

articles are first brought "under the spraying device," and, after being sprayed by the solution, are then brought "under the perforated drum," to be salted. To hold, then, that the words "spraying and salting devices" mean the "spraying device" alone, to the exclusion of the salting device, would be to violate every recognized canon of construction applicable to the subject. The foregoing views being decisive of the case, I do not deem it necessary to consider other matters of defense which counsel have discussed. Let a decree be drawn dismissing the bill, with costs.

ACTIEBOLAGET SEPARATOR *et al.* *v.* SHARPLESS.¹

(Circuit Court, E. D. Pennsylvania. December 30, 1891.)

1. PATENTS FOR INVENTIONS—EXTENT OF CLAIMS.

Claim 1 of letters patent No. 293,314, containing as elements a rotary vessel, an upwardly projecting neck open at the top, and having a discharge orifice or notch at its upper edge, must be restricted to a creamer having this notch cut through the side of the neck at a level below its upper horizontal edge, since all the other elements of the claim are old, and creamers had been constructed with holes pierced in the neck for discharge openings, and with open tops, over the walls of which the cream could be discharged.

2. SAME—INFRINGEMENT.

Claim 1 of letters patent No. 293,314, being restricted to a construction making a notch cut in the top of the open-topped neck of the creamer, and extending down through the wall of this neck, an essential element, is not infringed by a creamer having an open-topped neck, with a curved depression on the inner face of the rim which projects inwardly from the walls of the neck, said depression not extending downwards into the wall of the neck.

Bill in equity by the Actiebolaget Separator and the De Laval Separator Company against Phillip M. Sharpless to enjoin the infringement of letters patent No. 298,314; for improvement in centrifugal creamers. Bill dismissed.

Jos. C. Fraley, for complainants.

Geo. J. Harding and *Geo. Harding*, for respondent.

ACHESON, Circuit Judge. The bill of complaint charges the defendant with the infringement of letters patent No. 293,314, granted February 12, 1884, to Gustav De Laval, for an improvement in centrifugal creamers. The invention relates to a class of machines previously well known and in use for the separation of compound fluids, and more particularly used for creaming milk, and delivering the cream and the skim-milk separately, by the agency of centrifugal force. The ordinary creaming machine consists of a revolving globular metallic vessel, into which the new milk is fed, mounted upon a vertical shaft, and rotated by suitable mechanism with great rapidity, and with such effect that a separation of the cream from the skim-milk takes place, the latter by reason of its greater specific gravity being thrown outwardly against the

¹Reported by Mark Wilks Collet, Esq., of the Philadelphia bar.

walls of the vessel, and assuming an upright hollow cylindrical form, while the cream is collected in the center of rotation standing upright in a zone or belt, so that the two can be discharged at different levels into separate annular receiving-pans suitably arranged and supported on a fixed casing. Several prior patents illustrative of the state of the art are in evidence. The earliest of these is an English patent to De Laval, dated November 4, 1878, which discloses an apparatus having all the features above mentioned, and in which the cream is discharged by overflowing the top edge of the open neck of the cylindrical rotating chamber. The next is an English patent to Alexander dated December 24, 1879, showing a machine having the same general characteristics, the cream being forced over the outwardly curved lip formed around the edge of the open mouth of the centrifugal drum. The United-States patent No. 249,731, dated November 15, 1881, to De Laval, discloses an apparatus of the like general character, but in which the cream is delivered into its annular receiver through a hole pierced through the wall of the neck of the revolving chamber. The United States patent No. 281,916, dated July 24, 1883, to Neilson, shows a centrifugal creamer of the same general type, and in which the cream is discharged through a discharge port or hole formed in the wall of the upwardly projecting tubular extension or neck of the centrifugal vessel.

The declared object, as expressed in the patent, of the invention involved in the present suit, is "to prevent the clogging by impurities of the orifice through which the cream is delivered from the rotating vessel;" and it consists in a discharge orifice or notch in the upper edge of the upwardly projecting open throat of the rotary vessel. The specification states:

"In the upper edge of the throat, *c'*, is formed a delivery notch or orifice, *j*, for cream which passes thence into the vessel or receiver, *D'*, from whence it is delivered by a spout, *k*. It is advantageous to have the delivery orifice for cream thus formed, because, if any impurities approach it, they will rise and be thrown over the upper edge of the throat, *c'*, hence the orifice will not be liable to be clogged, as is the case where the orifice is formed by a fine hole or boring in the usual way."

The patent drawing shows the upper edge of the throat as having an inwardly projecting and overhanging rim, which somewhat contracts the top of the mouth, and the delivery notch or orifice, *j*, as a horizontal cut or slot of an even depth, (somewhat less than the thickness of the overhanging rim,) and with rectangular sides, extending across the top edge of the throat, and passing, not only through the rim, but also entirely through the upright wall of the neck. Referring to the delivery notch or orifice, *j*, the plaintiff's expert testifies:

"And the peculiarity of this upper discharge orifice is that, instead of consisting of a hole made through the wall, it is open at its upper side, so that any solid impurities which may be carried with the cream to the inner entrance or mouth of this discharge orifice will be shoved upwards by the movement of the cream, and will pass over the top of the vessel without clogging the orifice."

