web or neck of the beam thinner than the top or bottom. In other words the metal neck or web of the beam between the top and bottom flanges is made as thin or light as practicable, as the patentee himself describes it, "for the purpose of lightening the beam by removing the metal of the beam from that part where the strain is least." The removal of this superfluous metal, of course, leaves a hollow or concavity between and parallel with the flanges. The patentee says he does not claim the flanges nor the fillets, nor a combination of them alone, evidently because he knew they were old; but his claim is for a combination of the flanges and fillets, and the concavity between them. Some scoffer said that "God could not help making valleys so long as he made hills;" and so it may be seriously and truthfully said of this device that with flanges and fillets at the top and bottom of the beam a concavity between them was a necessity, and it required no invention to produce it. The lateral expansion of the top and bottom of the beam, thereby making the flanges, made a greater or less concavity between them, so that the inventor did not invent a concavity, nor did he invent a new combination of flanges, fillets, and concavity, because the concavity would always be where there were flanges at top and bottom, and the central portion of the rail partly cut away to save metal. Such concavity is in the T railroad rails, in bridges and building girders and beams, and in fact any form of beams where the top and bottom are wider than the metal neck. The concavity is as old as flanges and fillets, and always, it may be said, goes with them, in such a structure as this. For these reasons. I think the patent is void for want of novelty; and the bill is dismissed for want of equity.

AMERICAN ROLL PAPER Co. et al. v. WESTON.

(Circuit Court, S. D. Ohio, W. D. May 28, 1892.)

No. 4,281.

- 1. PATENTS FOR INVENTIONS- ANTICIPATION-PRIOR USE-ROLL-PAPER CUTTERS. Letters patent No. 301,596, issued July 8, 1884, to Richard W. Hopking, cover an improvement in roll-paper holders and cutters consisting of a bracket from which the roll of paper is suspended by means of a yoke, which passes through a slot in the bracket, and has its arms bent to form a spring, and its ends curved to pass a short distance into the roller or core. A blade, having its ends bent at right angles, to guide the paper, is connected with the bracket by means of a knife yoke, upon which are two coil springs to continually press the knife against the roll, so that the paper may be pulled out and cut at any desired length. *Held*, that the invention was anticipated by the device constructed in Richmond, Ind., by Martin Nixon, and used there by himself and others about 1875 or 1876, and which consisted of a bracket holding the roll, and a follower with a metal edge, which was held above the roll by slots in the bracket, and of its own weight followed the roll as it diminished in size, and continually pressed against it ready for cutting.
- 2. SAME.

The patent was also anticipated by the device constructed by O. J. Livermore about 1878-79 at Worcester, Mass., for cutting sheet wrapping paper from rolls, and used there for several years in the dry goods store of Clark, Sawyer & Co. This machine operated in substantially the same manner as the Nixon device, having a wooden frame with a slot, in which the roll was carried on an iron rod, and in which was a heavy wooden follower with a metal edge, acting by force of grav ity: 45 Fed. Rep. 686, reversed.

In Equity. On rehearing. Knight Bros., for complainants. Arthur Stem, for defendant.

SAGE, District Judge. This cause is before the court upon a petition for rehearing, based upon alleged anticipations which have come to the knowledge of the defendant since the entry of the decree for an injunction and account on the 8th of April, 1891. The defendant has produced testimony tending to prove six prior uses of the invention. These will be considered in the following order:

First. Paper bag machines, with tension bars for controlling the feed roll of paper, which, according to the testimony, were put in the factory of Chattield & Woods at Cincinnati in the summer of 1878. It is not quite clear from the testimony whether the tension bars were on the machines put in at that date, or upon others put in a year or two later, but the later date would be earlier than the complainants' invention. Upon a careful examination of the testimony, I am satisfied that this device was not an anticipation. The machines were used for making flour sacks. The tension bar was of wood, the surface bearing upon the roll of paper being rounded, and not practical as a cutting edge. It appears from the evidence that the wood rapidly wore away, flattening the surface, but the superintendent, when he discovered that fact, shod the rounded part of the tension bar with quarter-inch iron, which was shorter in length than the shortest roll used on the machines.

