that when the rotation of the marking roller is started by the letter the die prints upon the forward part of the letter. In this organization the proper registration is secured by stopping the marking roller in a certain position, and retaining it in that position for the printing operation.

In defendant's machine the means for insuring the proper registration of the die are the timing lever, which stops the advancing letter, and the clamping feet on the marking roller, which press the letter away from the timing lever and against the feed belt. These devices control the feed, and are the means employed for presenting the forward part of the letter at the proper moment to the die upon the constantly revolving marking roller. In this organization, it is by controlling the feed mechanism, or by securing the proper accuracy of the feed, that proper registration of the die upon the letter is secured.

The machine of the patents in suit and the defendant's machine differ so radically in construction and mode of operation that I fail to find infringement of any of the claims in issue. In reaching this conclusion, I have given to the patents in suit the full breadth of construction which is warranted by the position which they occupy in the art.

Upon this ground, and without entering upon the other defenses raised by the pleadings and the evidence, a decree must be entered dismissing the bill.

Bill to be dismissed, with costs.

LOUDEN MACHINERY CO. v. JANESVILLE HAY TOOL CO. et al.

LOUDEN MACHINERY CO. et al. v. SAME.

(Circuit Court, W. D. Wisconsin. December 27, 1905.)

Nos. 72, 73.

1. PATENTS—INVENTION—NEW COMBINATION OF OLD ELEMENTS.
Where a new organization of old elements produces a new mode of operation and a beneficial result, there may be patentable invention, whether that result be new or old.
[Ed. Note.— For cases in point, see vol. 38, Cent. Dig. Patents, § 48.]

2. SAME—INFRINGEMENT—HAY-SLINGS.
The Louden patent, No. 444,546, for a hay-sling, while for a combination of old elements and not entitled to a broad construction, produces by a new combination a new mode of operation and a better result, and discloses patentable invention; also *held* infringed.

3. SAME—INVENTION.
The Louden patent, No. 539,524, for a hay-sling, is void for lack of patentable invention.

4. SAME—PULLEY.
The Toney patent, No. 393,941, for a pulley having a detachable head so that different forms of heads can be used interchangeably to fit different hay carriers, is void for lack of invention, in view of the prior art which contained pulleys precisely the same in operation and effect and having the same elements except the removability of the head.

5. SAME.
The Louden patent, No. 434,544, for a hay-carrier elevating pulley, was not anticipated and discloses invention, being for a new combination of old elements co-acting to produce a new and useful result; also *held* infringed.

6. SAME—HAY-CARRIER APPARATUS.
The Louden patents, Nos. 493,216 and 526,839, both for track hangers for hay-carriers, show only combinations of old elements each of which performs its old functions, and are void for lack of invention.

7. SAME—STOP DEVICE FOR HAY-CARRIERS.
The Burkholder patent, No. 490,738, for an adjustable stop device for hay-carriers, is limited as to all of its claims to a device having extending wings as shown in the specification and drawings. As so construed, *held* not infringed.

In Equity. Suit for infringement of letters patent No. 434,544, granted August 19, 1890; No. 444,546, granted January 13, 1891; No. 493,216, granted March 7, 1893; No. 526,839, granted October 2, 1894; No. 539,524, granted May 21, 1895—all to William Louden, and relating to hay-carrier apparatus; No. 393,941, for a pulley, granted December 4, 1888, to J. Toney; and No. 490,738, for an adjustable stop device for hay-carriers, granted January 31, 1893, to John H. Burkholder. On final hearing.

Jones & Addington, for complainants.
Offield, Towle & Linthicum, for defendants.

SANBORN, District Judge. These two cases involve the validity of seven patents for storing hay, covering the operation of unloading, elevating, moving, and dropping the hay, by means of a hay-sling, compressing pulleys, registering head locking the elevating apparatus to the carrier, stopping the carrier at the proper place, and releasing the load; also for suspending the carrier track to the roof of the hay barn. Large numbers of the various devices covered by the patents, in forms somewhat modified from the patent designs, have been sold by complainant, and the apparatus has been commercially successful. Defendant dealt with complainant in the purchase of the apparatus for several years, without objection, and purchased large numbers of patent pulleys, fittings for hay-slings, etc. Afterwards defendant commenced to make, use, and sell all the devices covered by complainant's patents, in substantially the same shape as the commercial forms of the devices sold by complainant.

It is claimed by complainant, and the proof shows, that the devices have been commercially successful, and that the development of the hay-sling art by these patents was final, and was marked by useful results. It is in testimony as to some, possibly all, of the patent devices, that the patent marked the final step in the development of the art. These various fixtures, when used with a hay-carrier consisting of a four-wheeled truck, running on the horizontal flanges of an inverted T-rail, serve to raise the hay from the load, compressing it in the sling, locking the compressing pulleys, locking the latter to the carrier, moving the bundle along on the track, stopping and releasing it at the proper place by means of the mechanism

of the pulleys, registering head and stop block, and then, by means of the trip-coupling located at the center of the hay-sling, the bundle is released and the hay falls on the mow.

