towards the state in adjudicating these liens, and will rigidly scrutinize all such claims.

I come, therefore, to the examination of the claims of the libelants and petitioners in the three cases at bar. In the case of the schooner Elexena there are two claims of material men. That of S. F. Hastings for \$36.63, for sails and repairs of sails, etc., is stale as to \$23.63; only \$13 is therefore allowed. That of Crockett & Connorton for \$62.36, for supplies furnished within six months before the seizure of the vessel by the state of Virginia, is allowed. Decree will be entered for these sums. As to the claims of seamen filed in this case, amounting to \$126.03, it appears from the imperfect papers presented in their behalf that they were on board of the Elexena at the time of her capture in delicto, presumably participating with the vessel in her violations of the laws of the state. These claims are therefore disallowed.

As to the case of the schooner Alice J. Venable. The claim of the libelant, J. T. Gibbons, is for sails and repairs of sails, furnished within six months before the seizure of the vessel, amounting to \$68.59, which is allowed. That of Prendergast & Sons, for sails and other materials furnished within six months before the seizure of the vessel, amounting to \$346.35, is allowed. As to the claims of seamen preferred in this case, amounting to \$100.81, it is almost a necessary presumption, from the papers evidencing the claims, that the seamen were on board the offending vessel at the time of her seizure, and they are therefore disallowed.

In the case of the schooner Samuel T. White, the claim of the libelant for sails and tackle, amounting to \$168, furnished within six months before seizure, is allowed. That of Ernest Parsons, amounting to \$208.70, is disallowed in part and allowed in part. Items to the amount of \$60.70 are disallowed as stale. Items to the amount of \$13, for sails furnished after the seizure of the vessel, are disallowed, as not within the cognizance of the court. Of this claim the sum of \$135 is allowed. Decree will be entered accordingly.

## NATIONAL CASH REGISTER CO. et al. v. AMERICAN CASH REGIS-TER CO.

## (Circuit Court of Appeals, Third Circuit. December 23, 1892.)

# No. 1.

1. CIRCUIT COURT OF APPEALS—PATENT CASES—DECISIONS IN OTHER CIRCUITS. 'The rule which requires a circuit court to follow the decision of another circuit court in relation to the same patent, when the question and the evidence are the same, does not extend to the circuit court of appeals; and that court will exercise its independent judgment, giving attentive consideration, however, to the judgments of the circuit courts in other circuits.

### 2. PATENTS FOR INVENTIONS-COMBINATIONS.

In order that a combination of old elements may be patentable, it is not necessary that all the constituents shall so enter into the combination that each changes the mode of action of every other, and that each not only performs its own part, but is also in some way directly concerned in the performance of their respective parts by all the other elements; but it is sufficient that the combination produces a new and useful result, and not a mere aggregate of several results. Pickering v. McCollough, 104 U. S. 310, explained.

8. SAME—CONSTRUCTION OF CLAIM—INVENTION—CASH REGISTERS. The third claim of letters patent No. 253,506, issued February 14, 1882, to Michael Campbell, covering, in a cash registering apparatus, a series of keys to designate certain amounts, combined with the cash drawer and drawer holder mediately connected with said keys, and a spring to throw the drawer open when released by the drawer holder, is a claim, not for details of mechanism, but for the combination of the keys with the drawer to produce the required result, and was a pioneer invention, although none of the mechanism by which this result was obtained was new. 47 Fed. Rep. 212, reversed, and National Cash Register Co. v. Boston Cash Indicator & Recorder Co., 45 Fed. Rep. 481, disapproved.

4. SAME-INFRINGEMENT-EQUIVALENTS. In this claim one of the elements is the "mediate connection" itself, and not the details thereof, and the patent is infringed by a cash register in which the drawer is released by pressing the keys, although the particular mechanism of the connection between the keys and the drawer is not the same as that of the patent; and it is immaterial that in the waver is not the same as that of the patent; and it is immaterial that in the infringing ma-chine the drawer is released when the finger leaves the key, instead of on the downward pressure of the key, as in the patent. 47 Fed, Rep. 212, re-versed, and National Cash Register Co. v. Boston Cash Indicator & Re-corder Co., 45 Fed. Rep. 481, disapproved.

Appeal from the Circuit Court of the United States for the Eastern District of Pennsylvania.

In Equity. Bill by the National Cash Register Company, Michael Campbell, and Maria G. Wellbrock against the American Cash Register Company for infringement of a patent. The circuit court, following the decision of the circuit court for the district of Massachusetts in National Cash Register Co. v. Boston Cash Indicator & Recorder Co., 45 Fed. Rep. 481, held that there was no infringement, and dismissed the bill. 47 Fed. Rep. 212. Complainants appeal. Reversed.