Second. The Nixon use. William R. Nixon was a paper manufacturer at Richmond, Ind., engaged between the years 1872 and 1876 in making Manilla paper for bags and for wrapping purposes, in partnership with his brother, Martin Nixon. The most of the produce of their mill was sold in rolls to paper bag manufacturers, but they had a few retail customers at Richmond, to whom they sold wrapping paper To save time, and the labor of changing the machine every in sheets. time they wished to produce paper in sheets instead of rolls, they endeavored to persuade those customers to take wrapping paper in rolls, and, to induce them to use it in that form, his brother, Martin, constructed a roll-paper holder, a sketch of which is in evidence. The knife bar, or, as the witness styles it, the "cross bar," was provided with a weight and a cutting edge, either of tin or zinc, it is not material which. It rested upon the roll, and had a vertical play between its upright end supports, so that as the roll grew smaller, it would follow it down, and bear against it. It was also provided with a piece of iron on the top of it, to make it heavier, and hold it while the paper was being torn off. It was a crude construction, gotten up to aid in the introduction of roll paper in the market. It was set up in the mill, where William R. Nixon testifies it was operated for about six weeks. The witness' description of how it was used was as follows: "You took hold of

the end of the paper, pulled it out as far as you wanted, and then tore it off; the bar and weight on it holding it, and tearing it straight by means of the piece of tin on there." Being asked whether the paper was torn off with a straight edge, his answer was that, "if the tin was straight, of course it cut straight." No paper holder or cutter of this description was sold or put on the market, so far as the witness knew or was able to state. He fixes the date by the fact that the partnership was dissolved in 1876, and that he then left Richmond. He is sure that the device was made in the time of the partnership. Simon Fox, a merchant tailor of Richmond, testifies that he had a roll-paper holder and cutter in his shop. "It must have been in the seventies." It might have been in '74 or '75, but he could not fix the date exactly, nor could he remember how long it was used. It was brought there from Nixon's house. He says it was a wooden bracket, with two uprights, one at each end, with an opening, and that there was a roll of paper on it. He testifies that he cannot recollect whether, when it was first introduced in his store, there was some arrangement on it for cutting or tearing off the paper, but that his cutter used his shears, because it was easier to cut the paper with them than with the machine, and that the paper could be cut or torn from the roll by the use of the machine itself, without the use of the shears; and yet he cannot recollect whether there was anything on the machine for cutting or tearing the paper across the roll. He also testifies that a device left at his shop by the defendant, Weston, about two months before he gave his testimony, which was in July, 1891, resembled the one at his store above referred to, and that he used shears for cutting the paper off that machine. He does not, however, remember whether there was a bar on that machine or not. John J. Ronev of Richmond testifies that 12 or 15 years ago he saw a roll-paper holder and cutter in the store of Fox, the last witness; that-

"It was principally of wood, the brackets attached to the end of the cutter's table. The roll was hung so it slid up and down in a slot, the journal of the roll. There was a cutter attached to it for cutting or tearing the paper off, and my recollection of it is that it followed the roll as it diminished in size. That cutter was metal. I don't know whether it was tin or sheet iron, attached to a piece of wood. I don't know whether the piece of wood was flat or partially round, but it followed the roll of paper."

He also testifies that he has seen it used, but could not say how often, but his opinion was that it was not much used. The paper was torn off by pulling it up against the cutter. On cross-examination he was unable to answer whether the cutter had to be held down by one hand, as the paper was torn off by the other.

Martin N. Nixon testifies that he got up the device above referred to for holding roll paper. He says there were two brackets, with slots for carrying the roll, and there was a follower, a square piece, which followed down the slot, and was used for a tearing edge. His recollection is that the tearing edge was made of zinc, but it may have been of tin, as they had both tin and zinc at the mill. He made two of these devices. Mr. Fox, the clothing merchant, used one, and Mr. Nye, a queen's ware merchant at

