HOE et al. . SCOTT.

(Circult Court, D. New Jersey. January 24, 1895.)

## 1. Patents-Folding Machine-Antictpation.

Patent No. 331,280 , issued to R. Hoe \& Co., for Improvements in machines for folding paper and other materials, consisting in mechanism to produce a two-part folding operation in contradistinction to the one-part folding operation, is not anticipated by any prior invention.
2. Same-Infringement.

Claims 1, $2,3,8,9,17$, and 29 of said patent are infringed by the folder of defendant, Scott, which in form is substantially like the folder of the patent, while in mode of operation and result the two machines are identical.

Suit by Robert Hoe and others against Walter Scott for infringement of patent.

M. B. Philipp and H. T. Munson, for complainants. B. F. Lee, for defendant.

ACHESON, Circuit Judge. This suit is founded upon letters patent No. 381,280, granted on December 1, 1885, to R. Hoe \& Co., assignees of Luther C. Crowell, the inventor, for improvements in machines for folding paper and other materials. The declared object of the invention "is to accomplish the longitudinal folding of fabrics on the run by means of internal guides and co-operating external turners, which may be rapidly made and quickly adjusted in working order without necessitating great accuracy of construction, nicety of adjustment, or any considerable expense." The invention consists in mechanism to produce "a two-part folding operation," in contradistinction to "the one-part folding operation" of prior devices, which were provided with an internal guide so founded as to afford turning edges converging to a point, which point determined the line of the longitudinal fold. These devices, the specification states, "may therefore be said to operate to change the direction of the travel of the sides of the moving material, crease or lay the line of its fold, lap the sides together, and cause the lapped sides to take the same direction of travel, all simultaneously." In order thus to accomplish the longitudinal folding at a high rate of speed, without breaking or wrinkling the material at or near the foldforming point, especially when such material was of two or three plies, it was found necessary to construct the members of the folder with great nicety, and to adjust them in relation to each other with great accuracy, thus incurring expense and a loss of time. The specification says:

[^0]said sides at right angles to the line of their parallelism) to lie or be bent substantially at right angles to said sides, and it is the distending or bringing of this central portion into alignment with the said side portions, and at the same time bringing the side portions together, whereby the folding is completed, that constitutes the second part of the operation. In this second part of the operation the leading edge of the material is directed onward from the devices which perform the first part to the fold-laying device at the proper angles to ultimately lay the sides of the material together or bring them into folded contact."

The specification and illustrative drawings show an internal guide formed of two angular converging guiding surfaces or edges which do not meet, but terminate in proximity to external turners which are set a distance apart, and co-operate with the internal guide, whereby the major portions of the sides of the material are strained over the internal guide, and brought into parallel positions, but not in contact, and a fold-laying device to bring together the sides of the material and the central connecting portion into alignment with the side portions, and thus complete the folding. The specification also describes a supplementary invention, a fold-creasing edge, which, while not an essential part of the folding devices, may, it is said, aid the forming of the line of longitudinal folding. This creasing edge, it is stated, "will simply act to guide or bend outward the slack portion of the material wherever such slack is produced by the sides being brought into contact in passing from the external turners to the said fold-laying or secondary device."

The defendant is charged with the infringement of the following seven claims of the patent:
"(1) A longitudinal folder consisting of an internal guide, two external turners set a distance apart, and a fold-laying device, substantially as described.
"(2) In a longitudinal folder, the combination, with an internal guide, of two external turners set a distance apart, whereby the major portions of the sides of the material, considered widthwise, are brought into parallel positions but not into contact, substantially as described.
"(3) A longitudinal folder consisting of an internal guide having converging guiding edges or surfaces which do not meet, external turners set a distance apart, and a fold-laying device, substantially as described."
"(8) The combination, with external turners set a distance apart, of a foldlaying device and a fold-creasing device, substantially as described.
"(9) The combination, with an internal guide and external turners operating to support the major portions of the sides of the material, considered widthwise, in parallel positions, but not in contact, of a fold-laying device operating to bring said sides together, and a fold-creasing device for distending the central portion of the material and aiding the formation of the fold line, substantially as described."
"(17) A longitudinal folder consisting of the combination, with an internal guide composed of a sheet or plate that provides the converging guiding edges or surfaces, 21, 41, and a supporting body, 20, of external turners, 22, 44, set a distance apart, and a fold-laying device, substantially as described."
"(29) A longitudinal folder consisting of the combination, with an internal guide composed of a sheet or plate that provides the converging edges or surfaces, 21, 41, and a supporting body, 20, of external turners, 22, 44, and a foldlaying device and a fold creaser, substantially as described."