The Louden Adjustable Hay-Sling Patent, No. 444,546.

This is a patent for adding adjustability to a hay-sling. Mr. Louden makes no claim for inventing a hay-sling, but only for making it elastic, adjustable, and successful. He adds devices for easily making it long or short, puts old things into a new combination, thereby securing adjustability, and for this new element claims a patent. The hay-sling which he so improved may be described by imagining two diamond or cross-shaped kites laid together endwise, and tied to each other by a device known as a trip-coupling. When the hay is laid on the sling the extreme ends are brought together and fastened, and the hay thus bundled up and compressed, ready to be lifted, carried to its destination, and dropped by parting the sling in the center. This is done by opening up the trip-coupling by pulling the trip cord, when the coupling parts, the two sections of the sling separate and the bundle falls. The ropes surrounding the two kite-shaped parts of the sling are called the sling ropes. The cross-pieces are the spreaders. These are made of wood. The longitudinal pieces are omitted, thus leaving the sling composed only of the ropes, cross-pieces, and coupling. The trip-coupling is composed of two parts; each having castings with rope-holes for attaching the ends of the companion slings. One casting has a pin set at right angles, and the other a socket for the pin, and a movable trip-latch resting over the pin and keeping it in place. To this a tripping-rope is tied. When it is desired to uncouple the sling the latch is pulled from over the pin, the coupling opens, and the sling parts.

This was the sling to which the patentee, by the use of other old devices, added adjustability. The old sling could not be readily made longer or shorter. This defect had, however, been partially met in two ways. Originally the sling-ropes were immovably fastened to the ends of the spreaders. This had been improved by running them through the spreaders, and securing them by the use of wedges. Thus, by using two or three spreaders in each half of the sling, the latter could be lengthened by bringing the spreaders closer to each other, or shortened by placing them further apart; the ropes remaining of the same length. Another method of adjustment was to leave free the ends of the sling-ropes, at the extremities of the sling, tie knots in these rope-ends, at short intervals, and change the length of the sling by taking it up at one or another of the knotted places. By catching the knots over a slot in an elevating pulley hook the bundle, surrounded by the sling, could be held together while being raised to the hay-carrier, and until released by opening the trip-coupling. These means of adjusting the length of the sling were not convenient or practical. They were improved by the patentee by the addition of tent-rope clamps and end-rings, to replace the knotted end-ropes, and J-shaped hook-bolts for the wedges.

To make the sling adjustable the patentee first fastens the end-rope

in one of the eyes of the tent-clamp casting. He then carries it loosely through one of the eyes in the end-ring, much as it would run through a pulley-sheave, then back through the two remaining eyes of the tent-clamp ring, and from there to the spreader-ends. To change the length of the sling he loosens the rope and moves the adjustable tent-clamp ring back and forth on the spreader-ropes, at the same time adjusting the hook-bolts on the ends of the spreaders, allowing the distance between the spreaders to be changed, and thus shortens or lengthens the total length of the sling. The tent-clamp device was old. It is found in the Clark patent, 109,176, for a ring clamp to shorten hay-sling ropes; in the Louden patent, 328,896, for a hay-carrier including a casting with eyes, whereby the rope could be readily lengthened or shortened; in the Chambord patent, 377,063, showing a casting with four eyes for adjusting rope lengths; and in the Kuntz patent, 71,393. The spreader clamp is simply a hook-bolt or bolt with one end bent to a half-circle to hold the rope, and the other threaded for a nut by which the rope may be clutched and securely held to the spreader. It is only as a combination, therefore, that the patent can be sustained.

The only claim in question is No. 4, for "A hay-sling composed of the ropes, A and A^1, trip-coupling, C, spreaders, B, adjustable clamps, C^1 and B^1, and attaching rings, D, substantially as shown." Complainant's position as to this claim is that it was the first in the art to produce a hay-sling with means for adjusting the length of the sling between the attaching end-rings; that it secured a new function and a new result, and was a distinct advance step in the art. It is evident that the claim is specific and not broad, and that the patent can be sustained, if at all, on narrow grounds. "A new combination, with a new mode of operation, may be inventive, even if all the parts thereof are old, and even if the functions of the combination be also old." Walker on Patents, § 37. Where a new organization of old elements produces a new mode of operation, and a beneficial result, there may be a patentable invention, whether that result be new or old. Id. § 26; Dowagiac Mfg. Co. v. Minnesota Moline Plow Co., 118 Fed. 139, 55 C. C. A. 86. "The combination of old devices in a new article, without producing any new mode of operation, is not invention." Burt v. Evory, 133 U. S. 349, 358, 10 Sup. Ct. 394, 397, 33 L. Ed. 647; Florsheim v. Schilling, 137 U. S. 64, 78, 11 Sup. Ct. 20, 34 L. Ed. 574. Novelty is not negatived by antiquity of parts. Walker, § 66. "In case of a claim for a combination, where all the elements are old, and where the invention consists entirely in the new combination of old elements or devices, whereby a new and useful result is obtained, such combination is sufficiently described if all the elements or devices of which it is composed are all named, and their mode of operation given, and the new and useful result to be obtained pointed out, so that those skilled in the art and the public may know the extent and nature of the claims, and what the parts are which co-operate to produce the described new and useful result." Bates v. Coe, 98 U. S. 31, 25 L. Ed. 68.