Edward Rector and Lysander Hill, for appellants.

Ernest Howard Hunter and John R. Bennett, for appellee.

Before DALLAS, Circuit Judge, and WALES and BUFFINGTON, District Judges.

DALLAS, Circuit Judge. This is an appeal from a decree dismissing a bill for alleged infringement of patent No. 253,506, for an improvement in cash registering apparatus, granted to Michael Campbell, and dated February 14, 1882. The only claim involved is:

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

The defenses are that this claim is invalid, and that, even if valid, it is not infringed. It is insisted that it discloses no patentable invention whatever, but that, if it should be sustained, and as for a combination, the appellee's machine would not be an infringement, because it not only does not contain any of the specific devices of the appellants' apparatus, but also does not employ the combination al-

# NATIONAL CASH REGISTER CO. v. AMERICAN CASH REGISTER CO. 369

leged. The appellants, on the other hand, admit that all the specific devices were old, singly and in other combinations. but assert that what Campbell invented and claimed is a combination, and nothing else. Accordingly, their counsel contend that the claim in question is valid, as disclosing a patentable invention of a new and useful combination, and that the appellee's machine is an infringement, not because of any real or supposed identity or equivalence of elements, but because it accomplished the same result as is accomplished by the Campbell machine, by substantially the same mode of operation. We have, then, no issue as to novelty or infringement of details, and therefore the only questions to be considered are: First. Is the claim for a combination, supported by invention? Second. Has the appellee infringed?

1. The claim is, in terms, for mechanism "combined with" other mechanism. It is true that certain particular mechanism is mentioned, but it does not necessarily result that the patentee intended to limit the claim to any special devices, or that the law will so restrict it. The question is one of construction; and as we are of opinion, upon grounds to be hereafter stated, that Campbell's invention was a primary one, it follows that the language of this claim should be as liberally interpreted as its fair import will allow, to the end that his conception shall be justly protected to its true extent, and in its broad and actual scope. The invention, says the specification, "relates to a cash registering apparatus to be employed in connection with a cash drawer," and the claim is for (in such apparatus) a series of keys to designate different amounts, combined with a drawer for receiving cash; a drawer holder, for holding the drawer closed against the tension of the spring, (presently mentioned;) a mediate connection (of some kind, not designated) between the series of keys and the drawer holder, by which the latter will be disengaged from the drawer upon the operation of any one of the keys: and a spring to throw the drawer open when so disengaged. By this contrivance the cash drawer, which when closed is always locked, is, by the operation of any one of the keys of the series, thrown open by the spring; and none of the devices by which this object is accomplished, so far as they are designated in the third claim, were new. The series of keys, the cash drawer, and the spring were unquestionably old; and the drawer holder is but a pivot lever, differing from other levers of the same class in nothing but in form, and in the use to which the patentee applied it. Of any particular mechanism of mediate connection, nothing need be said at this point. None is specifically mentioned in the claim with which, alone, we are concerned; and for the present purpose it may be taken for granted that none which was new was contemplated. It is clear, then, that so to construe this claim as to confine it to specific details would be to invalidate it for lack of novelty: A consequence which certainly ought not to be accepted when, according to the natural and ordinary meaning of its language, it plainly appears to be a claim for a new combination of old devices,—a well-known series of keys combined with the other familiar mechanism mentioned, and mediately connected, in some way not mentioned, with the drawer holder included v.53f.no.3-24

in that mechanism. It cannot be restricted to all or any of the devices used in the mediate connection between the series of keys and the drawer holder, not only because they are not even specified in the third claim, but also because they are expressly claimed in the second claim, which is:

"(2) In a cash registering apparatus, a series of keys to designate certain amounts, a pawl-carrying bar, c, and a series of toggle levers, x, intermediate between each key and the said pawl-carrying bar, the toggle lever, b, actuated by the bar, c, combined with the drawer holder, D, and drawer, C, substantially as described."

There is nothing upon this record which would warrant us in attributing to the patentee the folly of having presented, and to the patent office the improvidence of having allowed, two claims for the same thing. The distinction between them must be maintained, that both may be given effect.

