NATIONAL CASH-REGISTER CO. *v.* AMERICAN CASH-REGISTER CO., (two cases.)[1]

(Circuit Court, E. D. Pennsylvania. June 2, 1891.)

1. PATENTS FOR INVENTIONS—NOVELTY—CASH REGISTER.
The claim embraced the old elements in a cash-register of keys, key-levers, and rods, each provided with a shoulder, and carrying an indicating tablet, and a supporting bar yieldingly held against the key-levers, and pressed back by the shoulder of a rod when raised, and springing back under it, and upholding it by catching under the shoulder, and depended for its novelty upon the element of a connecting train of mechanism common to the whole series of keys, and interposed between them and the supporting bar, to move the bar away from the shoulders further than it would be moved by the shoulders of the rising rods. Pivoted latches, one for each tablet, had previously been used to move the supporting bar away further from the shoulders than could be done by the shoulders themselves. *Held*, as the combination gave new capabilities to the device, and was new, the claim embraced patentable novelty.

2. SAME—INFRINGEMENT.
The patent claimed, in combination with a number of other elements, each old, a supporting wing and connecting mechanism, common to all the keys, and interposed between them and the "supporting wing," whereby, by the motion of any key, the wing will be moved back, and the disengagement of the shoulder of any key remaining up secured, and the wing allowed to spring back to catch under the shoulder of the rising key. This mechanism consisted of a bar, held up beneath the front ends of the key-levers; an arm at either end of the bar pivoted to give it a rising and falling motion; a trigger; a link connecting the bar and trigger; an L-bar bearing against the "wing;" and a trip, provided with a shoulder, and catching onto the L-bar, against which shoulder the trigger works. The defendant replaced the "wing" by a transverse inclined faced supporting bar, working in guides at its ends, and yieldingly impelled towards the upholding bars; and his connecting mechanism consisted of a cross-bar, lifted by the key, and falling when the key was released; a vertically sliding bar connected therewith, and having at its upper end a lateral projection engaging with a trip on the bell crank lever which bears against the supporting bar. *Held*, that defendant infringed.

3. SAME.
In a suit in another circuit against another respondent on the claim in suit here, the respondent's "plate and connecting devices" had been held not equivalents of the corresponding devices of complainant's patent. *Held* that, as upon an examination of the former respondent's device obvious differences between it and the present defendant's device appeared, the court would not particularize the points of distinction, but would decide independently on the question of infringement here presented.

4. SAME—EXTENT OF CLAIM.
A clause in the specification stated that "the elbow, (shoulder,) *d*, of the rod in rising aids in pressing back the wing, I." The claim contained no suggestion that the shoulder and the connecting mechanism operated simultaneously to press back the wing. The complainant's expert testified that such simultaneous action was, for any length of time, impossible. *Held*, the claim is not to be restricted to mechanism operating simultaneously with the shoulders to move back the wing, I.

5. SAME—INFRINGEMENT—FORMER ADJUDICATION.
The third claim of patent to Campbell, No. 253,506, for a cash-register, was adjudicated in another circuit, (*National Cash-Register Co.* v. *Boston Cash-Indicator & Recorder Co.*, 45 Fed. Rep. 481,) and no such distinction appears between the device there and the present respondent's device as would justify a different determination, and the former decision will be followed, and the device declared not to infringe.

In Equity.

Peck & Rector and *Lysander Hill*, for complainant.

Earnest Howard Hunter and *John R. Bennett*, for respondent.

[1] Reported by Mark Wilks Collet, Esq., of the Philadelphia bar.

