

fording vertical support between the floor-wheel housing and the furniture plate, whereby lateral oscillation of such housing is permitted; and those words must be restricted to such a bearing, resting on a collar beneath the floor-wheel housing, as is shown in the Martin patent."

But such a question is not before us, and we take the claim as we find it.

The ratchet-wrench patent, No. 277,256: The answer denies that Forbes was the original inventor of his alleged improvements in ratchet wrenches, and sets out that they were anticipated by the Gates patent, No. 198,291, of five years' earlier date. In the course of introducing testimony, the defendant introduced a patent to one Gallagher, No. 137,432, dated April 1, 1873, against the complainants' objection that it was not pleaded by the answer; but, as the Gates patent included substantially the features of the Gallagher patent which are relevant here, it is not material to consider the latter. The state of the art was such at the date of Forbes' invention that, as shown by his expert, Mr. Smith, his claim must be narrowed so as to cover only the feature of a pawl constructed of such width relatively to the distance between the cogs of the ratchet wheel that it cannot be turned without being first withdrawn from engagement with the wheel. In the Gates patent there was a reversible pawl beveled on the rear of its edge used for the same purpose, which, like the pawl in the Forbes patent, trailed back over the teeth when the lever was reversed to take a new hold, but the expert says it was free to turn without disengagement from the wheel. And he testifies that "the advantage of the Forbes construction is that there can be no accidental reversal of the pawl, and this is not true of Gates'." And the sum of the matter is that, if the supposed improvement was required in consequence of the defect suggested, it consists of widening the pawl so that its heel will rest upon the tooth behind it, and, as the tooth is straight across the periphery of the wheel, the pawl would be prevented from turning. This was a mere change in the form of a part of the combination adopted for the purpose of correcting its occasionally defective action,—a modification so obvious to a person skilled in that subject as not to have required anything more than the ingenuity which such a person might be expected to possess. We think it would be a misnomer to call this "invention," and that the patent therefor cannot be sustained. For the reasons stated, we are of opinion that the decree of the court below should be reversed, and the case remanded, with directions to dismiss the bill.

DOZE v. SMITH.

(Circuit Court, S. D. Iowa, C. D. December 12, 1893.)

1. PATENTS—NOVELTY—WATERING TROUGHS.

The Campbell patent (No. 221,031) for an improved watering trough for stock, consisting, in claim 4, in the combination of a trough and drinking cap with a valve-feed mechanism, an open-bottom chamber, and a horizontal partition between the drinking cap and chamber, whereby air is prevented from entering the bottom of the latter, is valid, as showing patentable novelty.

2. SAME—INFRINGEMENT.

The Campbell patent (No. 221,031) for an improved watering trough for stock, having a horizontal partition set into the trough between the drinking space and an open-bottom chamber, so that when the water rises above this partition it forms a "water seal," protecting the chamber from atmospheric influences, is not infringed by a trough merely covered, as a box, between the drinking space and chamber, making the water seal impossible, except at a mathematical level.

3. SAME—LIMITATION OF CLAIM—EQUIVALENTS.

The specific claim of the horizontal partition for effecting the water seal being a renunciation of claim to other devices for performing the same functions, the use of projecting side walls of the open-bottom chamber of defendant's trough, for the same purpose, does not constitute an infringement.

Bill in equity by J. E. Doze against Alpheus Smith for infringement of a patent for a watering trough for stock.

Cummins & Wright and Hart & Poston, for complainant.
Steele & Livingston and Read & Read, for defendant.

WOOLSON, District Judge. Complainant is the assignee, for certain counties in the state of Iowa, by virtue of various assignments, of letters patent No. 221,031, for "improvement in devices for watering stock," granted October 28, 1879, to John S. Campbell. The infringement complained of consists in the use by respondent, upon his farm, of a hydrant for watering stock. It is not alleged that respondent is infringing by manufacturing or selling. The letters patent contain five claims. But the bill expressly excludes the first and fifth claims, and, upon the hearing, counsel for complainant waived all except the fourth claim of patent (in this hearing), and announced to the court that complainant would rely only on the fourth claim, as stated in the letters patent.