The distinguishing feature, then, between the old discharge orifice, by a hole through the neck of the rotating vessel, and the orifice, *j*, of the patent, is that the latter is open lengthwise at the top; but, like the old construction, orifice, *j*, is a channel formed in and through the wall, affording a lateral escape for the cream below the horizontal edge of the mouth of the vessel.

In further explanation of how the open-top notch obviates the obstruction by solid matter at the mouth of the discharge orifice, the same expert states:

"The flow of cream would carry the matter to the mouth of the notch, and would shove it upwards; and, as the matters accumulated from beneath, those first arriving at the notch would be forced upward by the accumulation beneath them until these would pass over the rim of the cream notch, the cream continuing to pass through the notch as before."

The patent contains the following disclaimer:

"I am aware that it is not new to construct a rotary vessel for a fluid separator, with an upwardly projecting throat, open at the top, and having in its side and below its upper edge a hole for the delivery of a fluid. In this vessel there is no discharge orifice consisting of a notch in the upper edge of the throat, and I do not claim such a vessel as included in my invention."

The first claim of the patent, which is the one alleged to be infringed by the defendant, is as follows:

"(1) A rotary vessel, C, for a fluid separator, provided with an upwardly projecting throat, C', open at the top, and having a discharge orifice or notch, *j*, in its upper edge, substantially as and for the purpose described."

From the foregoing recitals these deductions are clearly to be made: *First*, the invention relates exclusively to the "discharge orifice or notch, *j*," everything else in the plaintiffs' apparatus with which we have here to do being old; *second*, the purpose of the invention is to prevent clogging, an evil incident to a separator provided with a fine side hole or boring for the escape of the cream; *third*, the patent in suit contemplates and provides for the discharge of the cream through the side of the neck of the rotating vessel at a level below its upper horizontal edge.

Now, turning to the defendant's separator, we find that his cream discharge consists of a curved depression, or cut of half-moon shape, made in the inner face of the inwardly overhanging rim of the mouth of the rotary vessel, and leads upwardly, avoiding the upright wall of the neck; so that the cream is thrown outward above and over the level edge of the neck. In a word, the defendant's machine is a top-discharge separator, differing from those described in the English patents referred to, in that the cream discharge is confined to one particular point, namely, that part of the circumference of the mouth of the centrifugal vessel which is enlarged by the vertical cut or concavity, and is thus removed further from the center of rotation than the rest of the periphery of the mouth. The discharge of cream is thus concentrated because the concaved part is subjected to greater centrifugal force than the other portion of the top orifice or mouth of the vessel. Manifestly the top cream discharge was never subject to the clogging for which the patent in suit

was intended to furnish a remedy. The invention in question was for a side-discharge separator, and undoubtedly it was an improvement to such centrifugal creamers, although the evidence shows that it did not entirely remove the difficulty, as the cream slot or notch, *j*, sometimes becomes stopped by extraneous matter. But this can never happen in defendant's separator.

As to who is entitled to the credit of originally devising the vertical cut or depression in the mouth of the rotary vessel for the top discharge of the cream we need not here inquire. It is sufficient to say that, in view of the prior state of the art, the obvious and declared purpose of the invention embodied in the first claim of the patent in suit, and the terms of the specification and claim, it is totally inadmissible so to construe that claim as to make it cover the top cream discharge orifice of the defendant's machine. Let a decree be drawn dismissing the bill, with costs.

JOHNSON CO. v. TIDEWATER STEEL-WORKS.¹

(Circuit Court, E. D. Pennsylvania. March 1, 1892.)

1. PATENTS FOR INVENTIONS—ROLLING RAILS—INVENTION.

Claim 1 of patent No. 360,036, for method of rolling side-bearing girder rails, consisting in rolling down the metal forming the side tram in rolls provided with passes, in one or more of which that portion of metal forming the offset or head of the rail is subjected to elongating action, and that portion only forming its side tram is subjected to displacing or dummy action, does not involve patentable invention, since it was old to roll girder rails with a dummy action on both the head side and the tram side, and it was old in other forms of rails to turn the whole lateral flow of metal to the tram side, and the changes necessary to accomplish this result in the rolls used for rolling girder rails were obvious to a skilled mechanic.

2. SAME—LIMITATIONS OF CLAIM.

Claim 1 of patent No. 360,036, if valid, is limited to a process in which all the rolls described in the specification are employed, and in the specific form shown and described, and is not infringed by a process of rolling in which the rolling of the rails prior to their insertion into the dummy pass is performed by rolls of a substantially different construction.

In Equity. Suit by the Johnson Company to enjoin the Tidewater Steel-Works from infringing letters patent No. 360,036, for method of and rolls for rolling side-bearing girder rails, granted to Arthur J. Moxham, March 29, 1887. Bill dismissed.

George J. Harding and *George Harding*, for complainant.

William A. Redding, for respondent.

ACHESON, Circuit Judge. The bill charges the defendant with the infringement of letters patent No. 360,036, dated March 29, 1887, for a "method of and rolls for rolling side-bearing girder rails," granted to Arthur J. Moxham, and by him assigned to the plaintiff. This form of rails is used principally for street railways, and consists of an offset, upon which the wheel of the car runs; a side tram, at a lower level, and

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