ACHESON, J. These two cases are between the same parties, and were heard together. One of them is a suit for the infringement of letters patent No. 271,363, granted January 30, 1883, to James Ritty and John Birch, for improvements in cash-registers and indicators. The other suit is for the infringement of letters patent No. 253,506, granted February 14, 1882, to Michael Campbell for an improvement in the like apparatus. The Ritty and Birch invention relates to cash-registers and indicators designed for the use of store-keepers and others as a means of accurately registering the cash receipts for any given period of time, and for indicating to the customers that the amounts paid have been registered. The machine described in the patent is provided with a series of numbered keys, each of which may be independently operated; a series of indicators bearing numbers corresponding to those on the keys, one of which indicators is brought into view whenever its appropriate key is pressed; and a bell sounded to attract the attention of the customer and by-standers. The keys are levers pivoted on a horizontal shaft in the lower part of the machine, and on the rear end of each rests a vertical rod, working in guides, so as to freely rise and fall. The upper end of each of these rods carries a tablet bearing a number answering to that on the button of its key. The tablets are normally out of sight; but upon the depression of any key the rear end of the key-lever rises, and, lifting the vertical rod, which rests upon it, exposes to view the tablet it carries. As a means of holding the indicator up after its key has been released, each tablet-rod is provided with a shoulder, and across the machine, in position to engage the under side of these shoulders, is a supporting bar, (designated in the patent "wing, I,") which is pivoted at each end, and is thus free to vibrate. Its upper edge inclines towards the tablet-rods, and is yieldingly held against them by a spring, so that when any rod is lifted its shoulder may press back the edge of the bar until it passes above it, whereupon the bar is moved forward by its spring into the path of the shoulder, and the latter drops back, and rests upon the bar when the key is released. Everything thus far described had existed in some form or other in machines of this class before the date of the Ritty and Birch invention. The novel contrivance devised by them consists in a "connecting mechanism," which is operated by any one of the series of keys, and moves the supporting bar (wing, I) independently of the shoulders on the tablet-rods. This mechanism is of this nature: Underneath the front ends of the key-levers, and held up against them, is a cross-bar, K, having at either end an arm, J, by which it is pivoted, and may have a rising and falling motion. One of these arms connects with a link extending rearwardly and attached to a trigger or lever, *m*. Above this lever is an L-shaped bar, pivoted at the upper end of its vertical arm, and having the end of its lateral arm bearing against the upper front edge of the supporting bar or wing, I. A trip ("follower, *j*,") is so pivoted and suspended that it extends below the elbow of the L-shaped bar, resting against a shoulder thereon, while against the lower projecting end of the trip the lever, *m*, bears. These

parts are so related that upon the depression of any key of the series the cross-bar, K, is also depressed, and the arm, J, is moved, producing a vibration of the lever, *m*, and a movement of the L-bar against the wing, I, causing the latter to swing back far enough to easily allow the shoulder on any tablet-rod to pass it. When the wing, I, has been moved sufficiently for this purpose, the end of the lever, *m*, slips off the trip, permitting the L-bar to drop back, and the wing, I, (under the action of its spring,) to swing in towards the tablet-rods in time to catch underneath the shoulder of the tablet-rod then being lifted. On the release of the actuating key the cross-bar, K, returns to its former position, and swings the lever, *m*, back into place, ready for another operation. The defendant is charged with infringement of the first claim of the patent, which is as follows:

"In a registering and indicating machine, the combination, with a series of indicating tablets operated by a series of keys, of a series of rods, each provided with a detent or shoulder, and carrying one of the aforesaid tablets, and a supporting wing, with connecting mechanism, whereby, upon operating any one of the keys, the wing is so moved as to permit the passage of the rod, and whereby, upon the release of the key, the wing engages with and holds up the tablet-rod and tablet, substantially as described."

The evidence satisfies us that this combination was absolutely new, and that it gives to the machine increased efficiency, and, indeed, a new capability, completely remedying serious defects. It is highly important when a key is operated, and its rod and tablet are elevated, that any tablet-rod already up and resting by its shoulder upon the supporting bar shall be released, so that its tablet may disappear. But in actual practice with the old machines operated by a separate mechanism for each key of a series, it was found that the shoulder of the rising tablet-rod frequently failed to move the supporting bar sufficiently to effect the liberation of the tablet-rods already up by reason of a lack of perfect adjustment of the parts, the wear of the same, or the clogging by dirt. This difficulty was effectually overcome by the Ritty and Birch invention, which interposes a train of mechanism, common to the whole series of keys, between them and the supporting-bar, so that, whenever any key is depressed the connecting mechanism is set in motion, and thereby the supporting bar is moved so far back as to insure the disengagement and fall of any tablet-rod whose shoulder may be resting upon it. It must be conceded that previously means had been employed—namely, a series of pivoted latches or levers, one for each tablet-rod, co-operating with the shoulders of the rods—to move the supporting bar further away than could be done by the shoulders themselves. But it is also true that Ritty and Birch were the first to accomplish this result with entire certainty of operation, and by means altogether different, both as respects construction and mode of operation, from the old devices; thus perfecting the machine in this regard. Again, we think the evidence shows that Ritty and Birch achieved also an important new result; certainly one which before had never been accom-

plished in any practical way. As we have seen, the connecting mechanism of the patent takes power directly from any key of the series, and moves the supporting bar (the wing, I) independently and regardless of any actuation of it by the shouldered tablet-rods. Now the supporting-bar is thus moved even by the operation of a key whose tablet-rod is already up, with its shoulder above and resting on the supporting-bar. But, plainly, without the connecting mechanism this could not be done. This new capability is of great practical benefit. For example, in the absence of connecting mechanism, if two tablets are up in indication of the amount of a prior sale, and the next sale should happen to be for the same amount, or for the larger of the two sums, the operator may strike the key corresponding to the smaller sum and sound the alarm, but register only the value of that key. But in the supposed instance, the Ritty and Birch device would compel honest registry, for by the pressure of the key of the one tablet-rod the other becomes disengaged, and falls certainly.

