vant, to have an amendment filed, and leave for the same will not, therefore, be granted.

It should be said that there were two patents produced for forming the horse collar, which involved all the elements present in defendants' tool, and in the fourth claim of the patent as construed by the complainant. Each had the stretching apparatus and the forming channel.

For the reason, therefore, that the claim, as it must be construed in order to make defendants' device an infringement, is void for want of novelty and invention, the bill will be dismissed.

## VAILE et al. v. BUCKEYE IRON & BRASS WORKS.

(Circuit Court, S. D. Ohio, W. D. April 14, 1893.)

No. 3,932.

PATENTS FOR INVENTIONS-NOVELTY-OIL-MEAL COOKING. Letters patent No. 368,112 were granted November 18, 1884, to John H. Vaile for the process and apparatus for cooking oil meal. In this device two steam-jacketed cooking tanks were arranged over a storage tank, from which the cooked meal was drawn to send to the press, and into which the contents of the cooking tanks were alternately discharged, so that the storage tank was kept constantly supplied without any loss of time or hastening or retarding of the cooking process, as might be necessary if the meal was cooked in a single tank. It was shown that long before the patent was granted two cooking tanks had been used, the one above and discharging into the other, and each having separate steam connections; and, as against the patentee's claim that cooking in two successive tanks failed to produce the best results, it was shown that a single cooking tank had been used long before his device was patented. Held, that the patent was void for want of novelty.

In Equity. Suit by John H. Vaile, the Smith & Vaile Company, and the Southern Cotton-Oil Company against the Buckeye Iron & Brass Works for the infringement of a patent. Bill dismissed.

Chas. M. Peck, for complainants.

Parkinson & Parkinson, for respondent.

TAFT, Circuit Judge. This is a bill to restrain the infringement of a patent, and for the recovery of damages, and for an accounting of profits. John H. Vaile, November 18, 1884, was granted letters patent No. 308,112 for the process and apparatus for cooking oil Vaile by a license gave to the Smith & Vaile Company the meal. exclusive right to manufacture, use, and sell the improvements patented. Subsequently Vaile transferred, through a mesne conveyance, to the Southern Cotton-Oil Company, the exclusive right to make, use, sell, and dispose of the patented improvement for the treatment of cotton seed, and the manufacture of all the products of cotton seed, but for no other purpose. The Southern Cotton-Oil Company, by supplemental bill, was made a party. The defenses upon which the case has been tried are that the complainant's patent is wanting—First, in novelty; second, that it does not involve patentable invention; and, third, that the invention is not useful.

The patent in controversy is for that step in extracting oil from seeds which is described as cooking. The meats or kernels of the seed are first separated from the hulls. They are then crushed by crushing rolls, and reduced to a fine meal. Then comes the cooking, which is for the purpose of expanding and bursting the minute oil cells; and the final process is to subject the cooked meal to pressure in hydraulic presses to extract the oil. The patentee says in his specifications:

"My invention relates to an improvement in and apparatus for cooking and preparing oil meal preparatory to subjecting the same to pressure to form the cakes from which the oil is afterwards expressed. As hitherto conducted, the cooking of the meal was carried on in a single tank or reservoir, properly heated by steam, in which the meal was cooked, and from which it was directly drawn into the filling hoppers as needed, until the tank was empty, so that considerable time was lost in refilling the tank and cooking a second supply."

"The objects of my invention are to prevent the loss of time in cooking, and to insure the thorough and equal cooking of the meal; and the first object of my invention I accomplished by having one or more cooking tanks combined with a storage tank, into which latter the meal, when cooked, can be instantly drawn from either of the cooking tanks, while the cooking tanks can be at once refilled with a second charge, which is being cooked while the meal is being taken from the storage tank."

Devices are also described and claimed in the patent for distributing the meal while in the tank, but, as these devices are not infringed, it is not necessary to notice them. The patentee proceeds:

"The cooking tanks described in the specifications are cylindrical, heated in any suitable manner, but preferably surrounded by a steam jacket, to form a steam space on the sides or bottom, or both, in which the live steam is introduced to heat or cook the meal. These cooking tanks have suitable traps in the bottom, opening into the storage tank, through which the meal, when cooked, is drawn from the cooking tanks into the storage tank. The storage tank has a trap at the bottom, from which the cooked oil meal is removed automatically onto a former, and conveyed to the press, where the oil is expressed."