Two defenses are mainly relied on, namely, want of patentable novelty and noninfringement. The voluminous proofs bearing on these points have been attentively considered. A particular dis-
cussion of them all, however, will not be attempted, for to do this would expand this opinon unreasonably and without profit. I cannot do much more than state conclusions.

After a patient study of the earlier patents and prior devices, I am not able to discover that any of them embodies the two-part folding operation which is the distinguishing feature of the patent in suit. Take, for instance, the Thompson 1856 patent, upon which the defendant so much insists. The mode of operation there contemplated, it seems to me, is essentially different from that of the plaintiffs' patent. According to the plain description. of Thompson's patent, the paper or other fabric is doubled and folded as it passes down over the forming block, E, and by means of that block. Thus it is said that the material to be folded passes from the roller upon which it is wound to the "forming block, E, over which it is doubled and folded so as to pass between the rollers, $K$ and $K^{\prime}$, by which it is drawn down over the forming block, E, and delivered to the rollers, L and $\mathrm{L}^{\prime}$, after which it may be wound, cut, or folded, as may be preferred." Without reading into the patent what it does not contain, it is impossible to attribute to the lower edges of the doors the function of external turners or guides. The specification of the patent ascribes no such office to the doors, and there is no warrant whatever for the assumption of the defendant's expert that they act as do the external turners of the plaintiffs' patent.

Nor am I able to adopt the views of the defendant's expert with respect to the Sandeman English patent of 1870. It is a circumstance of no moment that in Fig. 10 of that patent the rollers, D, D, do not appear to be set close together, when the text describes them to be "a pair of vertical nipping or pressing rollers, acting also as guys or guides." Neither is there any justification in this language for the opinion that these rollers merely act as guides, and do not press the fabric together forcibly or into actual forcible contact. To the contrary, the specification, after describing the movement of the cloth upward over the triangular inclined plane from its base to and over its apex at a, which, it is said, "forms the line of fold," states that "the two halves or folds meet together at the rollers, D, D, and the cloth passes between them in its doubled state." The folding operation here described and illustrated is not the twopart folding operation of the patent in suit. Neither does the mechanism shown by Figs. 11, 12, and 13 of Sandeman perform Crowell's two-part folding operation.

The defendant lays much stress upon the Scholfield patent of 1880, and certain machines made in substantial conformity therewith. Turning to that patent, however, we find that it shows an internal guide,-a "plicater," as it is styled,-having a sharp point or apex, at which point the material is brought into a folded condition. Immediately under the plicater is a pair of guides, D, D, described as forming a "narrow slot" just wide enough to receive the two plies of the material, and below the slot are traction rolls for drawing the folded web through the slot and downward. From the description of this mechanism and its mode of action contained in the specification, and also from the illustrative drawings, it is evident
that the sharp apex of the plicater is the fold-forming point of the material passing through the machine.

I do not deem it necessary to particularize further. If the instances referred to do not show anticipation, certainly the other patents and mechanisms here set up fail to do so. My judgment is that the prior patents and devices, whether considered singly or together, do not disclose or suggest the invention of the patent in suit. That the patent covers improvements patentably novel and useful is not only to be presumed from the grant, but is, I think, affirmatively established by clear proofs.

Is infringement shown? Beyond any controversy, in the defendant's machine we find in combination an internal guide having converging guiding edges, external turners set a distance apart, and a fold-laying device, these parts coacting to accomplish the longitudinal folding of paper and other fabrics on the run. Furthermore, the proofs establish that these coacting devices are so arranged as to divide the folding operation into two parts. It is true, indeed, that the defendant's machine shows some formal departures from the description and illustrations of the patent in suit. The most noticeable variation is in the shape of the internal guide or former. In the defendant's folder the superior face of the internal guide conforms more nearly to a plane triangle than does that of the illustrations of the patent. This face, however, when carefully examined, is found not to be a single triangle in one plane. The evidence is quite convincing that the plane of the face of the defendant's internal guide changes downwardly as the apex is approached, and the point or apex is rounded. It is satisfactorily shown that the fold line is not made at the point of the defendant's internal guide, but that the rounded point simply performs the function of the fold creaser of the patent in distending the central portion of the material, and thus aiding the fold-laying device. The change which the defendant has made in the shape of the internal guide is unsubstantial. Nor is it material that the defendant's external turners are slightly reduced in diameter near the lower end of the internal guide, and that they are set nearer to each other than the external turners shown by the Crowell drawings. The patent merely describes the external turner as "set a distance apart," without defining the distance. The defendant's external turners are an essential part of his machine, and they perform the same function as those of the plaintiffs', and in the same way. Under the proofs, it is clear that the defendant's folder in form is substantially like the folder of the patent in suit, while in mode of operation and in result the two machines are identical. The claims in question in their terms are broad enough to cover the defendant's apparatus, and nothing in the prior art requires such a narrowing of them by construction as would relieve the defendant. The charge of infringement of the several claims quoted above is, I think, fully sus tained. Winans v. Denmead, 15 How. 330, 342; Machine Co. v. Murphy, 97 U. S. 120; Hoyt v. Horne, 145 U. S. 302, 308, 12 Sup. Ct. 922. Let a decree be drawn in favor of the plaintiffs.
v.65F.no.6-39

