of his combination. But this was rejected on the ground of a prior patent, and Norton was, in effect, compelled to disclaim it. He was compelled to make a new claim in such terms as would distinguish it from the rejected claim; and, having done this, he cannot now go back to the rejected and abandoned claim. It was necessary to him in his amended claim to specify some new element, something more than the enlargement at the end of the can mold to give room for the flange of the can head, by which he had described what he now calls the "annular space" in his combination. That was not his invention, nor was the combination which included it his. Thereupon he added what he designated "an essential feature," by which he limited his

claim, namely, the "annular space between the can body and mold, conforming to the thickness and width of the flange on the can head or end, into which annular space the head is forced." In the note to his amended specifications and claims Norton says: "None of the references [meaning none of the prior patents upon which his original application had been rejected] show a mold or clamp for the can body having an annular space between the can body and the mold into which the head is forced, nor do any of the references show sizing the exterior of the can from the outside, both of which are essential features of applicant's invention." It follows, and the court in the Wheaton Case holds, that, inasmuch as Norton's patent is for a combination, unless the defendant's device contains the annular space and piston or device for forcing the can head therein, or their mechanical equivalents, the charge of infringement is not made out.

In *Wheaton v. Norton* this annular space is defined as "a space existing between the circumference of two concentric circles having different diameters." In the present *Jensen* machine this space does not and cannot exist. If the conical sizing hole of the *Jensen* machine is considered to be a mold, and the *Jensen* can-head device with its recess a part of such mold, as the court, upon the case then presented, decided, the effect is to ascribe to the *Jensen* machine a mold with an enlargement at the end within the description which Norton gave of his invention in rejected claim numbered 2. It is a fact that has the force of a demonstration that the description which Norton is compelled on the trial of this case to give of the "annular space" of his combination, in order to make it appear that *Jensen's* device contains it, and which the court of appeals in the former case gives of this essential feature of Norton's invention, namely, a sizing mold having two diameters, the smaller of which conforms to the exterior of the can body and the larger of which corresponds to the exterior of the can-head flange, is essentially the same as that given by Norton in the claims rejected by the patent office. It was only by limiting his claim, by a precise description, to a sizing device or mold having its end enlarged "so as to leave an annular space between it and the can body for the reception of the flange of the can head," and by abandoning, and, in effect, disclaiming, all the six claims as originally made, that he was enabled to obtain his patent. Having tied himself down in this way, it does not avail him to say in the patent that he does not wish to limit himself to any particular form or construction of can mold, and to invoke a broad and liberal construction of his patent. In the brief filed for complainants, it is said that the object of the mechanism is not to force a can head into a recess or annular space, but to put the head on the body. This is precisely what was stated in the rejected and abandoned claims, and manifestly no construction of the patent can be allowed that restores to it what the patent office rejected, and the patentee abandoned. The intention of the patent is not to be ascertained from statements in the patent or application made upon the basis of the claims originally made, but subsequently abandoned. Norton did not claim that his invention was primary or fundamental. He only claimed to have invented "certain new and useful improvements" in machines for putting ends

on cans, and one of these improvements—an essential one—is the device by which the annular space is produced. Any description of the Norton “annular space” to fit the Jensen machine as construed by the court of appeals takes it out of Norton’s patent, and restores the rejected claims of Norton’s original application; and any description within the patent wholly separates it from the Jensen machine. The patented device requires a space between the exterior diameter of the end of the can body and the enlarged interior diameter of the mold. The annular space of Norton only exists when the can body is in the mold. I am of the opinion that this “annular space” was a mere expedient to secure a patent, when all the claims by which the combination could properly be described had been rejected, and that it is not in any sense an invention. The can body is not a part of the device, and yet without it there can be no annular space by any description of it not in the rejected claims. The annular space of the patent only exists as a result of the can-heading process, and it cannot, therefore, be a means in that process. Nevertheless, such as it is, it is an “essential feature” of Norton’s combination, since he has so specified it in his application for a patent, and his right to the relief he seeks depends upon it.

