## Legal Notes.

PATENTS FOR INOPERATIVE DEVICES AS ANTICIPATIONS AND THE HISTORY OF BARRELS.—A suit was brought against the Spruks Manufacturing Company by the Farmers' Manufacturing Company, assignee of John F. East, to restrain infringement of letters patent granted to East for an improvement in barrels. It was decided by the Circuit Court that the East patent was invalid, in that it did not involve anything more than ordinary mechanical skill in view of the extensive prior knowledge; and secondly, that there was no infringement by the defendants. From this decision an appeal was taken (127 Fed. Rep. 691) which resulted in a reversal of the lower court's decision.

• The East patent contains four claims. Of these, only one and three, reading as follows, were in issue:

"(1) A barrel or receptacle having its sides composed of a sheet of veneer provided with parallel slits arranged lengthwise of the barrel, and terminating at a distance from the edges of the sheet, and leaving the edges of the veneer sheet continuous or integral, as shown and described."

"(3) A barrel or receptacle having its sides composed of a sheet of veneer provided with parallel slits arranged lengthwise of the barrel, and terminating at a distance from the edges of the sheet, and expanded in the middle to a greater diameter than at the ends, substantially as shown and described."

In his statement of invention, East says:

"I am aware that it is not new to make barrels of veneer, and that the ends of a veneer barrel have been drawn together by first slitting the edges of the veneer blank in order to get the bulge or curve to the barrel, and I do not claim any such construction."

His invention, as stated by him-

"Consists of a barrel composed of a veneer blank cut through its middle with a series of parallel slits extending transversely to the blank and longitudinally to the barrel, but not out to either edge of the blank, thus leaving the edges of the blank, which form the chines of the barrel, continuous or unsevered, while the middle cut portion is extended to get the bulge or curve to the barrel, and also to form ventilating openings."

The first patent for a barrel made of veneer was issued to Sheridan Roberts, May 14, 1861, and reissued as No. 6.044. September 8, 1874: and the opinion of the court below, so far as it adjudges East's patent invalid, seemed to hinge upon that. The invention relates to the formation of the body of the barrel in volute sheets cut or removed from the surface of solid cylinders, and forming the bulge of the barrel by forming notches or slots from the edges toward the center, or cutting out or removing gores or wedgeshaped pieces from each edge, so that, by bringing these cut surfaces into contact by means of hooping the body of the barrel, the barrel thus formed will have the desired bulge. An examination of this patent discloses that its design was to form a tight barrel, and a barrel shape, as contradistinguished from a mere cylinder, was obtained by cutting out gores or wedgeshaped pieces at the ends; and, by drawing in the veneer sheet at the joined ends, the gore spaces would be closed up. The vice of Roberts' patent was that it did not have that peculiar curvature at its sides, continuous from top to bottom and at every vertical line, which for ages has been known to be necessary for giving the greatest strength. It is this arch shape throughout at every vertical line of its sides from top to bottom, that distinguishes a barrel from a cylinder. Roberts' patent would produce a package with a cylindrical central zone and two cone-like ends. What he refers to in his statement of invention as producing the "desired bulge," by the drawing together of the ends from which wedge-shaped pieces had been cut, would not be that bulge with uniform curvature from top to bottom so essential to a barrel-shaped barrel. The compressing the ends of the cylinder could have no other effect than to produce the semblance of a bulge, in that it was wider at the center than at the ends. It could have no bulging form of any spheroidal sort, and must remain simply a cylinder in the center, with the weakness characteristic of mere cylindersof collapsing under pressure. Roberts' so-called barrel, therefore, is nothing more than a cylinder with a wider diameter and with cone-shaped ends, and lacks the curve or true bulge at the central zone, so essential to the strength of a barrel **P**atent was granted to him in 1861, and renewed in 1874. It had been before the public for 29 years when East's application was before the Patent Office, and must have been thoroughly known to the commissioner when East's application was considered, and had proved to be inoperative and worthless. Roberts' barrel was not, and was not intended to be, a ventilating barrel. Considering this patent as an alleged limiting or anticipating document, what, asked the court, would a person skilled in the art of barrel making produce from

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inspecting the drawings of the patent and following it? Nothing but a tight, unventilated barrel, with a cylindrical center and cones at the ends. For nearly 30 years it had been on the public record without producing any effect on the art or trade of barrel making. It cannot be said that a patent for a device which fails to accomplish the desired end is an anticipation of one which successfully accomplishes it.

