

Case No. 5,904. HAILES ET AL. V. VAN WORMER ET AL.
[7 Blatchf. 443.]¹

Circuit Court, N. D. New York.

June, 1870.²

PATENTS—OLD DEVICES—NEW COMBINATION.

1. Although a combination of old devices may be patentable when a new and useful result is produced, no one can, by combining several devices, each of which is old, thereby deprive others of the right to use them separately, or of the right to use them in new combinations, or of the right to use some of them in combination, omitting others.

[Cited in *Sarven v. Hall*, Case No. 12,369; *Coolidge v. McCone*, Id. 3,186.]

[See note at end of case.]

2. The mere addition of an old device producing a specific result, to another old device producing its own result, in such wise that their combination produces those same two results, and no other, is not invention.

[Cited in *Sarven v. Hall*, Case No. 12,369; *Reckendorfer v. Faber*, Id. 11,625.]

[See note at end of case.]

3. If the combination itself produces a new and useful result, not due to the separate action of either, nor attained thereby, but due to the co-operative or reciprocal action of the combined devices, a different question arises.

[Cited in *Russell & Erwin Manuf'g Co. v. Mallory*, Case No. 12,166.]

[See note at end of case.]

4. Invention generally consists in new modes of employing what was before known, so as to produce thereby effects either not produced before, or not produced in that manner, or not produced so usefully.

5. If the combination of the old devices be supplemented by other and new devices co-operating therewith, and thereby a new and useful result is produced, not attained by the action of the old devices, that is invention.

[Cited in *Russell & Erwin Manuf'g Co. v. Mallory*, Case No. 12,166; *Carstaedt v. United States Corset Co.*, Id. 2,467.]

[See note at end of case.]

This was a suit in equity, founded on two letters patent. One was a reissued patent [No. 1,397], granted to the plaintiffs [William Hailes and Ellen T. Treadwell] February 3d, 1863, for an "improvement in stoves," the original patent [No. 32,257] having been granted to John G. Treadwell and William Hailes, as inventors, May 7th, 1861. The other patent [No. 39,535] was granted to Martin L. Mead and William Hailes, assignees of John G. Treadwell and William Hailes, as inventors, August 11th, 1863, for an "improvement in coal stoves." and the interest of Mead in the patent had become vested in the plaintiff Treadwell. The specification of the reissue of February 3d, 1863, said: "Our experience in this class of stoves"—base-burning or reservoir stoves—"is, that the most beneficial effects are to be secured from an organization which does not pass the products

of combustion up, around and over the top of the coal-supply-reservoir, so as to heat a surrounding jacket thereof, but heats a circulating or ascending body of air by means of radiated heat from the fire-pot, and at the same time heats the base of the stove by means of direct heat, circulating through descending flues which lead into the ash-pit, or around it, and to the smoke and draught flue; also, that the greatest economy, considering the increased benefit secured from supplying coal continuously out of a reservoir, is attained with an arrangement which holds the superincumbent body of coal in suspension, such arrangement being a reservoir with a contracted discharge extending slightly down into a flaring or enlarged fire-pot, around or above the whole upper edge of which, outside of the contracted discharge of the coal-supply-reservoir, the flame is allowed to circulate, and, therefore, caused to descend and circulate around or under the base portion of the stove, in its passage to the smoke and draught flue." There were in this reissue twelve claims, the first five of which, the plaintiffs alleged, had been infringed by the defendants [Jasper Van Wormer and others] namely:“(1) A base-burning, coal-supply-reservoir stove or furnace, so constructed that the products of combustion do not pass up around and above the supply-reservoir, nor up through the grate, but down outside of the fire-pot toward the base of the stove, and out through a main draught flue, which leads directly from a space or chamber above the lower part of the stove, all for the purpose set forth and substantially as described. (2) The contracting of the discharge end of the coal-supply-reservoir, the expanding of the fire-pot, and the extending of the flame passage downward, for united operation, in a base-burning, coal-supply-reservoir stove or furnace, essentially as set forth. (3) A fire-pot resting on a base, and imperforated on its inner or outer circumference, or from its inner to its outer circumference, and so constructed and applied, with respect to a coal-supply-reservoir, that an inclosed horizontal chamber for the free expansion and circulation of the flame and gases, is formed all around and outside of the contracted discharge, and above the upper edge of the fire-pot, substantially as and for the purpose set forth. (4) The descending passage or passages, in combination with the continuous flame-expansion and circulation passage, and a main draught flue, leading out of the base or lower part of the stove or furnace, substantially as set forth and for the purpose described. (5) Constructing the fire-pot of a base-burning, coal-supply-reservoir stove or furnace, with an imperforated circumference and in the form of a trumpet-mouth at its upper portion, in combination with descending flame-passages, substantially as described and for the purpose set forth.” The specification of the patent of August 11th, 1863, stated that the invention covered by it was an improvement on the stove patented by the reissue of February