In *Fay v. Cordsman*, 109 U. S. 420, 3 Sup. Ct. 244, the court says:

“In such a claim [a claim for combination], if the patentee specifies any element as entering into the combination, he makes such element material to the combination, and the court cannot declare it to be immaterial.”

But if Norton is not estopped by the rejected claims of his original application to show that the enlarged diameter at the end of the mold constitutes the annular space of his patent, yet neither this annular space nor its equivalent can, by any construction, however broad, be found in the Jensen machine. The Jensen machine contains a can-head recess in the under side of a plate above the tapering sizing and guide device. This recess holds the can head in place while the can body is forced into it through the tapering hole from below. It is semicircular in form, and is so fixed that when a can head is held against the semicircular recess end, it is directly over the tapering hole. Complainants contend that this recess constitutes “an enlargement at the end of the mold,”—assuming that the Jensen tapering hole and can-head recess constitute “a mold,”—and their brief refers to it as “a recess at the end of the mold, differing in size by the thickness of the tin from the smaller diameter.” By this process the Jensen machine is construed to have a sizing mold with an enlargement at the end corresponding to that in the Norton mold, and this in turn is construed as constituting the annular space of Norton’s combination. As we have already seen, the annular space is described by Norton in his amended specifications as the “space between the can body and the mold into which the can head is forced.” The mere existence of a space between the can body and the mold will not answer the description of Norton’s annular space, unless it is a space into which the can head can be forced upon the can body. In the Jensen machine such a thing is impossible. It is possible in that machine, by forcing the can body through the tapering sizing hole, to have a space between the can body and the semicircular side of the

can-head recess; but if this space is produced in the Jensen machine the can head cannot enter the recess, and such a space, so far from performing a function in the can-heading process, will obstruct, and altogether prevent, the can-heading operation. Norton has not patented this annular space. That is not the subject of patent. He has patented the device from which such space results. It would be enough if he could and had patented as an invention a particular space produced in the can-heading process into which the flanges of the can head are guided as the head is forced on the can body, without claiming the exclusive right to all space occupied by the can-head flanges while the can body is entering the can head, for, since the can-head flanges must occupy some space as well when the can head and can body are centered together as at other times, such a claim, if successful, will make any further invention in automatic can heading impossible.

In deciding whether Jensen's machine contains the "annular space," which is an essential feature of Norton's invention, or whether the rotary disk is the equivalent of the Norton chute, or the tapering sizing hole is the equivalent of Norton's mold, the claims of patent 267,014 must be strictly construed against the inventor and in favor of the public, Norton having, after the six claims of his original application had been rejected by the patent office, amended his application, and limited his claims to these "improvements" as such. But, without this, I am of the opinion that there is no possible construction of the claims of this patent, however broad and liberal, that will bring the Jensen machine within them in respect to the features named, more especially with respect to the annular space and gravity chute of Norton's combination.

It is not material to consider whether the Jensen device, by which the can body is forced through the conical guide, is the equivalent of the piston of Norton's combination. It performs an important function in the can-sizing operation that wholly separates it from the piston of Norton, and so differs from it in other particulars as to disprove the claim of infringement, unless all devices, regardless of form or mode of operation, that accomplish the results of Norton's devices, are held to infringe them. Nor is it material to consider whether the Norton spring device has its equivalent in Jensen's machine; nor the question whether the principle of the conical guide of Jensen, so far from infringing the Norton mold, is not found in the earlier patents of Marsh and Miller. Nor is it material to consider the other questions of infringement that are presented in the case. All the claims alleged to be infringed are combination claims, and in all of them the annular space is an essential feature. Without this essential feature, there can be no infringement. The contention of complainants that Norton's invention is fundamental, and stands at the head of the art as the first machine ever invented for automatically putting can heads on the outside of can bodies, contradicts the evidence of the file wrapper, from which it appears that his claim was not that he had invented a can-ending machine, but "certain new and useful improvements" in such machines; and it is so decided in *Wheaton v. Norton*. An invention does not become primary in its character by the fact that the