Richmond, the other. Mr. Fox's device was in use at his store, or at least witness saw it in use there, about three weeks. Then one of the arms on the bracket was broken. He testifies that he saw it used at Fox's by drawing the paper against the cutting edge, and that the holder and cutter used in the queen's ware store of Mr. Nye was made by Mr. Nye's clerk, under instructions given by the witness. His statement of the date corresponds with his brother's. My conclusion with reference to this device is that it must be regarded as an anticipation of the complainants' device. It is true that it was a rough, crude construction, but it answered the purpose, and the use was practical. The witness Fox is evidently a man of inferior mechanical faculty. The fact that he used shears in cutting paper from the device when it was in his shop amounts to nothing, because it appears from his testimony that he did the same thing when he had in use the defendant's device, which has been found to be an infringement in this case. A sufficient reason for the disappearance of the Nixon device from use is to be found in the fact that at the date of its construction there was no general demand for wrapping paper in rolls. Third. The Shipley use, a device gotten up for holding roll paper by Columbus G. Shipley, superintendent of the Crume & Sefton Manufacturing Company, at Dayton, Ohio, at a date not accurately fixed. Standards to hold the axle or roller carrying the roll paper to be fed into the machine were bolted to the machine. To regulate the tension, a bar of iron was provided, working in slots in arms above the roll. It was heavy enough to overcome the momentum of the roll, and prevent its overrunning or unwinding too quickly, and it was intended also to regulate the tension. It was used in connection with a machine for stamping out boxes for confectionery and ice cream, and for oyster buckets, from Manilla paper of various thicknesses. There were occasions when it was necessary to tear off the paper; sometimes in starting a roll, and again when the machine was in operation, and places in the roll paper where ends had been pasted together were too thick to pass between the dies. On such occasions the paper would have to be torn off, and this was accomplished by a quick jerk, which would tear it across the roll. It was not necessary that the cut should be a clean cross cut. If it was a little ragged, it would make no difference. Mr. Shipley testifies that this device was first used in 1880, and he is confirmed in this statement by Mr. Crume, president of the Crume & Sefton Company. They are both evidently wrong, as appears by the testimony of Charles Johnson and Bernard A. Barlow, who were employed in the factory of the Crume & Sefton Company; Johnson as late as March, 1882, and Barlow until the last of May, 1881. Both testify that in their time no such device was in the factory, and there is testimony carrying the date of the complainants' invention back to May, 1883. At some time after the making of this device, but how long afterwards is not definitely shown, another was gotten up by Shipley, consisting of a bar of iron an inch and a half square in cross section, tied to the standards by wires, and so arranged as to bear on the roll at its side about as the cutting bar of the defendant's device bears, and to follow the roll as it decreased in size. I am not

satisfied with the proof as to the date of either of these devices. It does not establish with the certainty required by the law a date prior to the complainants' invention. The first device is not shown by the evidence to have ever been used as a paper holder and cutter, excepting incidentally. It is true that, according to the testimony, paper was torn somewhat in the manner of that torn in the use of the complainants' device, but it was only occasionally, when pasted ends were encountered, or when an uneven end was to be torn off; and whether a clean or straight tear could be made does not clearly appear. This device must therefore be rejected as not an anticipation.

Fourth. The Maltby use. This was a tension device used in a paper bag machine, constructed to make four bags simultaneously, the machine being fed from four separate rolls of paper, one of which was provided with a tension device made of iron, and held down on the roll of paper by its weight. The testimony is conflicting whether this bar was convex or rounded, or concave or hollowed out, and it cannot be recognized as an anticipation.

Fifth. The Livermore use. O. J. Livermore testifies that in 1878 or 1879 he devised a roll-paper holder and cutter at Worcester, Mass., where he was engaged in the store of Clark. Sawyer & Co., retail dry goods merchants. He went out one day to buy sheet wrapping paper which they had been in the habit of using, and, finding a roll of wrapping paper, it occurring to him that that would be more convenient, as any length desired could be torn off, he bought it, took it to the store, and set it on end on the counter. It was difficult to tear it off smoothly, and so he devised and constructed a machine, a model of which is in evidence. That machine was used constantly during the two years that he remained in Worcester after it was constructed, and it operated satisfactorily. He does not know what became of it, but he saw it in use there a number of times after he left the employment of the firm. It was the only machine of the kind in that store at any time within the witness' knowledge. He gives the names of six persons who saw it in use, all of whom, excepting one, reside in Worcester. That one is Edward W. Ball, general manager of a manufacturing company at Woodhaven, N. Y. He testifies that the machine had a wooden framework, at each end of which was an upright, having a slot cut from the upper end partly down its length, in which was an iron rod, carrying a roll of wrapping paper. Above this roll was a bar or strip of wood, with a piece of sheet brass attached to one side, and projecting slightly beyond the lower edge of This bar or strip rested upon the roll of paper, and, as the the wood. roll was used, followed it down by gravity. It fitted in the slots of the uprights. When used, he says, "we took hold of the edge of the paper, and drew out the quantity required. Then we took hold of the further opposite edge of the paper, and, placing the hand upon the paper, by slightly elevating the paper and drawing it towards us, we tore it off." He says that "if you wanted to use the knife, you had to hold the bar firmly upon the roll with one hand." By the knife he explains that he means the metal blade attached to the bar, and states that if an attempt was

