the bend of the hook for a certain distance,—which I very much doubt,-yet, the patentee is estopped, as already shown, to cover such loop, unless the certain distance during which it is coincident either covers the whole of the bend, or so much thereof that the loop may serve as a seat for the eve, and thus increase the strength of the hook. And if this were not so, and the alleged invention could be construed to consist in what the inventor originally ignored,—that is, in merely turning up such prolongation of the tongue,—there is, at most, nothing more than the skill of the mechanic, in view of the prior art. In any event, the applicant—having presented to him the direct issue of novelty, in view of the prior art, and having failed to claim the upturned end, and having elected to show, describe, claim, and insist upon his invention as consisting in a certain kind of loop, having certain definite functions—is bound by his admission, and is not now in a position to claim that his invention consisted in a mere lengthening and upturning of the end of the tongue, sufficient to prevent abrading the cloth.

Finally, the evidence fails to establish that the alleged defects of the earlier hooks caused the falling off in the sales thereof, or that the alleged advantages of the patented hooks account for their popularity. On the contrary, the changes in women's fashions, and extensive advertising, not of the patented improvement, but of the hump, appear to have contributed largely to its success. Like the Orum lock, in Duer v. Lock Co., 149 U. S. 216, 13 Sup. Ct. 850, it was put upon the market just at the time when the public were looking for a hook of this description, and the eye of the people was caught by an alluring trade-mark and seductive signs. Let the bill

be dismissed.

BINDER et al. v. ATLANTA COTTON SEED OIL MILLS.

(Circuit Court, N. D. Georgia. March 25, 1896.)

- 1. Infringement of Patents—Process for extracting Oils.

 A patent for a process for extracting oil from animal or vegetable substances, by exposing them to the direct action of dry superheated steam, for the purpose of liquefying the oil and opening the oil cells in readiness for expression, is not infringed by merely subjecting such substances to direct action of ordinary steam, in order to moisten them, when too dry, before cooking by external heat in a steam-jacketed heater.
- 2. Same.

 The Binder patent, No. 434,696, for a process for the extraction of oil from animal and vegetable substances, construed, and hdd not infringed.

This was a bill in equity for the infringement of a patent.

George Westmoreland, for complainants. B. F. & C. A. Abbott, for defendant.

NEWMAN, District Judge. Charlotte F. Binder, as administratrix of the estate of Charles F. Binder, and H. N. Low and H. C. Johnson, as assignees, bring this their bill in equity against the At-

lanta Cotton Seed Oil Mills, charging it with the infringement of a patent obtained by said Charles F. Binder (application for which was filed November 13, 1886, and the patent itself granted August 19, 1890, No. 434,696) upon a process for the extraction of oil from animal or vegetable substances, by the direct application of steam to the material used. Complainants claim, in their bill, that the defendant company has used, for many years, in its oil mill, near Atlanta, the process for which the above patent was issued.

In the specifications attached to the letters patent the patentee

describes his invention in this way:

"My improvement consists in applying the dry or superheated steam directly to the material from which the oil is to be extracted, for a sufficient length of time only to open the oil cells, when the material is taken to any approved press, and the oil extracted by pressure. In continuing the application of steam to the material for a sufficient length of time to open the oil cells, the

material is sufficiently heated to liquefy the oil or grease.

"The most approved practice has heretofore been, in preparing animal fat or oleaginous seeds for the extraction of oil by pressure, to heat them by any means,—generally in a steam-jacketed vessel,—to liquefy the oil or grease, thus rendering its expression more easy by reason of its greater fluidity. This system, however, of heating the substance from which the oil or grease is to be extracted by dry heat, has but the one advantage of rendering the oil or grease more fluid, while it has the disadvantage of closing the oil cells. It has also been customary to subject animal fat to the direct action of steam in a digester, until the water of condensation shall have digested the material, and floated the oil on the top, whence it may be drawn off by corks as it accumulates. The latter process, however, besides separating the oil or grease from other substances contained in the digester, dissolves the gelatine matter, which is consequently drawn off with the water, and with it any nitrogenous matter that it may contain, leaving, as refuse, if this process is continued, only calcium-phosphate.

