BOYD *v.* STEDMAN *ET AL.*

Circuit Court, D. Massachusetts. October 5, 1889.

PATENTS FOR INVENTIONS—PRIOR STATE OF THE ART.

In letters patent No. 236,766, dated January 18, 1881, for improved machinery for winding yarn, the fifth claim was for a movable carrier with a detector lever to stop the winding of a particular spool when the thread breaks, and with a combination which pushes the detector lever out of the way of the cam-shaft. *Held,* that as the English patent of Muir and McIlwham (1866) showed devices for pushing the detector lever away from the cam, of which complainant's combination was only an improvement, It is not infringed by an invention effecting the same purpose, but by a different structural arrangement.

In Equity.

John Boyd sued William L. Stedman and others to restrain infringement of patent.

Howson & Howson and *T. L. Livermore,* for complainant.

Browne & Browne, for defendants.

COLT J. This bill charges infringement of complainant's patent ho. 236,766, dated January 18, 1881, for improvements in machinery for doubling and winding yarns. This suit relates to the mechanism employed in such machines for stopping the winding action of any particular spool when a thread which is being wound upon it breaks or fails. In devices of this class, the yarn is passed through an eye or hook at the upper end of what is called a "detector lever," which is mounted upon a movable carrier. So long as the yarn is unbroken, the detector is suspended in a raised position. If, however, the yarn breaks, the detector drops, and its lower end comes in contact with a rotating cam-shaft. The effect of this action is to release "catch" mechanism, which causes, through the action of other mechanisms, the rotation of the particular bobbin to stop. The efficiency of devices of this kind seems to depend upon the firm hold of the catch mechanism so long as the yarn is unbroken, and on the quick release of that mechanism, with the least possible friction, when a thread breaks. The fifth claim of the patent, which is alleged to be infringed, relates to a combination of devices constituting an improvement in "stop motions," The claim is as follows:

"The combination of a bracket and movable carrier, having a catch with a detector lever on said carrier, a weighted catch-lever, 89, and rotating camshaft, 48, adapted to act directly on the end of the detector lever when the latter falls into its path, and release the lever, 39, the descent of which pushes the carrier inward to take the detector lever clear of said cam-shaft."

It is necessary in these machines that the detector lever should be moved out of range of the revolving cam-shaft; and it is this result, accomplished by the co-action of the weighted catch-lever and the detector carrier, which constitutes the chief value of the combination contained in the fifth claim. If Boyd had been the first inventor in this class of machines to push the detector lever out of range of the cam-shaft by means of catches and weighted levers, I think this claim should receive a broad construction. But an examination of the prior state of the art seems to forbid this, and to narrow the claim to the particular means by which Boyd accomplished this result. The English patent of Muir and McIlwham, of 1866, shows catch devices in connection with weighted levers which push the detector lever away from the revolving cam. I am aware that the English device has two weighted levers, instead of one, which is found in the Boyd apparatus, and that, consequently, in the English device the essential elements of the combination are five, instead of four; but this is no more than saying that the Boyd combination is more simple and compact, and is therefore an improvement upon the Muir and McIlwham machine. In both devices, however, a revolving cam, striking the end of the detector lever, releases catch mechanism, which causes a weighted lever to fall, and to move, in its descent, the detector carrier away from the revolving cam. The important feature which Boyd says constitutes the chief value of his fifth claim is undoubtedly found in the English device. In their fundamental features, and in the result accomplished, the two machines do not differ. I do not, therefore, see how I can give this claim of the Boyd patent the broad construction contended for. In view of the prior state of the art, this claim must be limited to the improved form of devices therein described. The defendants' machine differs in important particulars from Boyd's. The structural arrangement of its parts is not the same. The catch mechanism and other portions of the machine are quite different from those found in the Boyd apparatus. I do not deem it necessary to enter into a particular comparison of the two machines, because it is apparent upon examination that, if Boyd is limited to his improved form of devices, the defendants' machine does not infringe. No infringement being shown in this case, it follows that the bill must be dismissed.