machine as improved is the first of its kind. The Norton-Hodgson patent, No. 294,065, which complainants contend is primary and generic, is, like the other patents involved in the suit, merely "for an improvement in can ending and seaming machines." It is not the first machine which combined can heading and seaming. The Miller patent, No. 232,535 is for a machine containing this combination. The ground upon which the claim is made that patent 294,065 is for an original invention is of the same character as that made for patent 267,014,—that it is the first machine that combined crimping and exterior can heading. As already stated, the fact that a machine as improved is the first of its kind does not give it the character of a primary and generic invention. Norton, in his application upon which patent 267,014 was issued, only claimed for an improvement; and the patent has, as we have seen, been adjudged to be merely for an improvement. And so of claim 14 of patent 294,065, which is merely for an improvement. It is not the first machine to combine can heading and crimping. In its elements, the Norton machine differs widely from that of Miller, and these differences are relied upon to give it an original character; but as to the difference between the Norton machine, in which the crimping and heading operation are both performed by the single heading mechanism, involving what is known as the "squeezing jaw," and the Jensen machine, where the crimping is performed by a rotary form of mechanism, separate from the heading mechanism, the complainants' position is altered. They contend that these differences do not give to Jensen's machine the character of an invention, nor relieve him from the charge of infringing the Norton-Hodgson can-heading and crimping combination; that the rotary form of crimping mechanism employed by Jensen is an old and well-known equivalent for the squeezing-jaw form of mechanism shown in the Norton patent, and that they are, therefore, entitled to it under the doctrine of equivalents. But, if this is so, it does not appear upon what principle the Norton patent can claim invention. The invention is not in the combination as such, since, as we have seen, that is in Miller's patent. If it is in the improvement of the combination, and such improvement combines with Norton's heading mechanism one of two well-known crimping devices, why may not Jensen combine the other with his heading mechanism, so long as he avoids the Norton method of uniting the two? The rotary crimper is not an ingredient in complainants' invention, within the rule that entitles a patentee to all well-known substitutes for parts that go to make up his machine, but it is in itself an aggregation of parts constituting an invention. If complainants' invention was on the principle by which a crimping machine is combined with a heading machine, and it was practicable to apply such principle to a rotary crimper, their contention would be upheld, and in such case it would, in my opinion, make no difference whether the crimper was an old and well-known machine or a new and patentable one. But the Norton invention does not admit of the employment of the rotary crimper. The latter is distinct from the heading mechanism, although the two mechanisms may be combined in one machine. In the Norton improvement the crimping process is performed in the heading mechanism. The can is headed and crimped by a single de-

vice, while in the Jensen machine there are two distinct devices combined. By "mechanical equivalent," as it is sought to have it applied in this particular, is meant, that Norton might have used the invention of the rotary crimper in his invention in lieu of the squeezing jaws; but this would be to substitute another invention for his own, in which the heading and crimping process are inseparable, and therefore would not avail to bring the rotary crimper of the Jensen machine within the scope of patent 294,065.

