patent, and also by one in behalf of the complainant, and all rejected it as not well founded. Prof. Thomson, of the Thomson-Houston Company, investigated it in 1882,-when it would have been of vital interest to his company to make use of it against this patent, if tenable,—and, after visiting Goebel, rejected its consideration. Dr. O. A. Moses, an inventor, with similar object, visited Goebel frequently, but came to the same conclusion, and says he was unable to produce any lamps. These are potent circumstances to raise doubt.

Coming to the new testimony produced for this hearing, and which I have carefully considered, I find that the depositions in behalf of the defendants are mostly cumulative, (or in rebuttal of certain new affidavits produced by the complainants, and not here considered,) but I cannot find that they remove any of the doubts above noted.

On the other hand, affidavits now produced by complainants tend to show an admission by defendants' witness Henry Goebel. Jr., (a son of the claimant,) that he manufactured exhibit lamps Nos. 1, 2, and 3, in 1892, for the purposes of this case. There is no denial of this, but it is claimed that this son is venal, and has deserted the defense to favor the complainants. One Hager, a glass blower, swears that he made for Goebel, while working with him, "in the early eighties," lamps similar to No. 4, and he thinks he made this one at that time. As to a planer which was produced by Goebel as made by him at an early day to cut bamboo for his carbon burners, one Korwan (who is corroborated by Hager) swears that it was actually made by him in 1883. This is contradicted as to date by an affidavit produced by defendants.

Upon the whole showing, I am satisfied that the complainants are legally entitled to preliminary injunction, and that it is the duty of the court to grant it without evasion. As stated by Judge Colt, and often held, a bond by defendant is not the equivalent of the injunction which the law gives for the protection of the inventor in the exclusive privileges promised by his patent.

The fact that the defendant company only organized and commenced manufacture of its lamps after the decisions sustaining the patent is an important consideration for this view.

Injunction will therefore issue, but with leave to defendants to move for requirement of a bond by complainants to indemnify the defendants for any damages they may suffer if it shall be finally held that the patent is invalid.

> AMERICAN PATENTS CO. et al. v. DE BEER. (Circuit Court, N. D. New York. July 21, 1893.)

> > No. 5.955.

1. PATENTS FOR INVENTIONS-INVENTION-BALL MACHINES. Claim 1 of letters patent No. 216,305, issued June 10, 1879, to Samuel Brown, for a machine for making balls out of leather scraps or other similar material, and which consists of two dies, between which the material is compressed, each die having a cavity somewhat less than a hemisphere, so that the expansion of the material after compression will form a true sphere, is void as being the product of mere mechanical skill.

2. SAME.

Claims 2 and 3, which cover, respectively, an airhole in the dies, and a bell-mouthed cylinder, in which the dies work, are likewise void for want of invention.

In Equity. Suit by the American Patents Company and others against Jacob de Beer for infringement of a patent. Bill dismissed.

Alfred W. Kiddle, for complainants. Andrew J. Nellis, for defendant.

COXE, District Judge. This is an action of infringement founded upon letters patent, No. 216,305, granted to Samuel Brown, June 10, 1879, for a machine for making balls out of leather scraps and similar material by pressure. "The object of the invention is to produce a ball of accurate and uniform shape with great rapidity and ease of manipulation." The scraps to be pressed are placed in a bell-mouthed vertical cylinder in which move two closely fitting dies having a cavity which is somewhat less than a hemisphere. Of these the patentee says:

"The dies A and A' are preferably made of steel, and fit very accurately in the cylinder C. Their edges are sharp, and the cavity in each, though a portion of a true sphere, is somewhat less than a hemisphere, so that when the two are brought in contact, the mold formed by them nearly resembles in shape, an oblate spheroid. This is an important feature of my improvement, since the expansion of the material when the pressure is released tends to loosen and throw out the ball, instead of binding it tightly within the die, as is the case when the cavity in each is a true hemisphere."

When pressure is applied the material is compressed in the mold formed by the two dies into the shape of an oblate spheroid. The upper die is then lifted and the ball is forced up and out of the cylinder by raising the lower die. After the pressure has been removed the elasticity of the material makes the ball assume a spherical shape. In short, the leather scraps are put into a cylinder and pressed between dies into the desired shape. This is all.

The claims involved are as follows:

"(1) In a machine for making balls from scraps or other elastic material by pressure, a die having its cavity substantially of the form specified and shown, whereby the expansion of the material on the removal of pressure frees the ball from the die. (2) In a machine for making balls from scraps or other elastic material by pressure, a die having airholes, substantially as for the purpose set forth. (3) In combination with the dies, closely fitting therein, the cylinder C, having a beveled or flaring mouth, substantially as described and shown."

The defenses are want of novelty and patentability, noninfringement and insufficiency of the specification.