## WICKES et al. v. LOCKWOOD et aL

(Circuit Court, D. Minnesota, Fourth Division. February 4, 1895.)

1. Patents-Gang-Sait Mills-Infringement.

The Wickes patent, No. 215,526, for an improvement in gang-saw mills, consisting in a pecullar construction of a frame in combination with other parts, held to be infringed by the device of defendant Lockwood.
2. Testimony-Presumption.

The recollection of witnesses as to the details of a machine built 20 years before, unaccompanied by contemporaneous drawings or exhibits, held insufficient to overcome the presumption arising from the issuance of a patent.
Suit by Henry D. Wickes and others against J. E. Lockwood and others.

Offield, Towle \& Linthicum, for complainants.
P. H. Gunckel (Robert H. Parkinson, of counsel), for defendants.

NELSON, District Judge. This suit is brought by complainants, manufacturers of sawmill machinery at East Saginaw, Mich., against defendants, carrying on the same business at Minneapolis, Minn., for an infringement of letters patent No. 215,526, issued to complainants February 18, 1879. The patent in question is for an improvement in gang-saw mills, and is as follows:

Henry D. Wickes and Edward N. Wickes, of East Saginaw, Mich.
Improvement in Gang-Saw Mills.
Specification forming part of letters patent No. 215,526, dated February 18, 1879. Application filed December 4, 1878.

To All Whom it may Concern: Be it known that we, H. D. Wickes and E. N. Wickes, of East Saginaw, in the county of Saginaw, and state of Michigan, have invented an improvement in gang-saw mills, of which the following is a specification:
The nature of our invention relates to new and useful improvements in that class of sawmills known as gang mills"; and the invention consists in the peculiar construction of the frame, by means of which greater stability to the general structure is obtained, and which admits of securing the base of the frame upon timbers independent from those ordinarily employed for supporting the main pillow blocks and crank shaft, thereby destroying the connecting vibrations produced from the heavy labor upon the main shaft which is sure to follow where the gang frame, pillow block, and main shaft rest upon the same base. The invention also consists in the new construction and combination of parts necessary to these beneficial results, and as more fully hereinafter described.
In the drawings, Fig. 1 is a perspective view of our improved gang-saw mill. Fig. 2 is a front elevation of the same. In the accompanying drawings, which form a part of this specification, A, A represent the vertical cheeks between which the gang saws have their reciprocating movement in guides of the usual construction. These cheeks are provided with shoulders, a, which rest upon shoulders, $b, b$, of the base, and to which they are rigidly secured. The vertical sections, $c$, of the cheeks, to which the lower guides are attached, project downward below the point of intersection between the upper and lower parts of the frame. B, B form the lower part of the frame, their upper ends being rigidly secured to, and coincident with the shoulders upon the upper part of the frame; but these parts, B, B, are spread apart at their feet to give greater stability to the structure, and to avoid the necessity, as occurs in gang mills of ordinary construction, of being supported upon the same timbers which carry the pillow block, d, and main driving shaft, h. C, C, are the timbers upon which rests the improved gang-saw mill frame. $D$ is the timber which


[^0]:    "Stated broadly, the invention may be said to consist in a longitudinal folder composed of an internal guide, external turners set a distance apart, and a fold-laying device, these parts being so arranged as to divide the folding operation into two parts. The first part consists in conforming the material by guiding or bending the sides of the web towards each other until the major part or portion of the sides (considered on a transverse line or widthwise) are parallel or substantially parallel, without being brought into contact. This causes the central part of the naterial (or that portion connecting