The patentee states:

"From this arrangement it will be understood that when the contents of either of the cooking tanks are cooked, they are at once drawn off into the storage tank, to the jacket of which only a sufficient amount of steam is admitted to keep up the proper degree of heat without cooking, and the cooker is again filled. In the mean time the meal is being drawn off from the storage tank and supplied to the forming press, and thus the storage tank would be emptied before a second supply of meal would be cooked, if it were not for the other cooker, which is by this time ready to be emptied into the storage tank; and so the storage tank is kept constantly supplied, while the cookers are intermittently discharged into it, and so loss of time and danger of improperly cooking the meal is absolutely prevented."

# A modification of this arrangement is also stated in the patent, as follows:

"It consists merely in locating the cookers, A, so that they discharge through traps, M, closed by slides, N, into a conveyor chamber, P, surrounded by a steam jacket to form a steam space, and supplied with any suitable conveyor, preferably a constantly revolving substantially horizontal screw conveyor, R. This conveyor chamber extends over and opens into the storage tank, D. By this means the cooked meal is conveyed from the cookers, A, into the storage tank, as will be readily understood."

### The claims in controversy are as follows:

"(1) The herein-described process of treating oil meals for pressure, consisting in cooking said meal in one or more cookers, connected with a storage heater, and in removing the meal from the storage heater, and in drawing the same, when cooked, from the cookers intermittently into the storage heater, and in removing the meal from the storage heater directly to the forming press, whereby the meal reaches the forming press in a properly heated condition, and whereby a constant supply of cooked meal for the forming press is kept up. (2) The combination and relative arrangement of one or more cookers, A, and storage heater, D, of a conveyor, R, for conveying the meal from either of the cookers to the storage heater, substantially as described." "(6) The combination with one or more oil-meal cookers and a storage heater of an intermediate conveyor, substantially as described."

The defendant's apparatus, as shown by the exhibit, consists of four steam-jacketed cooking heaters arranged in a horizontal line, from which, by means of a conveyor, which is not steam jacketed, the meal is conveyed to a steam-jacketed storage heater placed at a lower level, from which the meal is withdrawn into a press former, and taken to an hydraulic press to extract the oil. The worm used in the defendant's conveyor to carry the meal from the cookers into the storage heater is quite different from that suggested in the complainants' patent, and is so constructed as to break up any water balls which may have formed in the cookers. Water balls, it may be said, are formations caused by the lint surrounding the shell of the cotton seed, which ought to be, but is not always, removed from the meats before they are placed in the cookers. The lint, with the moisture and the heat, produce balls of mixed lint and meal, which interfere with the oil-producing capacity of the mass.

Steam-jacketed oil-cooking tanks are admitted to be old. They were used extensively, and are still, in the manufacture of linseed It had been common, also, before the complainants' patent was oil. issued, to construct what were called "two-high heaters." These consisted of one steam-jacketed tank placed directly above another of the same size and kind, each of which had in them revolving radial knives or blades keyed to a central turning shaft running up through both tanks, for the purpose of stirring and properly cooking the meal. There was a slide in the bottom of the upper tank, through which the meal was discharged into the lower tank, and a slide in the lower tank from which the meal was discharged into bags or some other former to be placed under the press. The steam which furnished the heat was carried to both tanks from the same source, but the steam pipes had valves upon them, by means of which the steam in one tank could be regulated independently of that in the other. After these two-high heaters had been in use, a patent was issued to Dover, January 9, 1883, which consisted of three cooking tanks arranged vertically, the one over the other, with a central shaft running up through the center of the three tanks, and revolving the meal stirrers in each tank. The meal was discharged into the first tank either continuously or all at once. After being cooked it was dropped through a trap in the bottom of the upper tank into the middle tank, and so on down to the lower tank, from which it was removed to the press. The steam connections were so arranged that the heat of each tank could be separately regulated. Conveyors of the kind used by the complainants are admitted to be old, at least when used without the steam jacket, and the defendant does not steam-jacket its conveyor.

The contention on the part of the complainants is that the benefit of Vaile's invention is in furnishing a storage tank, whereby the meal can be properly and completely cooked in one cooking tank, and then removed to the storage tank, and kept at a proper temperature until it can be pressed, whereas in former systems the cooking was done partly in one tank and partly in another, which failed to give the meal the right taste, just as the interrupted cooking of meat makes it less palatable. Then it is also said that with the two and three high heaters, the time given to the cooking of one tank full of the meal was dependent on the time taken for cooking the one just before and the one just after, and, as the proper time for cooking cotton seed varies very much with each tankful, the result was that many tankfuls were cooked too much or too little.