The defendant's machine is a cash-register and indicator of the same general character as that set forth in the Ritty and Birch patent, and embodies substantially all the old elements of parts above described. Its tablets, indeed, are not carried directly by the shouldered rods, but are stationary, while the rods carry screens to alternately hide and expose them; the difference consisting in moving a screen at the top of the rod to bring an underlying tablet into view, instead of having the tablet itself into view by its attachment to the rod. While the defendant's counsel directed our attention to this difference between the indicating devices, we did not understand them as seriously contending that it was a substantial distinction. Prior to the date of the invention in question, these two arrangements were well-known substitutes for each other in indicating mechanisms, and we regard the difference as formal and immaterial. The upholding instrumentality in the defendant's machine is a transverse bar proximate to the tablet-rods, with an inclined side facing them. The ends of this bar work in guides, and the bar is movable from and towards the row of rods, the latter movement being effected by a spring at either end of the bar. At the lower rear part of the machine is a cross-bar, with which each key-lever, by means of a pendant arm, is so connected that by the depression of any key the cross-bar will be lifted and will fall when the key is released. At each end of the cross-bar, and adapted to rise and fall with it, is a vertically sliding bar, having at its upper end a nose or lateral projection, which engages a trip on a bell-crank lever. Whenever a key is operated, and the cross-bars and the vertically sliding bar are thereby lifted, the nose on the upper end of the latter strikes the trip, and the bell-crank lever is thrown with such effect as to move the rod-supporting bar so far away as to release any tablet rods whose shoulders are resting upon it. When the nose on the vertical bars has slipped past the trip, the bell-crank lever is released, and the rod-supporting bar returns into position to engage the shoulder of the rising rod. When the operated key is released, the cross-bar, with its vertical bar, falls with the descent of the key-lever. From what

has been said it is apparent that the defendant's machine is provided with a connecting mechanism, interposed between the keys, and the rod-supporting bar, common to all the keys of the series, so that it may be operated by any one of them, and whether the tablet-rod of that particular key is up or down; that the action of this connecting mechanism is entirely independent of the action of the shoulders on the indicator rods, and so moves the supporting bar as to insure the fall of any tablet-rods whose shoulders may be resting thereon; and that it automatically disconnects itself before the full movement of the key-lever is completed, so that the supporting bar is returned by its springs in time to catch the shoulder of the lifted rod. It is, however, alleged that the defendant does not use the wing, I, of the patent; but this is true only in the sense that the specific form of device therein shown is not employed. The first claim of the patent, however, does not call for any specific construction of this element of the combination, but for a "supporting wing." In fact, the defendant's transverse supporting bar performs the same function in the combination as the supporting wing of the patent, and its mode of operation is substantially the same; for the intended purpose the two devices are essentially the same thing. But, again, it is earnestly contended by the defendant's counsel that the first claim of the patent must be restricted to such adjustments of the parts that the shoulder of the rising tablet-rod and the L-bar of the connecting mechanism shall both bear against the wing, I, simultaneously, and thus assist each other by their joint action at the same time in pushing the wing backward. But assuredly such a limitation is not expressed in the claim, nor in the remotest manner suggested. To import it into this claim, the counsel invoke the following clause of the specification:

"When any key is pressed down, its rod and tablet are raised, and the elbow, (shoulder,) *d*, of the rod, in rising, aids in pressing back the wing, I; but to aid the elbow the arm, J, * * * imparts motion to the link, *t*, and trigger, *m*, whose upper end, acting on the nose, *i*, of the follower, *j*, presses it back, and with it the bell-crank, L, which is thus forced against the wing, and presses it back."