The specifications of the letters patent substantially describe the "improvements in devices for watering stock" as consisting in a watering trough having an automatic valve mechanism, a central chamber so placed above this valve mechanism as that, by removing the cover of this chamber, which has an open bottom, the valve may be easily manipulated, and the float which operates the valve mechanism thereby permitted to move in a higher or lower plane, thus controlling the inflow of water to a lesser or greater height in the trough, as desired. The trough has at either end, and at such distance from the central chamber as may be desired, a top opening, on and around which a "drinking cap" is fitted. Between these caps and the central chamber a "horizontal partition," as the patent terms it, is set into the top of the trough, and extends from the drinking cap to the central chamber, on each side of the chamber, so that, as the water is taken from the drinking cap by stock drinking thereat, the water from the central chamber moves towards the cap, and the cap is refilled; thus keeping the caps constantly supplied with water, which rises above the horizontal partition. This partition is shown by the figures and specifications to have its surface on a level with the top of the watering trough. An outer curb may be used, surrounding the trough; and incline

partitions extend transversely from side of cap nearest chamber to the top of the chamber, so that between these partition inclines and the central chamber, and also between the trough (except at the drinking caps) and the outside curb, packing may be placed, for the purpose of protecting the water in the trough from extremes of temperature. The fourth claim in said letters patent is as follows:

(4) In a device for watering stock, the combination, with a trough having a drinking cap fitted on its top, of valve-feed mechanism, and an open-bottom chamber located over the latter, together with a horizontal partition fitted in the top of the trough, between said drinking cap and chamber, whereby air is prevented from entering the bottom of the latter, substantially as set forth.

Upon the hearing, counsel for complainant concisely stated the principle involved in this claim as being the water seal caused by this horizontal partition between the drinking cap and chamber, whereby there was openly exposed to the air only the small space or surface of water within the drinking cap, and thereby the air was prevented from reaching the water within the central chamber, and, as this chamber and the trough were surrounded with packing, the water in the chamber was kept at a temperature above freezing, so that, according to the recognized laws pertaining thereto, as the water at the surface of the drinking cap became chilled by contact with the air this chilled surface water would descend, and the water from the central chamber be drawn towards and into the cap; thus producing a current or movement in the water, and thereby preventing or lessening possibility of freezing.

The answer sets forth a number of grounds of defense. But, on the hearing, counsel for respondent announced that they would rely upon but two defenses, viz. (1) want of novelty; and (2) that the device used by respondent—his hydrant for watering stock—did not infringe upon complainant's patented invention.

As to the defense of the want of novelty, I find against respondent. It would serve no useful purpose to attempt to state in detail the grounds for this finding. A portion of the evidence submitted as to want of novelty was received subject to complainant's well-grounded objections, as without basis therefor laid in the pleadings. And as to the evidence, for whose introduction the answer furnishes the required foundation, I find that it does not sustain the allegation of want of novelty. The hydrant, or "device for watering stock," made and used by the respondent was introduced in evidence, by two models thereof,—one furnished by complainant, and the other by respondent. I do not find any substantial difference between these models, when considered with relation to the letters patent. These models show that respondent's hydrant has a central chamber, with open bottom, placed over a rude valve mechanism; that this chamber rests upon a drinking trough, into which the ends of the chamber (reaching from side to side, and completely across the trough) project perhaps a half, or slightly more, of the depth of the trough. This trough contains no "horizontal partition" set into it. Instead, this trough, from

chamber to drinking space, is covered over, upon its surface, as a side of a box would be covered. Neither has this trough "drinking caps fitted on its top." Instead, there is placed about the drinking space, on three of its sides (the fourth side—towards stock, when drinking—being open), a board or partial curb, whose only purpose or office seems to be to prevent the packing which surrounds the trough from falling or being pushed in the water in the drinking space. An outer curb is used with the trough, very similar in construction and manner of use to the outer curb with complainant's hydrant, and which serves here, as there, to confine the packing around the trough, and additionally, perhaps, to serve as a wind-break.