Now these three devices, the end-rings, rope-clamps, and hook-

bolt (all very simple in themselves), have a joint operation. The sling may be lengthened by taking up the rope through these rings, and further lengthened by loosening the hook-bolts at the ends of the spreaders and bringing the latter nearer together; and may be shortened by reversing the operation. It is plain that the function of these rings and the hook-bolts is to make the whole sling longer or shorter, as may be desired. The sling, as a whole, is adjusted, and its operation modified, by the use of the rings, and also the hook-bolts. To apply the language of Justice Matthews, in Pickering v. McCullough, 104 U. S. 318, 26 L. Ed. 749:

"All the constituents enter into it, so that each qualifies every other. * * * It produces a result due to the joint and co-operating action of all the elements, and which is not the mere adding together of separate contributions."

There is also a new mode of operation, and a more beneficial result, though perhaps not a new or different one. Formerly the length of the sling was changed by knotting the ropes at different places near their ends, and catching the knots over a claw-shaped hook at the proper length; also by knocking out the wedges at the ends of the spreaders and thus adjusting the length of the sling. But under the patent the mode of operation is quite different, and an improved result, if not a new one, is accomplished. It is also in testimony that these improvements made this type of hay-sling a commercial success; and this, in a doubtful case, is entitled to weight. It is said that this claim 4 is not for a combination, but simply for the specific things mentioned in it. But I think it comes within the definition of Justice Clifford, in Bates v. Coe, 98 U. S. 31, 25 L. Ed. 68, above quoted as a claim for a combination, since the operation and result of the various devices are fully explained in the specifications and drawings. See 2 Complt.'s Rec., 70, 71. Counsel for defendant are in error in saying that the hook-bolt is not shown or described in the patent. Deft.'s Brief, p. 34. It is shown in figure 7, and its operation clearly described on page 70. On the whole I think the hay-sling patent, 444,546, is valid, and should be sustained.

But it is insisted that defendant's sling is different, and does not infringe. Defendant uses a hook-bolt at the ends of the spreaders, slightly different in detail from that of the patent, but having exactly the same operation. It also uses a different clamp or casting for shortening the rope at B^1. Instead of a casting or rope-clamp with three eyes for the rope to pass through, it uses a clamp with two eyes, one elongated and divided in the middle by an arm loose at one end, which can be raised when it is desired to loosen the rope, and then laid upon the clamp when the rope is in place. Two of the three holes of the patent clamp are made by means of such movable arm, and making a different mode of operation, as well as an improved one. Although the patent is subject to a strict construction, in view of the want of novelty of the different elements, and simply the final step in a series of improvements, yet I think that defendant's sling is its equivalent, and that infringement exists.

The Louden Trip-Coupling Patent, No. 539,524.

Claim 4, of the hay-sling patent just considered, calls for any trip-coupling device, but the drawings show the Smith patent, 116,231. This was a pin dropped between two jaws. When these were opened by pulling the trip-cord, the pin was released and the sling parted. The same pin and socket construction was improved by the Ricker patent, 392,690, in which a spring-actuated trip-plate or bolt was arranged over the pin to hold it in the socket, and a guide provided for the trip-cord. The cord was fastened to a lever, and when pulled the trip-bolt was drawn back and the pin released. The Ricker device was loose-jointed. It was movable in all directions. Hence it readily adjusted itself to the circular shape of the sling. It appears from complainant's expert testimony that this movable feature was a defect, because the eyes of the coupling which carried the sling-ropes were so placed that the pull on the ropes tended to twist the two coupling sections, making it more or less difficult to disengage the coupling mechanism. It also appears from such testimony that the earlier couplings did not effectually guide and dispose of the sling-ropes in connection with the trip-rope.