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made to cut the paper against the knife without holding the bar down with one hand, it would rise up; that it was two feet long, or perhaps a little less, from one and a half to two inches wide, and from three quarters to seven eighths of an inch thick, and not of sufficient weight to act as a tension device, and keep the roll from overrunning. He further states that it was gotten up by Mr. Livermore about 1876, and that it was still in use when he left Worcester in 1885, and that he used it upon an average once or twice a day. Mr. Livermore, on cross-examination by counsel for the complainants, said that it was natural to put one hand on the bar and hold it down as the paper was torn off, but not necessary, as the paper could be torn as easily without it.

Charles A. Fletcher, of Worcester, testifies that between 1876 and 1880 he was in the employment of Clark, Sawyer & Co., and saw Livermore's paper holder and cutter. Being shown the defendant's exhibit, which was testified to by Livermore as a correct representation of it, the witness stated that it was practically the same as the original machine, which was used for cutting roll paper for wrapping purposes four or five years, to his knowledge, in the paper hanging department. His testimony is that it was used daily and operated satisfactorily; that the bar carrying the cutting edge was movable in the slot so as to rest upon the roll of paper, and follow it down as it diminished. The machine was there and in use when he returned, in 1884 or 1885, and has been there ever since, but the cutter bar had disappeared, and the paper was torn in an irregular way across the roll. Only one of these machines was made during the time of the original one, but a year or two after he returned another was made to take its place, and was in use when the testimony was given, and had been since about 1882, minus the cutter bar. When it was desired to remove a piece of paper it was commonly done by unwinding from the roll, and pulling the paper up and tearing it off against the cutter bar, without placing one hand on the cutter bar to hold it down, as the paper was torn off by the other hand, because there was sufficient weight to the cutter bar to make that unnecessary, although it was done a good many times as a matter of convenience. He says that when the roll was full, and given a sharp pull, the weight of the cutter bar was not sufficient to prevent it from overrunning; but when it was given an ordinary pull, or pulled slowly, the weight was sufficient to retard it, and he repeats that in the ordinary use of the machine the only hand used was the hand that was pulling the paper against the bar.

George Richardson, of the firm of Clark, Sawyer & Co., in 1877, 1878, and 1879, remembers the Livermore paper cutter and holder, and testifies that it was the same as defendant's "Exhibit Livermore," and was in use by the firm nearer five years than one. He confirms Fletcher as to the manner of its use; could not say whether when they tore the paper off with one hand they placed the other hand on the cutting bar, but he thought they did not do so usually.

Stephen Sawyer, treasurer of the Clark & Sawyer Co., which succeeded the firm, and 25 years a member of the firm, remembers the Livermore roll-paper holder and cutter. He testifies that it was a little larger than defendant's "Exhibit Livermore," and that it was used every day for seven or eight years, or more, until it broke down, and another and smaller one, without a cutter, was substituted.

P. C. Sanderson, salesman for Clark, Sawyer & Co., from 1873 to 1881, corroborates the testimony of Fletcher as to the construction and use of the Livermore paper-roll holder and cutter. He says that, if the roll of paper was very large, they had to take hold of the cross bar or cutter, and hold it down; but if the roll was smaller,—that is, a foot or less in diameter,—the weight of the bar and the cutter was sufficient, and they did not have to place the hand on the bar at all; also that it was in use in the store at least two years before he left the employ of the firm in 1881.