The court, whose decree is the subject of this appeal, expressed no independent opinion, but merely followed the decision of the circuit court for the district of Massachusetts in a suit in which the same claim had been in controversy. National Cash Register Co. v. Boston Cash Indicator & Recorder Co., 45 Fed. Rep. 481-485. The course pursued in this regard was in conformity with the rule, well established in this circuit, to follow, unless under extraordinary circumstances, a prior judgment of any other of the circuit courts of the United States, wherever the patent, the question, and the evidence are the same in both suits. We do not question the propriety of this practice, as it has heretofore prevailed; but it cannot be extended to this court. The decisions of the several circuit courts. whenever pertinent, will be attentively considered by this tribunal; but because they are subject to appeal, and for other manifest reasons, it is not admissible for a court of review to accord them controlling effected Accordingly, we have in this instance carefully examined the opinion of the learned circuit judge of the first circuit; but, though regarding it with sincere respect, we find ourselves inable to concur in it. This claim, as we read it, is, distinctly, exclusively, and broadly, for a new combination; and we know of no authority or principle of law which, so reading it, would warrant us in converting it, by construction, into a claim for details merely.

Thus far we have assumed that the actual invention was of a new and useful combination, and also (perhaps without necessity) that it was a primary one. We will now state the reasons by which these assumptions are supported. Whether or not the "connecting mechanism" between the drawer holder and the keys was new with Campbell is, in our opinion, apart from the question. That mechanism, or any part of it, was not, as we have shown, covered by the claim in controversy. The complainants' bill was not founded upon it; and this court is not called upon to deal with it, but solely with an alleged combination, which it is asserted, but denied, was invented by Campbell. Directing our investigation, therefore, to this distinct issue, we have, upon full examination of the proofs, become entirely satisfied that Campbell was in fact the original and first in-

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ventor of the combination claimed in his third claim. It is unnecessary to refer in detail to the several exhibits which were introduced to show the prior state of the art, or to enter upon a discussion of the testimony. It is enough to say that, upon all the evidence, we do not doubt that Campbell was the first person who combined a series of keys with any other mechanism whatever, so as to attain the object which he proposed and accomplished. It nowhere appears that a combination of a series of keys with a drawer holder and other mechanism had ever before been conceived, by means whereof each key of the series, when and as operated, would or could unlock a drawer in a cash registering apparatus, and permit a spring to open it. This Campbell effected, not by new mechanism, but by a new combination, and in doing this he made a patentable invention.

We have not overlooked the suggestion of appellee's counsel that Campbell's conception and arrangement were merely of an aggregation of known elements, not amounting to a true combination, and that, therefore, he was not entitled to a patent for anything. This suggestion is based upon the allegation that each of the elements associated by Campbell does not qualify every other of them: but this is true only in the sense that each does not modify or change the characteristic mode of action, or method of operation, of the others. In doing its appointed share towards effecting the single result achieved by the co-operation of all, each element acts, of course, according to the law of its own being: but, though of necessity so acting, it is still, none the less, combined with the others, and does "qualify" each and all of them. (not their distinctive methods of operation.) in the sense that each is, by the co-operation of the others, capacitated to contribute, by acting in its own peculiar way, to the common end, which, without the co-operation of each and every other of the co-ordinated elements, it would be powerless to accomplish or advance. Some of the language used by Mr. Justice Matthews in delivering the opinion of the supreme court in Pickering v. McCullough, 104 U. S. 310, has been pressed upon our attention, as indicating, it is claimed, that in a patentable combination of old elements all the constituents must so enter into it that each changes the mode of action of every other, and that each element must not merely perform its own part in the combination, but must also, in some way, be directly and immediately concerned in the performance of their respective parts by every other of the elements. No such doctrine as is thus claimed to be deducible from the opinion in Pickering v. McCullough appears to have been essential to the judgment in that case, nor do we think it necessary to attribute to the particular language referred to (104 U.S. 318) the meaning ascribed to it by counsel. If, instead of an extract, the whole opinion be read, in connection with the authorities which are cited in it, it may be readily perceived that the substance of the doctrine intended to be affirmed is that a combination, to be patentable, must produce a new and useful result, as the product of the combination, and not a mere aggregate of several results, each the complete result of one of the combined elements. There must be a new result produced by their union. That

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Campbell's invention was of a combination, as thus defined, we entertain no doubt; and that Mr. Justice Matthews should be understood as holding that no combination is patentable which does not fulfill the requirement which appellee's counsel insists is requisite, we cannot suppose. If it were essential to a valid patent for any combination whatever that the mode of action of every element included in the combination should be changed by each of the others, it would have been impossible to sustain several combination patents which have in fact been upheld, as, indeed, it would be difficult to conceive of any mechanical combination which would be both possible and patentable. A screw or a lever can act only in one way, yet a screw and a lever may so act in combination as to produce, in consequence of their combination, a single, new, and useful result. Moreover, there is no intimation in the opinion in Pickering v. Mc-Cullough of a purpose to overrule the earlier decisions with which (upon the view taken of it by counsel) it would appear to conflict, nor has it in later cases (which, of course, are to be followed) prevented the supreme court from declaring the law of this subject in accordance with our understanding of it. Blake v. Robertson, 94 U. S. 728; Parks v. Booth, 102 U. S. 96; Loom Co. v. Higgins, 105 U. S. 580; Clough v. Barker, 106 U. S. 166, 1 Sup. Ct. Rep. 188; Lake Shore & M. S. Ry. Co. v. National Car Brake Shoe Co., 110 U. S. 229, 4 Sup. Ct. Rep. 33; Lock Co. v. Sargent, 117 U. S. 536, 6 Sup. Ct. Rep. 934.