The patentee added three improvements. These were rigidity, arc-form, and improved rope-disposal. For the pin he substituted a lip or hook, a coupling-loop to catch over the hook, a trip-plate to project over the loop, and a keeper to hold the plate in position. Thus he imparted rigidity to the loose mechanism of the earlier devices. Having done away with the loose construction, which adapted itself to the circular form of the sling, he restored this feature by carrying obliquely into the coupling the eyes made to attach the sling-ropes, so as to give an arched form to the coupling and dispose of the sling-ropes in the plane of the mechanism. He further provided an improved disposition of the ropes by carrying the trip-ropes into the coupling longitudinally, and the sling-ropes transversely, separating the two by grooved partitions. Looking at the prior art, we find the element of rigidity supplied by the Brown patent, No. 375,865, and the central draft of the trip-rope by the Church hay-sling patent, No. 384,960. Giving the arched form to the device is like bending a hoop to fit a barrel. Keeping the ropes from interfering with each other is a most simple and usual expedient. Avoiding strain on the mechanism by accommodating its shape to the form of the sling shows improvement, but not invention. The whole device is modified pin and socket construction, with more rigidity, less friction, improved disposal of ropes, and better form; but all these features are secured by the use of old elements, acting in the old way. Nor is there a new mode of operation, as the Ricker device operates in the same way. It is true there is a new or different result, by relieving strain, secured by first imparting rigidity and then relieving it by simple, well-known mechanical expedients, all operating in their accustomed way. I think the device, although ingenious and practical, lacks invention, and must be held not patentable.

The Toney Patent, No. 393,941.

This is for a pulley combined with an adjustable or removable registering head having a knob at its upper end adapted to lock immovably into a hay-carrier. The head being detachable, any one of 20 different ones may be used, so formed as to fit all carriers in use. The device consists of a pulley, having its side or cheek pieces extended to grasp the head, which is pinned or bolted to them, and easily detached. The one claim of this patent is "The main frame made in one casting with the cheek-pieces, a, a, and bridge, b, in combination with the pulley wheel, B, and removable block, D, formed with a knob, g, substantially as described." "The pin, d," says the inventor, "may be driven out with a punch and reinserted to hold any of the interchangeable blocks." The knob on the head is designed to lock into the hay-carrier until released by the action of the carrier and stop-block. He asked for a claim for a "combination with the pulley frame of the removable block, D, formed with a knob, G," but this was rejected on the prior art. In the Bower patent, No. 330,290, the same pulley is shown, with the same head and knob, but the head, although provided with a screw thread, so that its position in the pulley might be changed, was not intended to be detachable, or designed to be taken out for the insertion of other heads. The inventor says he attaches importance to the adjustability of the head for the reason that the wear upon it may be readily compensated for, and the relation of the pulley block may be readily adjusted to suit a tripping lever also shown. Here is the idea of a movable head, which readily suggested a detachable one. In the patent office the examiner objected to the broad claim, on the ground that the adjustability of the shank did not lend patentable novelty, since it did not add to or modify the action of the device; and he rejected the claim and allowed the specific claim for the separate elements in combination, above quoted. The notion of having a number of pulley heads to fit different carriers is also contained in the patent to J. Farrell, No. 307,932, where six different forms of heads are shown. But neither Bower nor Farrell grasped the idea of Toney to make the head detachable, although it was but one step from their conceptions to his.

The question, then, is whether the Toney device is a patentable novelty. Its result and mode of operation are identical with the devices of Bower and Farrell. When in actual use the operation of all three is the same; the only difference being that of movability and substitution. There is a combination of two old elements, the pulley and the head, attempted to be combined with a third, that of interchangeability; but the operation and effect of the combined devices is precisely the same whether such third element be present or absent. In the jail lock cases (Fond du Lac County v. May, 137 U. S. 395, 11 Sup. Ct. 98, 34 L. Ed. 714; May v. Juneau County [C. C.] 30 Fed. 241; Id., 137 U. S. 408, 11 Sup. Ct. 102, 34 L. Ed. 729) the patentee combined old devices consisting of a bar moved by a lever to simultaneously lock several prison-cell doors. This had been previously done; but his improvement consisted in lengthening the bar by carrying it across and outside of a corridor at the side of the row of cells, so that

the jailer could operate it in safety, and without the danger of attack by the prisoners. This idea was new, and had a beneficial effect. The patented device was marketed for many years, and uniformly sustained by the Circuit Courts. In the Fond du Lac County Case the Supreme Court said:

"As the mechanical operation and effect of the patented devices are the same whether there be a grating or other barrier or not, there is no patentable combination between the devices and the grating."

And in the cigar-bunching machine case (National Progress Bunching Machine Co. v. Williams Co. [C. C.] 44 Fed. 190, 12 L. R. A. 109) the court say:

"Where the mechanical operation and effect of the patented devices are the same whether one of the elements of the claim is present or absent, there can be no patentable combination between these devices and that element."