If the record were not full of machines operating on principles similar to the patented machine the court would take judicial knowledge of the fact that the process of pressing material to be molded, between two dies of the desired shape, is old. It is un-

necessary to consider these machines for it was conceded at the argument that the precise structure shown and described would be devoid of patentability if the cavity formed by the dies, when brought together, were a true sphere. This concession is in exact accordance with the proof. The simple question is: Did it require invention to make a cup-shaped die—a die with a cavity "somewhat less than a hemisphere?" This is not a patent for a process or a product, but for a die. Patentability must be found, therefore, if at all, in the die or mold. Soap or wax or celluloid could be molded in the patented machine with perfect impunity. If this identical machine had been used for pressing such materials -and similar machines did exist-could Brown have obtained a patent for it simply because he used it to press leather instead of wax? Assuredly not. A chemist may make a new and useful compound in a mortar a century old, but he is not entitled to a patent for the mortar. There is nothing new about the machine of the patent. It operates in precisely the same way whether it presses clay or pulp, wax or leather. If the theory of the complainant is correct the next person who uses such a machine, on discovering that the material which he has occasion to compress contracts on the line of pressure, may make the dies "somewhat 'more' than a hemisphere" and have a patent for that. There was no invention in making a cup-shaped mold. But it is urged that in the art of ball making, the object being to produce a round ball, the mechanic would naturally make a round mold in which to compress the material; that such a mold would not operate successfully, because when the pressure is taken off, the material expands into an elongated ball; and that it required invention to make a mold which produced a perfectly round ball. Conceding that such an argument can be legitimately applied to a claim which is not for a ball or for a process of making balls, but is limited to a die of designated conformation, the conclusion by no means follows. Would it not occur to the ordinary workman. after he had removed the ball from the round mold and had observed that it expanded on the line of pressure, that the proper thing to do would be to compress it into a space less than a sphere so that the resiliency of the material would cause it to expand When he had discovered that the round into a perfect ball? mold would not squeeze the material tight enough the perfectly obvious thing for him to do was to squeeze it tighter. This could only be done by making the dies shallower. The court is of the opinion that the first claim is void for want of patentable novelty. Butler v. Steckel, 137 U. S. 21, 11 Sup. Ct. Rep. 25; Baumer v. Will, 53 Fed. Rep. 373; Bush v. Fox, 38 Eng. Law & Eq. Rep. 1; Hailes v. Stove Co., 8 Sup. Ct. Rep. 262; Marchand v. Emken, 132 U. S. 195, 10 Sup. Ct. Rep. 65.

The second claim is for an airhole and the third is for a bellmouthed cylinder in combination with the dies. Of course there is no invention in making an airhole or a cylinder with a flaring mouth. The bill is dismissed.

v.57f.no.5-40

SMEAD WARMING & VENTILATING CO. V. FULLER & WARREN CO. et al.

(Circuit Court of Appeals, Second Circuit. August 1, 1893.)

1. PATENTS FOR INVENTIONS-DRY CLOSETS-NOVELTY. Patent No. 314,884, granted March 31, 1885, to Isaac D. Smead, for a dry closet in which warm air drawn by ventilating pipes from the rooms of a building is used to desiccate fecal matter by passing the air through a vault made in the form of a tube, and so arranged as to receive de-posits distributed along its surface in comparatively small quantities at any given place, is not without novelty, in view of patent No. 264,586, granted September 19, 1882, to William S. Ross, for a vault which is placed between a furnace and a smoke flue, and in which fecal deposits are received on a shelf, over and around which products of combustion are made to pass.

2 SAME—ENLARGING CLAIM. As Sinead did not originate the idea of utilizing the warm air which was drawn from a room, or the means by which the air was introduced to the vault, but took the ventilating ducts, the gathering chamber, and the vent shaft of the Ruttan system, and simply improved the vault, he cannot omit the ventilating ducts, and claim that his patent includes any openings or apertures which perform the office of ventilating pipes. and introduce air into the vault.

8. SAME-INFRINGEMENT.

Where a flue is constructed from a urinal to a vault room, in which there is a grate, and the foul air from the urinal is drawn through the flue into the vault, and then out of doors through a chimney, the flue infringes the Smead patent, as it conveys a portion of warm air into the vault, and tends to produce desiccation.

Appeal from the Circuit Court of the United States for the Northern District of New York.

In Equity. Bill by the Smead Warming & Ventilating Company against Fuller & Warren Company and the Fuller & Warren Warming & Ventilating Company for infringement of letters patent No. 314,884, granted March 31, 1885, to Isaac D. Smead, for a dry closet. The bill was dismissed in the court below, and complain-Reversed. ant appeals.

John W. Munday and Lysander Hill, for complainant, Esek Cowen, for defendants.

Before LACOMBE and SHIPMAN, Circuit Judges.

SHIPMAN, Circuit Judge. This is an appeal from a decree of the circuit court for the northern district of New York, which dismissed the complainant's bill in equity for an alleged infringement of letters patent of the United States No. 314,884, dated March 31, 1885, to Isaac D. Smead, for a dry closet.

This patent had previously been the subject of examination in the same court in the case of Smead v. School Dist., 44 Fed. Rep. The opinion of Judge Wallace in that case contained the fol-614. lowing careful description of the invention:

"The dry closet of the patent is one in which air is used to desiccate fecal deposits, render them innocuous, and remove the foul odors from the building. The treatment of such deposits in buildings where a large number

and the los