Manifestly, respondent has not used the exact counterpart of the hydrant described in this claim of complainant's patent. Is his hydrant the equivalent therefor? Since this fourth claim is for a combination, it becomes material to inquire whether, in any essential particulars wherein it differs from the patented invention, respondent's hydrant contains the equivalent, so as to become an infringement. This fourth claim of the patent includes a combination of the following particulars: (1) A trough (2) having a drinking cap fitted on its top; (3) valve-feed mechanism; (4) open-bottom chamber located over this mechanism; together with (5) a horizontal partition fitted on top of trough, between drinking cap and chamber. Respondent's hydrant contains the first, third, and fourth of these particulars. It does not contain the second and fifth. It does not have a "drinking cap fitted on the top" of the trough. As illustrated in the model presented in evidence, and as described in his letters patent, the drinking cap, in the patented invention, is a curb completely surrounding the drinking space, and tightly fitted on top of the trough, and so fitted thereon as that, when the hydrant is in complete working order, the water rises into, and remains within, this curb or cap, and at the same level, or height above the bottom or under surface of the horizontal partition, as the water stands in the central chamber. But in respondent's hydrant the drinking cap, if such it may be called, has a curb only upon its three sides, leaving the fourth side without curb, and this curb will not retain water within its sides. But, instead, whenever the water rises to the under surface of the cover of the trough, instead of being confined within the drinking cap, it escapes through or over the uncurbed side of the trough or drinking space. Again, respondent's hydrant contains no horizontal partition. Instead, this trough is simply covered over, and on its surface, at the place where complainant inserts into the trough his horizontal partition. That this cover is not the equivalent of this partition is plainly seen when the action of the hydrant is examined. By the insertion of this partition the height or depth of the trough, where partition is inserted, is decreased to the extent of the thickness of the partition, so that there is always between the drinking cap and central chamber a body of water completely filling the trough for this entire distance, whereas it is practically impossible thus to fill the trough, under the cover, in

respondent's hydrant; for, as soon as the trough is filled with water,—that is, even though the trough is set to an exact level,—any further water run into the trough cannot be retained, but will discharge through the uncurbed sides of the drinking space. And unless the trough is set at a mathematically exact level the water will never fill the trough,—can never fill the trough to the bottom side or surface of the cover. In practice, it is safe to say the trough will never thus be filled, and the liability and probability of the water beginning to discharge from the trough before the trough is thus filled is very great. And thus what is the perfect water seal in complainant's hydrant is practically impossible in respondent's hydrant.

But complainant contends that by the projection of the ends of the central chamber, in respondent's hydrant, into the trough, the function of complainant's invention is performed, and in substantially the same manner as in the patented invention, and that, therefore, these projected ends serve as, and are an equivalent for, the horizontal partition. To this contention, defendant responds that these projected ends in his hydrant do not fit accurately to the sides of the trough, having from a half-inch to a quarter-inch space between them and the sides of the trough, whereby the air has free passage from the drinking places into the central chamber. The evidence shows that these spaces do exist as claimed. But the evidence further shows that these spaces are owing to the defective material used, and were not so intended; that the lumber used was warped, so that, in making the hydrant, respondent was not able to draw the sides of the trough up to these projecting ends. It will not be seriously claimed that these unintentional deviations, resulting merely from the defective material or workmanship used, would remove this hydrant out of the line of infringement, if infringement would otherwise exist. Fig. 1, attached to letters patent, shows this horizontal partition to have a lug or projection on its lower surface, and across each end. No statement of this fact appears in the specifications, nor does the same appear in the claim, as stated in the letters. So that these projecting chamber ends cannot be said to be an infringement in that respect. If now we examine the operation of the patented hydrant, we will find that these ends are not the equivalent of the horizontal partition. In the patented hydrant, when in complete operation, the water rises in the drinking caps above this horizontal partition, to such a height therein as to be on a level with the water in the central chamber. But this level is always above the bottom of this horizontal partition. Thus, as heretofore stated, a perfect water seal is formed, from drinking caps to central chamber, and completely filling the trough, and excluding the air, from cap to chamber. Thereby is interposed between the chilled water, at the exposed surface in the drinking caps, and the central chamber, this body of water, protected by outer packing of trough, and extending along and to the full depth of the trough, under this horizontal partition. And thus the function of this hydrant—protecting water in central chamber by water seal—is accomplished, the