That is the case here; the operation and effect of the pulley and head are precisely the same whether the head be immovably fastened to the pulley, as in the Farrell device, or attached with a movable bolt, allowing the use of any kind of a head, as in the Toney pulley. If the device had a different operation when used with the different kinds of heads, there might be a valid combination; but, in the absence of this, the combination seems to lack patentability. The combination is ingenious and useful, and seems to be without the range of mere mechanical skill; but under the authorities cited it cannot be sustained as a valid, patentable combination.

The Louden Self-Locking Compressing Pulleys Patent, No. 434,544.

This patent covers two elevating pulleys with hooks at their lower ends, adapted to receive the attaching end-rings of a hay-sling. One of the elevating pulleys, called the receiving pulley, is made double, with two sheaves placed far enough apart to admit the entrance of a catch or head on the other, or engaging pulley. This receiving pulley has a registering head adapted to be locked into the over-hanging carrier, and is simply a developed and improved Toney pulley. The engaging pulley has a single sheave, and its upper portion is provided with a head or hook adapted to engage a pivoted catch or latch in the receiving pulley, having a stop arresting its downward movement.

The operation of the device is as follows: The rope by which these compressing pulleys are locked together and then raised so as to enable the registering head to lock into the overhead carrier, runs from the draft horse or other source of power to a pulley on one side of the carrier. It is then carried down through one of the sheaves or pulley wheels of the receiving pulley, thence around the sheave of the engaging pulley, then back through the other sheave of the receiving pulley, and upward to the opposite side of the carrier, where it is fastened. The end-rings of the hay-sling being attached to the pulley hooks, power is applied, the ends of the sling approach each other, compressing the hay into a bundle. As the pulleys come together by the tightening of the rope the hooked-head of the engaging pulley is guided into and between the sheaves of the receiving pulley

by means of a plate or guide attached to the latter, and as the hooked-head goes in it catches over a latch and locks, where it remains until the load is released by operation of the trip-coupling of the hay-sling. The latch is then lifted by hand, the hook released from the catch, and the pulleys separated for another operation.

The hooks on the lower ends of the pulleys are provided with movable quadrant-shaped safety-stops, so that, when the end-rings of the hay-sling are attached to the hooks, the stops fall over them, thus holding them in place. These stops are set in recesses in the shanks of the pulley frames, so as to automatically close the hooks, and are provided with pins or keys with which to regulate their movements.

Ten claims of this patent are involved in suit. The elements of the alleged patentable combination are: The elevating pulleys; the pulley wheels so arranged as to operate the pulleys at right angles to each other, thus adjusting the bundle of hay so that it will fall at right angles to the carrier-track; the hook on the frame of the engaging pulley; a pivoted catch in the receiving pulley to engage the hook; a stop under the pivoted catch to limit its downward movement; a detachable registering head on the top of the frame of the receiving pulley, adapted to lock into the carrier, as shown in the Toney patent; a recess or opening under the registering head to allow the hook to enter and engage the pivoted catch; a guide on the frame of the receiving pulley (which may be set at various angles), to steer the hook into the recess; flanges on the upper part of the receiving pulley frame, to allow the ready removal of the registering head; pins or points on the registering head to engage with such flanges, in order to keep the head securely in place; the quadrant-shaped stops already described, in combination with the pulley frames; a stop on the frame of the engaging pulley, to limit its movement into the receiving pulley; guards over the sheaves of the receiving pulley, to protect and support them, extending from the pulley frame to the pulley bearings.

The Prior Art.

All of those devices are in themselves old. The use of the two pulleys is shown in the Van Sickle patent, No. 82,570, the Smith patent, 96,161, the Patrick patent, 226,457, the Chambord patents, 254,921 and 314,998; and particularly in the Foote patent, 317,109. The right-angle adjustment of the pulleys was shown by Vandorwalker, in his patent No. 311,545, and by Boyer, in patent No. 377,012. The locking operation of the hook, pivoted catch, and stop were suggested by the locking mechanism of the registering head in the carrier, and also by the Foote device already mentioned, and referred to below. The Boyd patent, No. 300,687, also shows a pivoted catch. The registering head was taken from the Toney patent, already held not to be a patentable combination. The recess, guide, flanges, points, stop, and guards are merely details in the construction of the pulleys, which would readily suggest themselves to any skilled workman. And the quadrant-shaped stops are suggested by

the ordinary snap hook, by the Hayes patent, No. 79,347, showing a clasp-hook attached to an ordinary iron hook, and by the Foote patent, No. 317,109, showing a stop designated to discharge the ring of the sling-rope from the hook. Does the combination of any or all these elements in the compressing pulleys covered by this patent show a patentable novelty? Do these good old things have a new mode of operation, or simply perform their accustomed functions? And do they co-act with each other; each taking part in a new and beneficial result?