I am of opinion that this patent is void for want of novelty and for want of patentable invention. It had long been the custom with single heaters to do the cooking all in one tank, and this system prevails largely to-day, so that excellence of taste from continuous working cannot make the device patentable. Nor can it be claimed that the combination of continuous cooking in one tank with a storage heater is new. So far as I can see, the only real difference between this patent and the two-high heater is that here we have two cooking tanks, so arranged that each shall be partly above the storage heater, whereas in the two-high heater there was only one cooking tank, placed immediately over a storage tank. It is said that in the two-high heater the lower tank also cooked. It may have done so, and it may not have done so. The supply of steam to each tank was capable of separate regulation, and the evidence is guite clear that the heat in the lower tank was never what it was in the upper tank. It was quite possible to use the lower tank as a storage heater, and there is no doubt whatever from the evidence that it was frequently so used long before the patent of complainants was issued. If this be true, then the opportunity for varying the time of cooking to suit each tankful of seed was just as complete in this two-high as either in complainants' system or in the old style single heater. The only new advantage in "the triple system," as complainants' device is called, which defendant imitated. is the use of one storage heater for two cooking tanks. Clearly, this is not invention. It is an economical rearrangement, which would have suggested itself to any one with slight knowledge of the After reading with care all the evidence, I do not find it process. established by a preponderance of it that the triple system has increased the yield of oil per ton of seed, or that the reduction in the labor, if any, is due to that part of complainants' system which defendant imitates. The substitution of an automatic former to catch the meal from the storage heater for the old hand mode of taking the meal in bags will fully explain any reduced cost in labor. No infringement of this feature of complainants' system is averred or proven. The increased production of oil per ton is mainly due to the marked improvement in the crushers and the presses. The claims of complainants' patent, in so far as defendant infringes them, are void, and the bill will be dismissed.

#### KINGSLEY v. UNION BRIDGE CO.

#### (Circuit Court, N. D. New York. May 2, 1893.)

#### No. 5,824.

PATENTS FOR INVENTIONS-NOVELTY-INFRINGEMENT-REISSUED LETTERS PAT-ENT NO. 11,001.

In reissued letters patent No. 11,001, dated April 30, 1889, for improvements in dies for making eye bars, a lower die section is employed, which is triangular in cross section, and is rigidly supported on a base. The upper die section is recessed upon its under side, to coincide with the angular face of the lower section. The heated bar coming from the rolls is laid on the lower section. The heated bar coming from the rolls is laid on the lower section. Power is then applied to the upper section, causing the metal to be bent into angular form, so as to lap the angular faces of the lower triangular section, the angular bend being made for the purpose of keeping the bar straight during the process of upsetting. *Held* that, in view of the state of the art, the patent must be confined to the only novel feature, viz. the triangular die section for bending the bar into angular form for the purpose mentioned; and that, as so construed, a die which forms a longitudinal rib for the purpose of holding the bar straight during the process of upsetting does not irfringe.

In Equity. Bill by John F. Kingsley against the Union Bridge Company for an alleged infringement of a patent. Dismissed.

Thomas J. Johnston, for complainant. Walter D. Edmonds, for defendant.

COXE, District Judge. This action is founded upon reissued letters patent No. 11,001, dated April 30, 1889, for improvements in dies for making eye bars. The application for the reissue was filed February 11, 1889. The original, No. 357,833, was applied for October 26, 1886, and was granted February 15, 1887. The invention "consists in a die of peculiar construction, and also a frame provided with rollers upon which bears the former-head or other agency used for bringing the desired pressure upon the upper die section." In carrying out the invention a lower die section is employed which is triangular in cross section. This lower section is rigidly supported upon any suitable base. The upper die section is recessed upon its under side to coincide with the angular face of the lower section. The bar, as it comes from the rolls, is heated and laid upon the lower section of the die. Power is then applied to close the upper section upon the lower section, causing the metal to be bent into an angular form so as to lap the angular faces of the lower triangular section. This angular bend is for the purpose of holding the bar straight during the process of upsetting. It is this which is the marked feature of the patented structure, distinguishing it from the upsetting dies of the prior art.