"It is the purpose of my invention to liquefy the oil in the cells, and open them, by reason of which the oil or grease will be more easily expressed, and at the same time minimize the amount of the water of condensation. I accomplish this result in various ways, several of which I illustrate in the accompanying drawings. It may, however, be accomplished in other ways, the discovery being the introduction of dry steam, and its escape before condensation, heating and expanding the cellular tissue, and providing for the more ready extraction of the oil by pressure. An excess of moisture is also driven out of the material by the use of very dry or superheated steam, or by the application of external heat, by either a steam jacket around the vessel in which the material is treated, or by other means; but it is not necessary to apply external heat in any case if the steam is of sufficiently high temperature."

The specifications wind up with the claim of the patentee stated as follows:

"(1) The herein-described process for the extraction of oil, consisting in subjecting the material from which the oil is to be extracted to direct contact with superheated or dry steam of such a high temperature that only sufficient moisture is applied to the material to take the place of the oil in the cells, and then expressing the oil, substantially as set forth.

"(2) The herein-described process for the extraction of oil, consisting in subjecting the material from which the oil is to be extracted to direct contact with superheated or dry steam, and thereby opening the oil cells, and preparing the material for the extraction of the oil, without moistening it, and then expressing the oil by mechanical force, substantially as set forth.

"(3) In the extraction of oil, the improvement which consists in subjecting oleaginous material to the direct action of steam, and thereby opening the oil cells, without moistening the material treated, and then expressing the oil, as set forth."

It is the process, then, set out in these specifications and in the claim, to which complainants have the exclusive right, and to which their bill applies.

The defendant company sets up in its answer that it does not now, and never has, used the process embraced in Binder's patent. It admits, however, that it uses steam, applied directly to the meats, but not for the purpose of opening the oil cells by reason of the action of the steam. The steam used, it claims, is a lower grade of steam than that of the process claimed by Binder, and used for the purpose of supplying moisture when the meats are too dry. The cooking process is, as the answer asserts, carried on by the admission of steam into the jacket surrounding the heater in which the meats are contained.

The complainants claim that the steam used by the defendant company is the same kind of steam claimed in Binder's process, and that it is used for the same purpose, namely, the injection of steam upon the meats to prepare them for the extraction of oil. Much evidence has been introduced upon the issue thus raised. The evidence upon that subject is conflicting, but there seems, really, to be a preponderance in favor of the defendant company. Certainly, there is no preponderance in favor of complainants. It appears, from the evidence, that steam had been used for some years before Binder obtained his patent, in the oil mills of the South, for the purpose of moistening the material for the extraction of oil.

The strength of the case for the complainants, and on which I understand them mainly to rely, is the fact that the defendant company commenced the use of steam shortly after a conversation between Dr. Binder, Harrington, the then superintendent of the defendant's oil mill, and Mr. Thornton, who was president, at that time, of the defendant company, on that subject; and it is contended—and, indeed, there is evidence to this effect—that the preparations then made for the use of steam for the purpose described were in pursuance of information received in that conversation from Dr. Binder. The further fact relied on is the effort which Thornton made about that time to obtain a patent for the direct application of steam, in connection with the preparation of cotton-seed meats for the extraction of oil, and which was prevented by an interference filed by Dr. Binder, resulting in the refusal of the patent office to issue a patent to Thornton, and the grant of letters patent to Dr. Binder.

Whatever may be said as to the contention that Thornton was endeavoring to obtain, for himself or for his company, the benefit of Dr. Binder's inventive genius, it does not affect the distinct issue presented to the court in this case. It may be remarked that the specifications and claims filed by Mr. Thornton are not in evidence, and we are left without information as to what his claim really was. But whether the process which Thornton claimed to have discovered was the use simply of wet or ordinary steam, or the use of dry or superheated steam, would be immaterial, except in so far as it throws light on the issue here, and that is: Does the use of steam of the kind, in the manner and for the purpose used by the defendant company, infringe the process for which Binder obtained his patent?