It is evident that the registering head, the hook on the engaging pulley, the pivoted catch, and stop in the receiving pulley, the quadrant-shaped stops on both pulleys, and the stop on the frame of the engaging pulley (to adjust its entrance) all co-act in a new mode of operation to produce a new and useful result. In connection with the hay-sling they tie up the bundle of hay, securely compress it, and lock it to the carrier. The registering head (detachable or otherwise) is not in itself patentable, as already shown; but it holds the locked pulleys up to the carrier so that the slackening of the draft-rope will not lower the load. As admitted by Mr. Pond, the defendant's expert (Deft.'s Ev. 355), the registering head on one pulley and the interlocking mechanism between the two pulleys co-act in producing a structure wherein the hay is compressed and supported by the carrier. The devices which secure this result are old, but in a new mode of operation they produce utility. The pulleys have made a commercial success, some 25,000 sets of them having been sold.

The Foote device, No. 317,109, is claimed as an anticipation. It shows compressing pulleys in which a hook on one locks over a cross-bar in the other, but the pulleys are held up to the carrier by a grip on the draft rope. This feature renders the locking mechanism unimportant, because the grip will hold the pulleys together without locking. Mr. Pond so testified, as well as Mr. Louden. Deft.'s Ev. 355. C. R. 329. But defendant insists that the Emerson patent of June 18, 1889, No. 405,541, completely anticipated the Louden pulley patent, and I have carefully considered the evidence relating to that device. It contains the important features of the Louden patent, being the registering head and mechanism adapted to securely lock together the two pulleys. In detail the two patents are quite different, but both secure the same result. If the Emerson device is part of the prior art, that of Mr. Louden could only be sustained in its specific form, when defendant's pulleys would not infringe, as they differ in many specific details. A thorough reading of the evidence, however, has convinced me that the Louden pulleys were invented, disclosed to others, and embodied in a working structure, prior to January 26, 1899, when application for the Emerson patent was filed. Without referring to the evidence in detail, it is enough to say that on August 23, 1888, Mr. Louden wrote a letter to Cochrane Bros., at St. Thomas, Ontario, describing his pulleys, and containing a rough sketch. His description includes the hook, recess, catch, and registering head. He also wrote to defendant about the pulleys August 23, 1888. A practical and successful test of their operation

was made in December, 1888. This evidence is corroborated by a number of witnesses.

On the whole, I am satisfied, notwithstanding some evasion in Mr. Louden's cross-examination, that the evidence carries his invention back of the date of Emerson's application. I also think that defendant's compressing pulleys infringe the patent in suit. They are made under the Strickler patent of August 2, 1901, No. 671,245. The differences between the two sets of pulleys are only in details. The engaging pulleys of each set will lock into the receiving pulleys of the other set. The registering head, pivoted catch, stops of all kinds, recess, right angle operation, etc., are all present. There is some improvement. For one pivoted catch defendant used two, held in place by spiral springs. The hook of the Louden engaging pulley is a round head in the Janesville pulley, and there are other differences. The Strickler device is a good example of a patent showing highly specialized claims, in which the old elements have, in the main, their accustomed modes of operation. I think, therefore, that this patent is valid, and infringed.

The Patents in Case No. 73.

The Two Louden Patents for Track-Hangers, Nos. 493,216 and 526,839.

These are two-part devices for a hay-carrier track, centrally located above the track, and adapted to grip the head or bead of the track-rail, and carrying suspending loops at their upper ends to engage an extraneous suspending device. Counsel for defendant call the first one the "sister-hook" device, and say it is nothing more nor less than an ordinary pair of sister-hooks such as have been used for generations, adapted, as would naturally be the case for such use, so as to rigidly grasp the upper edge of the ordinary T-rail. Sister-hook is defined in the Standard Dictionary as:

"A pair of hooks so mounted that they face and overlap each other; match hooks."

The patent adds to this definition by describing flanges at their lower ends adapted to fit under the flanges of the rail, and by providing for securely fastening the hooks together by means of a threaded bolt.

One purpose of this invention is to have the hooks adjustable to the track, so that they can be readily attached at any desired place. Another is to make the hooks so light and thin that they will not interfere with the passing of the carrier along the wide horizontal flanges of the rail.

The earlier patent of Myers, No. 440,602, covers:

"A track-suspending device consisting of two (partially) severable parts, having means at its lower end to embrace the edge of a track-rail, and at its other end means to catch over an extraneous supporting device, its said parts arranged side by side; and means for holding the two parts together."

The only substantial difference between this and the Louden device is that the two parts of the latter are entirely separable, and the

means for holding the two parts together is changed from a ring or collar to a bolt; and the Forshey patent, No. 308,483, is for a hanger showing entire separation.