The other patent referred to in the court below was that of Elijah B. Georgia, No. 164,542, dated June 15, 1875. This invention, as stated in the application—

"Relates to means whereby fruits may be packed, transported, and kept without deterioration for a considerable period. The invention consists in having the staves or heads or both sawed or incised longitudinally, or in the direction of the grain, so as to get the necessary aeration without weakening materially the stave."

The appellate court doubted whether this Georgia patent had any real pertinency to the matter involved in the appellate court controversy, as this barrel was essentially different in structure from that involved in the patent in suit. This was an ordinary stave barrel with apertures or ventilators. East did not pretend to have been the first to make ventilators in a stave barrel. The essence of his invention and the characteristic thing about it, was that for the first time a ventilated barrel was made of veneer, and the central, outward, bulging bend at the central zone was secured by means of precisely arranged incisions or indentations in the veneer sheet, which thus relieved the fibers at the middle of the strain.

The need of a ventilated barrel for the shipment of vegetables had been greatly felt along the whole South Atlantic Coast by those engaged in truck farming. and, previously to East's invention, second-hand flour barrels, with holes chopped by hand, were commonly used for this purpose. These were found to be inconvenient, expensive, and sometimes unsanitary; and the testimony showed that, after East's invention, barrels were made of veneer from a gum tree which grows abundantly in that region, and put upon the market at a cost of about one-half of the old barrels, and that about a million of such barrels are now being annually made and sold for the shipment of potatoes alone, and that, except the recently produced barrel of the defendant, there was no other ventilated veneer barrel used in that region but that manufactured by the complainant company or its licensees; and there was also testimony that parties interested in the defendant company, including Mr. Canfield, its general manager, importuned the complainants for the right to manufacture their barrels, but were refused because they had already granted a license for the territory which he was endeavoring to secure. The testimony was abundant that the East barrel had gone into general use, that the public had attested its superior utility and value by adopting the same, and that it had superseded all other barrels previously used for like purposes. "The fact that prior devices, such as the Roberts and the Georgia barrel, had not been successful, and that the East barrel secured general acceptance and extensive use, and was a commercial success, creates a strong and almost conclusive presumption that the East barrel was the product of invention and had patentable merit, and that something more than mere application of mechanical skill was involved in its production. It is difficult to draw the line between mechanical skill and patentable invention, and now that East had succeeded in producing a barrel of great commercial use, out of simple and inexpensive material, by what seems to be but a trivial modification of previously known devices, it was easy to say that any mechanic skilled in the art, having before him the previous invention of Roberts, could readily have accomplished the same object by ordlnary mechanical skill, but the fact remains that, notwithstanding the great demand and imperative need of the very thing that East produced, no other mechanic or barrel maker had ever produced such a barrel previously to East's patent." Simple as the device is, others failed to see it, or to estimate its value, or to bring it to the public notice. Ventilated barrels were known and used long before, but these were barrels made of staves, and ventilating holes were cut with hatchets or by mechanical means, such as are set forth in the Georgia patent. So, too, barrels made of veneer could be made in accordance with the Roberts patent, which would produce a tight, unventilated barrel, with cones at the ends, and a cylindrical center The next question was whether the defendant company had infringed this patent. The defendant's barrel was made from a sheet of veneer. The latter was cut to form two barrels; the central, dividing line showing the lines of cutting the sheet into two parts, from each of which two barrels are made. The blank for each barrel was a flat sheet having at each end a series of gores between the end hoops, and the center bulge a series of parallel cuts partially through the wood.