As to the effect of the former adjudication upon the questions now presented, the contention of complainants is that the construction given the patents sued on in the former suit is broad enough to include the changes made in the new Jensen, and so bring it within the boundaries of the Norton patent; "that the defendant cannot be heard to contend for any different construction, or more limited scope for the patents sued on, than that construction and scope which, after thorough contest, the court decided they were entitled to receive." As already appears, the court in the former case gave to the claims of Norton's patent 267,014 a broad and liberal construction, upon a mistake as to the primary character of the invention, and of Norton's claim in the patent office, upon which the patent was issued. In the more recent case of *Wheaton v. Norton*, 17 C. C. A. 447, 70 Fed. 840, the court held against the construction given the patent in the former case, saying, in effect, that the patent in fact occupied a very different position from that accorded it in the case of *Norton v. Jensen*. The rule as to *res adjudicata* is that, when a particular ground of controversy has been passed upon, the adjudication bars a subsequent action upon such ground. The ground of action in the present case is not that involved in the former suit. The present Jensen machine is a new machine, made under a new patent issued since the decree in the former suit, and differing from the machine in litigation in the other case. The particular ground of controversy is, therefore, not the same as that already decided, and the question is whether "the same scope" is to be given complainants' patents that was given them in the first case, and, if so, whether they are broad enough to include what complainants call the "changes" in the new Jensen machine. The former decision of the court of appeals is conclusive upon the particular question decided, but not upon similar questions that may subsequently arise between the parties. As to these, the principle of the decision only applies so long as it is not overruled. The decision is special, but the principle of the decision is a rule of universal application. There has been one rule of construction in the case of *Norton v. Jensen* and another in that of *Wheaton v. Norton*, but it does not follow that there is one law for Jensen and another for Wheaton; that in all cases where Jensen is a party Norton's patents are to have a different construction from that given them in all other cases, and one to which they are not entitled.

The defendant is entitled to a decree in his favor that the bill of complaint be dismissed, and it is so ordered.

UNITED STATES PRINTING CO. v. AMERICAN PLAYING-CARD CO.

(Circuit Court, W. D. Michigan. June 23, 1897.)

PATENTS—COSTS OF REFERENCE.

Each party should, in the first instance, pay his own costs, on a reference in a patent case to ascertain profits and damages, leaving the question of their final disposition to be determined when the decree is entered.

On Motion by Defendant for an Order Directing the Master as to a Question of Costs.

Briesen & Knauth, Paul H. Bate, and Howard, Roos & Howard, for complainant.

Boudeman & Adams, for defendant.

SEVERENS, District Judge. On motion for an order directing the master in respect of the costs of taking testimony upon the reference heretofore ordered in this case. This motion is intended to raise before the court the question as to the obligation of parties to pay costs upon a reference ordered by an interlocutory decree for the purpose of ascertaining profits and damages which the court has adjudged the complainant is entitled to recover in a patent case. For several years past the parties and counsel in such cases have, in this district, quite generally followed a practice supposed to have been held to be the regular and proper one by Judge Wheeler in the case of *Urner v. Kayton*, 17 Fed. 539. In that case Judge Wheeler decided that the defendant should bear the costs of the reference in the first instance, leaving their ultimate disposition to be fixed when the final decree in the case should be entered, and it has been supposed that this was a precedent for all such cases. But the question whether such a duty rests upon the defendant has never been formally submitted to this court, and no rule of practice has been judicially established here upon this subject. Judge Lowell, in Massachusetts, held in the case of *MacDonald v. Shepard*, 10 Fed. 919, to the contrary of what has been by some supposed to have been ruled by Judge Wheeler, and that the practice in respect to the payment of costs pending a reference was not different from that which obtains upon references in equity courts in other cases. I think it is more than doubtful whether Judge Wheeler intended, in *Urner v. Kayton*, to lay down a general rule which should be applicable to all such references. On the contrary, I incline to construe his opinion as reported to be based upon the peculiar phraseology of the decree ordering the reference in that case, which it seems was a direct order on the defendant, requiring him to go forward and render the account; and it would seem that the decision of the court was rested upon the theory that there was an obligation to take an affirmative step by the defendant, and go forward in executing the order to account. Certainly the general practice in cases of reference is for each party to pay his own costs as the proceeding goes forward, and for the court ultimately to adjudge upon whom the payment of such costs ought equitably to be devolved; and I can hardly think Judge Wheeler intended to lay down a rule in opposition to the general one which governs this sub-