The alleged patentable novelty of this device consists in making an adjustable hanger, attached to the bead of a T-rail, so formed as to readily admit the passage of the carrier-wheels. All these elements appear in the prior art, and in the patent each performs its old function. There is improvement, but the result is the same. This patent is without novelty or invention, and should be held void.

The Second Track-Hanger Patent.

This is called the dished-suspension or side set-over device. It consists in setting to one side the head of the bolt in the earlier track-hanger, by dishing the sister-hooks, so as to make the hanger thinner, thereby enabling the wheels of the carrier to be set closer to each other. Mr. Louden, in his testimony, admits that the earlier patent shows all the features of the later one except the dished or set-over feature. As defendant's counsel say, the nut is countersunk into the track-hanger so to equi-space the bolt. Like the shears in ordinary use, this device is a purely mechanical and noninventive structure. The elements of this device, its results, and the mode of operation, are all old. It operates precisely like the first hanger, but the form is improved by equi-spacing the bolt. This device also, like the other, lacks patentable novelty.

The Burkholder Stop-Block Patent, No. 490,738.

This covers a flattened A-shaped device fastened to the top of the carrier rail in the same manner as the track-hanger devices. It co-operates with a carrier having a rising and falling latch, which engages and locks upon the stop-block. The A-shaped device is otherwise described as a double inclined lug, operating with the rising and falling latch of the carrier. The object of the invention was to provide a stop, which, like the track-hanger, could be attached to the track at any point, without drilling holes in it, and which would not interfere with the passage of the carrier-wheels thereon. These results were secured by this patent. But the commercial device of complainant, and also that made and sold by defendant, are in form entirely different from the Burkholder device. In the latter the double inclined lugs are under the track, but in the two former they are centrally located over the track. The Burkholder device is secured to the top or bead of the track, and has wings extending outside of the carrier-wheels and downward to a point below the track; the lugs being attached to the lower part of each one of the wings. At this point, below the track, the rising and falling latch of the carrier engages the lugs, locking and unlocking as desired. These wings or arms are entirely lacking in the devices of complainant and defendant, which, as already said, operate above the track. The inventor says that the wings constitute one of the most important parts of his invention. The mechanism was designed to operate with a particular form of carrier described by the patentee, so constructed as to

require the stop-block to be located under the track. The claim alleged to be infringed is:

"The combination with an inverted T-shaped track and a hay-carrier stopping-device, secured to and over the vertical portion of said track, and carrying on both sides the double inclined lug, g, of a hay-carrier having a vertically movable catch-block, F, the upper ends of which extend above the sides of said carrier and have lateral projections which engage with said inclines, as set forth."

It will be noticed that this claim does not mention the wings; but they are referred to in the other claims, are shown in all the drawings, and alleged by the patentee to be one of the most important parts of his invention. The question is whether the Louden and Janesville devices, not having the extending wings, are made in substantial accordance with this claim, in view of the construction to be placed upon it supplied by the history of the patent. Can this broad claim be fairly applied solely to structures having wings, in view of the inventor's statement as to the importance of the wings, and the fact that the drawings all show them; and thus read into the claim, in connection with the other evidence, just as if it had claimed also the wings?

The express terms of the claim do not limit the patent to any particular device, but it is insisted it was so intended; that the patent is a contract between the government and the patentee, governed in its construction by the general rules for the interpretation of grants and contracts; and that the court should put itself in the place of the parties at the time the contract was made and read its terms in the light of the facts and circumstances which then surrounded them. National Hollow Brake Beam Co. v. Brake Beam Co., 106 Fed. 693, 45 C. C. A. 544.

In support of this argument it is said that Burkholder did not contemplate or claim a stop-block devoid of wings, and the patent office so understood his position, and that such a claim entirely ignores the state of the art. It is further made to appear that, after the filing of the Burkholder application, P. A. Myers applied for a similar improvement, for use with a carrier having its lock mechanism above the track, and so he made his stopping device to operate above the track. In other respects his invention was the same as that of Burkholder. Myers was granted a patent. He having filed subsequent to Burkholder, this could not have been done had the patent officers suspected interference, under the rule in Ex parte Upon, 27 O. G. p. 99. If the Burkholder claim reads on defendant's device, it equally reads on the Myers device.

The essential feature of the Burkholder invention is the adjustably securing of the stop-block on the central web of the inverted T-rail, without mutilation of the rail. This is shown by Mr. Louden's testimony. But the prior art shows other devices adjustably attached to the central web of a rail. This is true of the Myers patent, No. 307,725, which shows a stop-block above the rail, and adjustably attached to its central web, without mutilation of the rail. It is true, as stated in complainant's brief, that the stop-block of the Myers patent

is attached to the track-hanger and not to the rail; but this seems to be a distinction without a difference. The same objection may be made to the Burkholder patent, since his stop-block is attached to the wings or arms of the device, and not directly to the track itself. Both devices involve the same idea, which is the adjustable attachment of a stop-block to a rail, by means of a hanger in one and an arm in the other; neither touching the track itself. It is also true that the Burkholder device is more adjustable than that of Myers; his being necessarily attached to the track-hangers, making its position over the track depend on the immovable position of the hangers. But the same conception is at the foundation of both devices.