G. Herbert Marsh, another salesman, testifies to the same effect. He says that the cutter bar followed down on the roll, and that the cutting was done by pulling the paper against the brass rule; also that the weight of the cutter was sufficient to keep the roll from unwinding too fast, and to cut the paper without holding it down with the other hand; that he always used it the other way.

William Stevenson, a witness for the complainants, was employed by Clark, Sawyer & Co. in 1885 or 1886. He was then 14 or 15 years of age, and was first a salesman and later a teamster. He testifies that the bar of the Livermore holder and cutter was of wood, about an inch and a half wide, and half an inch thick; that it was heavy enough to act as a brake to keep the roll from overrunning or to be used as a cutter without being held by the hand; that sometimes a straight cut would be made by simply pulling up against the bar, but not with any certainty. He also testifies that as good a tear or cut could be made without as with I do not regard this testimony as entitled to the weight claimed the bar. Considering the testimony of all the witnesses, I am of the for it. opinion that the Livermore holder was a practical, effective device, and an anticipation of the complainants' invention. It is true that no cutter was provided for the holder substituted in the store of Clark, Sawyer & Co. for the original one, but that fact is not entitled to the significance The first one was not put attached to it by counsel for complainants. in by the proprietors, but by Livermore, a clerk. There are some employers who are mindful of comforts and conveniences for their employes; there are others who think almost anything will do. When the original device was worn out or fell into disuse, the deficiency was supplied in an imperfect way, but by whom it does not appear.

Sixth. The Wheeler use. The testimony of one witness, taken by the defendant, with reference to this use, was shown on cross-examination to be entirely hearsay. The only other witness, the pattern maker, testifies that he made the patterns for the device in January, 1883, fixing the date from his books, and that he delivered them to Wheeler immediately afterwards. Upon further examination, at the request of the complainants, he found that the true date was October 19, 1886, long atter the complainants' invention. It is scarcely necessary to add

that that use cuts no figure in this case. The Nixon device and the Livermore device were the first embodying any conception of a holder and eutrer for roll paper to be used for wrapping purposes. They were both practical, both successful. The complainants' device, although an improvement in detail of construction, is nothing more than an equivalent embodiment of the same conception. It is completely anticipated. The contention by counsel for complainants that the others were mere experiments, long ago abandoned, is altogether untenable. The former decree herein will be set aside, and the bill dismissed at complainants' cost.

THE T. W. SNOOK.

GRISWOLD et al. v. THE T. W. SNOOK, (CONTINENTAL INS. Co., Intervener.)

(District Court, N. D. Illinois. June 18, 1892.)

Admirality-Decree-Bond-Intervention.

A vessel arrested in a suit to recover damages done to the hull of another vessel by a collision was released on bond. Afterwards an insurance company intervened in the suit, claiming that the cargo of the other vessel had been insured by the company, and had been totally destroyed by the collision. A decree was rendered finding the libeled vessel guilty. *Held*, that the insurance company should not be allowed to be let in to share in the decree to the extent of what might remain of the penalty of the bond after satisfying the decree in regard to the damage to the other vessel, since the bond was given only to satisfy the cause of action set out in the original libel.

In Admiralty. On motion.

Libel by the firm of Griswold & Manchester against the propeller T. W. Snook for damages caused by a collision. A decree was rendered in favor of the libelants. The Continental Insurance Company intervened, and now moves to be let in to participate in the decree.

Robert Rae, for Continental Ins. Co.

BLODGETT, District Judge. On the 18th day of September, 1887, a collision occurred in the waters of Chicago river between the propeller T. W. Snook and the canal boat Georgia, whereby the Georgia was sunk; the Georgia at the time being in tow of the canal propeller City of Henry. Griswold & Manchester, as owners of the Georgia, filed their libel in this court on the 20th of September, 1887, charging that the collision was caused by the fault of those in charge of the Snook, and claiming damages for the loss of the Georgia to the amount of \$2,000, her alleged value. A monition was issued, and the Snook arrested by the marshal of the district, and on the 4th of October, 1887, the Snook was released from such arrest on a bond given by Charles A. Cook, William C. Wil-

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