barrel." It seemed clear to the court that, in the process of manufacturing its barrel, the defendant had adopted East's invention of cutting through the middle a series of parallel slits extending transversely to the blank and longitudinally to the barrel, and not out to either edge of the blank. "It is precisely these longitudinal parallel slits in the center of the barrel that is the essence of East's invention, for it is that that differentiates East's barrel from the Roberts barrel, with its smooth, continuous, uncut, imperforate central zone, which had proved to be impracticable and useless. Without these longitudinal incisions, the arch shape which distinguishes a barrel from a cylinder could not be attained."

"East has not discovered any new elementary material for the making of barrels, and the elementary principle upon which barrels are constructed is old; but he has adopted a new form, and discovered a new combination, a diversity of method and diversity of effect, a new modus operandi, whereby it has been practically demonstrated that cheaper and better results are obtained, which benefit the world; and therefore, under the principles and precedents, he has become entitled to that protection which the patent laws are intended to secure for 'any new and useful improvement on any art, machine, manufacture, or composition of matter.' Such combination, however simple and obvious, if entirely new, is patentable, and not the less so because up to a certain point he uses old methods and old materials. Having produced a new and better result by his invention, the law looks to that, and 'it is of no consequence,' says Justice Story, 'whether the thing be simple or complicated, whether it be by accident, or by long, laborious thought, or by an instantaneous flash of the mind, that it was first done."

The simplicity and apparently obvious nature of East's device were really the chief arguments against its patentability, but the books are full of cases where patents have been sustained for changes in methods which seem equally simple. The substitution of the hot blast for the cold in making iron; the use of a flame of gas to finish cloth, rather than the flame of oil; the substitution of pit coal for charcoal, and of anthracite coal for bituminous coal, in certain processes—are some of them.

While the question of patentable novelty in East's device might not be entirely free from doubt, the grant of a patent by the Patent Office created a presumption in its favor, which those who contest it must rebut by proofs; and when the proofs showed, as they did, that there was a wide and general demand for a new and cheaper barrel, that none of the alleged anticipatory devices had filled that want, and that East's barrel met instant public recognition, general acceptance, and extensive use, superseding all other devices, the presumption of novelty seems irrestistible; and the conclusion was that the patent should be upheld, and the defendants enjoined from infringing it by the making of the longitudinal slits in the central zone, which the testimony clearly showed that they did. In so far as it was claimed that they had improved upon East's invention, in providing additional ventilating apertures, the opinion, of course, did not affect such alleged improvement.

INFRINGEMENT OF A TRADE MARK INDICATING QUALITY. -The case of the Stevens Linen Works vs. William and John Don & Company (127 Fed. Rep. 950) discloses a state of facts doubtless common enough in business life. The uncontradicted evidence showed that the complainant, a manufacturer of linen crash, had adopted as a trade-mark the words "Stevens Crash," printed in a line diagonally across an ornamental square ground. By universal custom of trade, this trade-mark had been used to designate grade and quality, and not ownership; the complainant originally adopted them to indicate the different qualities of his goods. There was no evidence to support the charge of unfair competition, no evidence that anyone had ever been deluded by the use of the letters into the belief that he was buying complainant's goods instead

Ventilation was supplied "near the head or chine ends, rather than altogether in the central portion of the of the defendant's. The bill was dismissed.

Infringement of a device for regulating the quantities of air and gas, respectively, admitted to the mixing chamber of a gas engine, is not avoided by so changing the mechanism that the quantity of air admitted remains the same, while the quantity of gas is variable. Where defendant owns an infringing machine, and throughout the suit contests the validity of the patent, and asserts the right to use such machine, complainant is entitled to an injunction, although pending the suit defendant has refrained from actual infringement.

Two patents may be for the same invention, although the earlier is for a specific machine, while the later contains broader claims, which embrace both the prior specific machine and others as well.

A patentee cannot patent a structure, and by disclaimer withdraw the invention which makes the structure patentable.