There are also a number of other prior patents showing a track-hanger device adjustably attached to the central web of a T-rail, as stated in the discussion of the track-hanger patents. It further appears that the double inclined lugs of the Burkholder device were contained in the carrier described by the patentee, as adapted to operate with his invention.

We have, then, in the prior art the notion of a stop centrally placed above a track rail; of a block with double inclined lugs; and of adjusting the device by means of a hanger or arm to the central web of the rail. This would seem to show no invention in the first claim of Burkholder, under the construction given it by complainant, as a broad claim covering any stop adjustably secured to the central web of the track. For these reasons it seems that the claim was not intended to be given this broad construction, and in view of the fact that the ideas so embodied are old. Thus limited the claim is not infringed by defendant, whose device, like that of Mr. Louden, constructed ostensibly under the Burkholder patent, is attached upon the track itself, without the use of wings or arms. The hay-sling and self-locking pulley patents are sustained, and held infringed. All the others are held to lack invention, except the Burkholder patent, which is not infringed.

The Question of Multifariousness.

In view of the result in suit No. 73 it is not necessary to consider this question in that suit. In suit No. 72, involving the hay-sling, trip-coupling, registering-pulley head and compressing pulleys, I think those devices capable of joint operation, and that they actually do so operate. The hay is held by the sling, compressed by the locking pulleys, raised by the ropes passing through the carrier and pulleys, sustained by the registering head locked to the carrier, by the lock mechanism of the pulleys, the sling and the locked trip-coupling, and finally released by the tripping device of the last—all to the end that the hay may be stored. All the parts mentioned work together, at the same time, as portions of one machine, to sustain, carry, and deposit the load. The apparatus would be impaired if any one of the patented devices were lacking.

Let the usual decree be entered dismissing the bill in No. 72, as to the trip-coupling and registering-pulley patents, sustaining the bill as to the hay-sling and compressing-pulley patents, and securing the relief

prayed as to them. In case No. 73, let the bill be dismissed, with costs. As to costs in case No. 72, inasmuch as the two patents sustained include both of the devices held not patentable, I think the decree should include costs, and that defendant is also entitled to costs as to the Toney patent and the Louden trip-coupling patent. An equitable division of the costs should be made when the decree is settled.

BENJAMIN ELECTRIC MFG. CO. v. DALE CO. et al.

(Circuit Court, S. D. New York. October 31, 1905.)

No. 8,742.

PATENTS—INFRINGEMENT—CLUSTER LIGHTS.

The Benjamin patents, Nos. 721,774 and 721,777, granted on a divisional application and both relating to a cluster of electric lights, in which the electricity is conveyed to the lamps through plates, instead of by a separate wire to each, disclose sufficient mechanical improvement over prior structures to constitute patentable invention, although not novel in their electrical features. As so construed, *held* not infringed by a structure mechanically, but not electrically, different from those of the patents.

In Equity. On final hearing.

Seward Davis and Jones & Addington (W. Clyde Jones, Keene H. Addington, and Robert Lewis Ames, of counsel), for complainant.

William M. Stockbridge, for defendants.

HOLT, District Judge. This suit is brought to restrain the alleged infringement of two patents, Nos. 721,774 and 721,777, issued to Reuben B. Benjamin, and by him assigned to the complainant. The invention relates to an improvement in the arrangement of a cluster of electric lights. It provides, in substance, for a cluster of electric lights so arranged that, instead of separate wires connecting each lamp in the cluster, there are two leading-in wires, each connecting with two metallic plates insulated from each other, and so arranged that the electricity is conveyed to and from each of the lamps through the plates. An interference was declared between Benjamin's original application and an application for a patent for a similar invention by Nelson Weeks, and decided in favor of Benjamin. Benjamin thereupon added new claims to his application. A second interference with Weeks was declared, which again resulted in favor of Benjamin. Thereupon he added still further claims to his application, and a third interference was declared, which was again decided in favor of Benjamin. Benjamin's original application, in the course of these proceedings, had been divided and made into four applications, and after the decision on the third interference four patents were issued to Benjamin. The result of this repeated addition of claims to the pending applications is that the patent No. 721,774 now contains 46 claims, and the patent No. 721,777 contains 17 claims, making 63 in all. Many of these claims are substantially identical, and the excessive number of distinct claims inserted in the patent, most of which are expressed in substantially indistinguishable terms, serves no useful purpose, and simply makes burdensome the in-