water seal being the body of water described. In defendant's hydrant, when in complete working order, this water seal is impossible. The entire surface of the drinking space is exposed to the air. Besides, from drinking space to central chamber the water is directly exposed to the air, at its surface, along the entire distance and position where, in the patented invention, is situated the water seal. The water in the drinking space in respondent's hydrant can never rise above the bottom of the cover of trough, while the water in drinking cap of patented invention rises above, and remains above, bottom of horizontal partition. The evidence shows that the water in the patented hydrant, as would naturally be expected, under the circumstances, rarely freezes, while the liability of the water in respondent's hydrant to freeze, even in moderately cold weather, is very great. Therefore, as above stated, this water seal is impossible, in respondent's hydrant, and no equivalent therein appears for the horizontal partition, which is one of the essential elements or particulars entering into the combination claimed in complainant's letters patent. It follows from the foregoing that respondent's hydrant does not infringe on the patented invention. Let decree be entered dismissing the bill, at complainant's costs.

On Rehearing.

(June 18, 1894.)

WOOLSON, District Judge. The court herein having found for defendant, plaintiff applied for a rehearing, and the case has been reargued by counsel for plaintiff and for defendant. In the light of this reargument, I must modify so much of the opinion rendered on former hearing as treats of the drinking cap of the patented invention. In the former opinion, filed herein, this cap is considered as being so connected with or fastened to the body of the trough as to be water-tight, so that the water would rise in this cap to a level higher than the top of the horizontal partition. Plaintiff has exhibited, in working operation, a model of his patented "stock hydrant" or drinking trough. This demonstrates the incorrectness of the former decision on this point. The phrase used in the letters patent is unfortunate, so far as expressing the use of this cap is concerned. In fact, what is called in the letters patent a "drinking cap" is not a cap at all. The sides which form what is miscalled a cap are used solely to prevent the material which is used as packing about the trough from falling into the water in the trough. So that the letters patent should have spoken of these places as drinking spaces or places, rather than drinking caps. Without an inspection of the patented invention in operation, a person reading the letters patent, and applying the specifications and claims to the illustrations therein given, would naturally, if not necessarily, regard these caps as intended to contain water.

The point yet remains, as decided in the former decision, as to the horizontal partition, which, in the letters patent, constitutes an

essential feature of the combination and claim therein described. Plaintiff insists that this horizontal partition finds its mechanical equivalent in the side walls of the central chamber of defendant's drinking trough, and that, therefore, defendant has infringed on the letters patent held by plaintiff. After carefully considering the arguments presented by counsel, and the cases cited by him, I am not able to regard this claim as sustained by the evidence. The case of *Stirrat v. Manufacturing Co.*, 10 C. C. A. 216, 61 Fed. 980, decided by the United States circuit court of appeals for the Eighth circuit at its May, 1894, term, while not on all fours with the case at bar, presents some points of useful analogy. In that case the water-heating device consisted of the combination of a hollow, long, center plate of stove, etc., with a supply pipe, etc. The device claimed as infringing consisted of the combination of a solid, long, center plate of stove, etc., fastened to a water box, etc., with a supply pipe, etc. After considering the state of the art at time of issue of the letters patent, and distinguishing between a pioneer invention in a certain line, and one which merely improves on devices or mechanisms which have been in use (a reasoning which might be largely and well applied in case at bar), Judge Sanborn, voicing the opinion of the court, says:

The claim for a specific combination or device in a patent is a renunciation of every claim to any other combinations or devices for performing the same functions that are apparent from the face of the patent, and are not colorable evasions of the combination or device claimed. The statute requires the invention to "particularly point out and distinctly claim the part, improvement or combination which he claims as his discovery." Rev. St. § 4887. When, under this statute, the inventor has done this, he has thereby disclaimed, and dedicated to the public, all other improvements and combinations apparent from his specifications and claims, that are not evasions of the device and combination he claims as his own. The claims of his patent limit his exclusive privileges, and his specifications may be referred to to explain and to restrict, but never to expand, them.