The Binder patent is for a process which applies the dry or superheated steam directly to the meats, the effect of which, it is claimed, will be to liquefy the oil or grease contained in the meats, and, if the steam is of sufficiently high temperature, to obviate the necessity for the application of external heat. The claim clearly is to render unnecessary to a very great extent—and, if the steam be of sufficiently high temperature, to render unnecessary entirely—any other heat than that contained in the steam itself. The issue presented, then, is this: Has the defendant invaded the rights of complainants to the process thus described? Now, the method which the defendant company is using for the extraction of oil from cottonseed meats is to place the meats in a "heater," incased in an outer covering called a "jacket," and steam is injected into this jacket, in order that it may circulate all around the heater, for the purpose of cooking the meats, to prepare them for the expression of oil. Frequently, during dry seasons, or from other causes, the meats were too dry for this external heat alone to accomplish the purpose, and it was therefore necessary to apply a moistening agent in some way, in order to procure a better flow of oil, and to supply this moisture they injected ordinary or boiler steam on the meats. Now, it may be true that Thornton, who was then president of the defendant company, got his idea of the use of steam, to be applied directly to the meats, either from Dr. Binder, or from Binder through Harrington; but, however this may be, the method adopted was used by other mills long before Binder obtained his patent, and, even if this were not true, it is a method which is not claimed or covered by the Binder patent.

The view I take of this case, then, is this: Mr. Thornton, the president of the defendant company, probably availed himself of Dr. Binder's suggestion as to the use of steam to be applied directly to the cotton seed in the course of preparation for the extraction of oil. did not, however, do more than use ordinary steam from his boiler. If Dr. Binder suggested to him the use of dry or superheated steam. he did not avail himself of the suggestion. Subsequently, when Dr. Binder made his application for a patent, he only made claim to the use of dry or superheated steam, the advantages of which, as he claims them to have existed, have already been set forth. the extent to which it can be said Thornton adopted his suggestion was not an infringement of the improvement for which Binder subsequently obtained a patent. I have gone through the evidence carefully, and have taken some time to consider this matter, and the above seems to me to be the necessary conclusion, taking all the evidence together. I cannot, therefore, hold that the precise and specific improvement for which Dr. Binder's patent was issued has, under the evidence here, been infringed by anything the defendant has done. A decree may be taken dismissing the bill.

ENGLE SANITARY & CREMATION CO. v. CITY OF ELWOOD.

(Circuit Court, D. Indiana. April 8, 1896.)

No. 9,128.

1. PATENTS—INFRINGEMENT—MECHANICAL EQUIVALENT.

It is an essential rule, governing the application of the doctrine of equivalents, that not only must there be an identity of function between the two things, but that function must be performed in substantially the same way.

2. SAME—OVENS FOR BURNING OFFENSIVE MATTER.

In furnaces for burning wet and offensive matter, an open-work grate, upon which the matter is dumped, and through which the liquids percolate, leaving only the solid matter to be consumed by fire, is not the mechanical equivalent of an oven which receives and holds both liquid and solid matter, until the one is evaporated and the other consumed.

2 SAME

The Engle patent, No. 372,305, held not infringed as to claims 1, 2, and 3.

This was a suit in equity by the Engle Sanitary & Cremation Company against the city of Elwood, for alleged infringement of a patent.

Chambers, Pickens & Moores (Albert H. Walker, on the brief), for complainant.

C. A. Snow & Co., Andrew Wilson, and Morgan & Morgan, for defendant.

BAKER, District Judge. This is a suit in equity for the alleged infringement of claims 1, 2, and 3 of letters patent of the United States No. 372,305, granted, on the invention of Andrew Engle, to Andrew Engle, James Callanan, and James C. Savery, on November 1, 1887, for improvements in furnaces for burning wet and offensive substances. The complainant deraigns title to the invention by mesne assignments from the original patentees. The bill of complaint is in the usual form in such cases. The answer admits that the defendant is a municipal corporation, existing in due form of law in the state of Indiana, but denies every other averment of the bill. The sole ground of defense interposed on the hearing was that the furnace used by the defendant does not infringe either of the claims of the letters patent of the complainant which are alleged to be infringed. In view of this contention, it is unnecessary, to determine the validity or patentability of the invention embraced in such claims.

The claims alleged to be infringed are as follows:

"(1) The combination of the oven, 2, provided with an opening in the front, and a valve in the rear thereof, with the fireplace, 4, provided with an outlet under the oven and with the valve, 5, closing that outlet, all arranged and operating together, substantially as described.

"(2) The combination of the oven, 2, provided with an opening in front, the fireplace, 40, in the rear of the oven, and connected therewith, and provided with a valve rearward thereof, and the fireplace, 4, provided with an outlet under the oven, and with the valve, 5, closing that outlet, all arranged and operating together, substantially as described.

"(3) The combination of the oven, 2, provided with an opening at the front and a valve in the rear thereof, the fireplace, 4, provided with an outlet under