Campbell's invention was a primary one. The proofs abundantly establish that he was the first person who succeeded in effecting. in any manner or form whatever, the opening of an automatically locked cash drawer, in a cash registering apparatus, upon the operation of any one or other of the keys of its series. In doing this he did not merely improve upon something which had been done before. What he produced was absolutely and entirely new. The result which he achieved was a distinct and single one, which had not, by any means, been previously attained. He entered upon barren territory in the domain of invention, and was the first to occupy and appropriate it. He was a pioneer. Machine Co. v. Lancaster, 129 U. S. 263, 273, 9 Sup. Ct. Rep. 299. That Campbell's invention was The evidence of this is so comuseful, we are also fully persuaded. plete as not to require detailed discussion. Indeed, the ocular proof of its practical utility, manifested by the operation of the apparatus in our presence, would of itself be sufficient to require us to conclude that it does not lack this essential of patentability.

2. But little need be added with especial reference to the matter of infringement. In National Cash Registering Co. v. Boston Cash Indicator & Recorder Co., supra, it was held that the mechanism specifically designated in the third claim was old, but that the mechanism of mediate connection, which was not designated, was new, and that there was no infringement of the patent, because the defendants used a connecting mechanism which differed from that used by the plaintiffs. As we, however, have been constrained to view this claim as for a combination, the question of infringement must necessarily be considered by us as related to a subject quite

distinct from that to which the same question was directed in the decision of the case to which we have referred. The correct inquiry. from our point of view, is not whether this appellee uses, in its mechanism of mediate connection, the same devices which are used by the appellants, or equivalents thereof, but whether the mediate connection employed by the appellee is not itself an equivalent of the mediate connection of the Campbell combination. It may be conceded that there are marked differences in the details by which this connection is made, and its purpose accomplished, in the one apparatus and in the other; but the manifestly well-founded expert testimony is that "a mediate connection," not the details thereof, is included among the elements of the Campbell machine. This element, as well as all others of the patented invention, are found in the appellee's apparatus. We attach no importance to the fact that in the appellants' machine the drawer is released upon downward pressure of the key, while in that of the appellee it is released as the finger leaves the key to which the pressure is applied. In both, the drawer is opened by what is substantially one and the same act .--the operation of a key of the series. Though some of the corresponding parts of the machinery are not the same, and, separately considered, could not be regarded as identical or conflicting, yet, having the same purpose in the combination, and effecting that purpose in substantially the same manner, they are the equivalents of each other in that regard. Cochrane v. Deener, 94 U. S. 780. We are of opinion that the combination here claimed is infringed by the apparatus used by the appellees.

The decree of the circuit court is reversed, with costs, and it is ordered that this cause be, and the same is hereby, remanded to the said circuit court for further proceedings to be there taken in pursuance of this determination and judgment of this court, and in conformity with this opinion.

## BAUMER v. WILL et al.

## (Circuit Court, N. D. New York. December 23, 1892.)

### No. 5,881.

1. PATENTS FOR INVENTION-LIMITATION OF CLAIM-PRIOR ART-CANDLE-SHAP-ING MACHINE.

Letters patent No. 330,200, issued November 10, 1885, to Anton F. Baumer, cover an apparatus for shaping candles, comprising a tubular holder with a die at one end and a plunger at the other, whereby the final shape and finish are given both to the ends of the candles and to the exterior circumference of its body. *Held*, that if the patent is sustainable at all, in view of the fact that similar candles had been before made, and that machines for molding and pressing plastic material by means of a die and plunger were well known, it is entitled only to a narrow construction, and the patentee is not entitled to invoke the doctrine of equivalents.

#### 2. SAME-INFRINGEMENT.

The patent is not infringed by a machine having a single die for molding the foot of a candle, the tip being meanwhile held firmly by a cushion which prevents the candle from slipping, but does not impart any form or finish to the tip, and in which the holder embraces only a part of the candle, and is not adapted to smooth or finish the exterior thereof.