And the opinion thereupon proceeds with its clear and forcible reasoning, as applied to the evidence introduced in the case, and the status of the patent with regard to the state of the art at date of its issuance, and closes with the declaration that:

When [the patentee] made his invention, there was no patentable novelty in a combination of a water box bolted to the long center with the supply and eduction pipes used by appellee; and this fact, and the specific limitation he imposed upon himself in his claims, have forced us to the conclusion that his patent was properly restricted by the court below to the special feature of construction he described and claimed, viz. the hollow, long, center through which the water was caused to pass, in combination with the connecting pipes.

The reasoning of the case cited is specially applicable to the case at bar, especially to the horizontal partition, which "specific limitations the patentee had imposed upon himself in his claims." Because of the press of other matters requiring present attention, I am unable to present at length the reasons impelling me to this conclusion, but must content myself with the reference to the case just cited, and with adhering to the former decision reached, and that decree be herein entered dismissing the bill. To all of which,

at the time, plaintiff duly excepted. And plaintiff is given 60 days from this date in which to have signed and filed bill of exceptions, and such certificate of evidence as plaintiff may be advised.

DASHIELL v. GROSVENOR et al.

(Circuit Court of Appeals, Fourth Circuit. February 5, 1895.)

No. 110.

1. PATENTS FOR INVENTIONS — RIGHT OF GOVERNMENT TO USE PATENTED DEVICE.

The consent of the owner of a patented device is not positively necessary in order to enable the United States to use the invention described in the letters patent, particularly in cases where it relates to the mode of construction of implements of warfare required by the government.

2. SAME—SUIT TO RESTRAIN INFRINGEMENT.

The patentee of an improvement in breech-loading cannon brought suit against an officer of the United States navy, connected with the bureau of ordnance and having charge of the manufacture of cannon at a navy yard, for an alleged infringement of his patent, praying, not only for an accounting and damages, but for an injunction restraining defendant and all persons acting under his authority from making the cannon alleged to infringe complainant's patent. *Held*, that the suit was, in substance, one to prevent the making of breech-loading cannon of a certain character at the navy yard, and that public policy and the rights of the government would not permit such a suit to be maintained. 62 Fed. 584, reversed.

3. EQUITY—BILL CHARGING FRAUD—DECREE ON OTHER GROUNDS.

A court of equity will not grant a decree on another ground, where the bill charges actual fraud as the ground for relief, and the fraud is not proven. 62 Fed. 584, reversed.

Appeal from the Circuit Court of the United States for the District of Maryland.

The court stated the case as follows:

This is an appeal from a decree rendered in the circuit court of the United States for the district of Maryland in the chancery cause of James B. M. Grosvenor and others against Robert B. Dashiell, by which it was adjudged that letters patent No. 425,584, granted to Samuel Seabury, dated April 15, 1890, for improvement in breech-loading cannon, are valid, and that the same have been infringed by Robert B. Dashiell; also, that said Seabury and his assigns recover from said defendant certain profits and damages, and that a perpetual injunction be issued. 62 Fed. 584.

It is claimed in the bill, which was filed on the 25th July, 1892, that Seabury was the inventor and patentee, and that he assigned certain interests in the letters patent to his co-complainants, who with him then owned the entire right and title to the invention; that the defendant, well knowing the premises, has wrongfully, unlawfully, and injuriously, with intent to derive profits therefrom, and to deprive complainants of the royalties to which they were entitled, conspired, combined, and confederated with William M. Folger and other persons, and infringed upon the rights of the owners of said patent, by making and using, and causing and authorizing others to make and use, a large number of breech-loading cannon, embodying the inventions described and claimed in and secured by said letters patent, without any authority from said owners so to do, whereby defendant has realized large profits, to the loss and injury of the patentee and his assignees; that at the time of the infringement charged the defendant was an officer of the United States navy, holding the rank of ensign, and was connected with the bureau of ordnance of the navy department, of which Commodore William M. Folger was then and still is in charge, having control and supervision of the manufacture thereat, un-