The plaintiff's expert states, what is undoubtedly the truth, that in the very nature of the described devices the simultaneous action of the shoulder of the rod and the connecting mechanism upon the wing, I, for any appreciable length of time is impossible. Both, however, at one time or another, take part in pressing back the wing, I, and this is the fair meaning of the specification. In that sense the shoulders on the rods and the connecting mechanism in the defendant's machine aid each other. Their exact action is shown to be this: The shoulder of the rising rod strikes and begins to move the supporting bar. Then the connecting mechanism acts upon the bar, moving it out of contact with the shoulder. At this instant of time the previously upheld tablet-bar is liberated. Then the supporting bar returns, while the shoulder is still opposite its upper part, so that it strikes the shoulder, and is held outwardly and slightly moved backwardly thereby, until the shoulder escapes it. Now, the essential thing to be accomplished is the certain liberation

of the upheld tablet-rods, and the return of the supporting bar to its normal position in time to engage the shoulder of the tablet-rod then being lifted; and this is effected by the defendant's mechanism. In principle the two mechanisms are identical; and not only in mode of operation, but in purpose and effect, they are alike. Whatever differences exist are of a formal character, involving changes within the range of ordinary mechanical ability. As, then, in defendant's machine the connecting mechanism is found working in combination with all the other constituents of the first claim of the patent, all performing their respective functions, and by their co-operation producing the contemplated results, we must hold that the charge of infringement is sustained.

The counsel for the defendant have pressed upon our attention the decision of Judge COLT in the case of *National Cash-Register Co.* v. *Boston Cash Indicator & Recorder Co.*, 45 Fed. Rep. 481, which was a suit on this patent, and in which the bill was dismissed; the court adjudging that the Boston Company's "plate and connecting devices" were not the equivalents of the wing with the connecting mechanism described in the Ritty and Birch patent. Now, were we dealing with the same mechanism, we would unhesitatingly conform our decision to that of Judge COLT, agreeably to our settled practice to follow the decision of a court of another circuit upon the same question in a suit on the same patent. But a specimen of the machine of the Boston Company has been exhibited to us, and, upon inspection, we find that there are obvious differences between it and the machine of the present defendant. We do not feel called on to make a critical comparison between the two machines, or even to particularize the points of distinction plainly observable. It is enough for us to say that, without intending to intimate a doubt as to the correctness of the decision made by the court in the first circuit upon the case there presented, we feel bound to follow our own convictions on the question of infringement involved in this suit. In our apprehension, the invention of Ritty and Birch was one of more than ordinary merit, and we cannot bring ourselves to the conclusion that their patent can be successfully evaded by such structural changes as the defendant has made. If it could be, then was the grant of the patent a vain thing. In this case, then, there must be a decree in favor of the plaintiff as respects the first claim of the patent.

In the suit on the Campbell patent, the defendant is charged with the infringement of the third claim thereof, namely:

"(3) In a cash-registering apparatus, a series of keys, to designate certain amounts, combined with a draw, the draw-holder, D, mediately connected with said keys, and the spring to throw the draw open when released by the draw-holder, substantially as described."

This patent was also the subject of adjudication in the case of *National Cash-Register Co.* v. *Boston Cash Indicator & Recorder Co.*, *supra*, and the third claim was construed by Judge COLT, who held that the device there alleged to infringe that claim was not within its scope. Now, it seems to us that, in respect to the subject-matter of this claim of the Campbell patent, no such distinction exists between the device of the Boston Com-

pany and the device of the present defendant as would justify a determination different from that made by Judge COLT, and therefore we will follow his decision. In this case, then, a decree will be entered dismissing the bill.

BUTLER, J., concurs.

BRUNSWICK-BALKE-COLLENDER CO. *v.* BRUNSWICK.

(Circuit Court, N. D. California. August 5, 1889.)

PATENTS FOR INVENTIONS—INFRINGEMENT—BILLIARD TABLES.

Letters patent No. 203,108, for billiard tables, is not infringed by the manufacture of tables under letters patent No. 119,262, since the tables described in the two patents are not only materially different, but also operate differently.

In Equity. On petition for rehearing.

Philip G. Galpin, for complainants.

John L. Boone, for defendant.

SAWYER, J. Upon a careful examination of patent No. 119,262, issued to defendant, Brunswick, and patent No. 203,108, issued to Boyle, and held by complainants, and sued on in this case, I am satisfied that the manufacture of tables under the former would constitute no infringement of the latter. The construction of the two tables is not only materially different, but they operate differently; and the claim of the combinations found in the latter patent are limited by the description of the construction given in the specifications, and the purpose stated, and the language used in the conclusion of the claim referring to the arrangement and operation, viz., "the whole arranged to operate as specified for the purposes set forth." The disclaimer also, I think, reaches the case. The claimant says, in terms, after mentioning the elements of the combination, as contained in former tables, "I do not wish to be understood as claiming such construction broadly," that is, the combination claimed in the broadest sense. He, evidently, limits his claim to his peculiar construction and operation. In rendering the former decisions the patent No. 203,108 was discussed with reference only to patent No. 321,004, involved in the case. No. 119,262, not being before the court, no reference was made to it in the decision. As the latter patent is in no way affected by the decision, there is no occasion for a rehearing for its protection. Let a rehearing be denied.