3d, 1863, and consisted, "1st, in the construction of an illumination-window or windows, at one or more points in the continuous flame-expansion-chamber or channel, which is about the base of the coal-supply-reservoir and the top of the coal-burning fire-pot, in combination with a descending flue which leads to a chamber about the base of the stove, and from such chamber into a chimney-flue; 2d, in the construction of a damper draft flue in the continuous flame-expansion-chamber or channel, located as just stated, in combination with a descending flue, which first leads down into a chamber about the base of the stove, and then into the chimney-flue, with which the damper-draft-flue connects directly at the top of the fire-pot." There were in this patent six claims, the first two of which, the plaintiffs alleged, had been infringed by the defendants, namely: "(1) The combination of the illuminating openings, flame-expansion-chamber, coal-supply-reservoir, fire-pot, descending flue and draft-flue, substantially in the manner and for the purpose described. (2) The combination with the flame-expansion-chamber, formed at the base of the coal-supply-reservoir, and around the upper edge of the fire-pot of a base-burning stove, of the branch draft-flue with damper, when the same are located with respect to the flame-expansion-chamber, fire-pot, coal-supply-reservoir, and descending combustion-flues, substantially as and for the purpose described." The case was now heard on pleadings and proofs.

Joel Tiffany, for plaintiffs.

Charles M. Keller, for defendants.

WOODKUFF, Circuit Judge. Upon a careful examination of the evidence in this case, aided by the very full and elaborate discussion of the counsel for the respective parties, I am of opinion that the defendants are guilty of no infringement of the rights of the plaintiffs.

The introduction of a magazine or reservoir into a stove, for the purpose of supplying coal to the fire-pot below, was no novelty at the time when the plaintiffs' base-burning stove is claimed to have been invented, in 1861. The contraction of the lower end of such reservoir, so that it should be smaller than the upper portion thereof (which is claimed by the plaintiffs to aid in sustaining the mass of coal therein, and prevent too great pressure upon the burning coal in the fire-pot), is found in several stoves before that time in public use. The construction of a fire-pot of larger diameter at the top than at the bottom, was then not new.

Stoves so constructed that the smoke, gas and other products of combustion passed from the fire chamber, through downward flues, to or near the level of the bottom of the stove, were common; and the revertible flues, so called, had long been in use. In one of the exhibits describing the Sexton stove, and in the American gas-burner, these products of combustion were passed down and through a chamber in the base of the stove, and thence out into the smoke-pipe. The addition of a direct draft to such stoves as were

constructed with revertible flues, by means of a flue above the fire-pot, provided with a damper to be closed after the fuel had been ignited, was no novelty.

The use of openings in the exterior, or shell, of the stove, and the insertion of mica therein, in order to permit the light emitted in the process of combustion to be seen, had been employed for very many years. If there are any other devices in the stove patented by the plaintiffs, embraced within the details of their specifications, the stove manufactured by the defendants does not contain them. The stove of the defendants does embrace all of these particulars in combination, and this use is claimed to infringe the plaintiffs' patents. This claim, however, cannot be sustained, unless it be true that the plaintiffs have invented such a combination of these old devices, as precluded their introduction into the defendants' stove. To determine this, it is necessary to examine the combination which the plaintiffs allege and describe; and, before doing so, it is proper to say, that, although a combination of old devices may be patentable when a new and useful result is produced, no one can, by combining several devices, each of which is old, thereby deprive others of the right to use them separately, or of the right to use them in new combinations, or of the right to use some of them in combination, omitting others.

The plaintiffs, in their patent of 1861, did unquestionably combine all these several devices in some form. Their construction of a flue for the direct draft was, however, plainly and materially different from that of the defendants. It consisted of a flue leading from the chamber at the top of the magazine or feeder, in such wise that in the process of igniting the coal, all the smoke, gas, and other products passed through the coal before reaching the flue leading to the smoke-pipe; and the same is true of the invention as exhibited in the drawings annexed to that patent, as reissued February 3d, 1863. But, in their patent of August 11th, 1863, they have described the draft flue as leading directly from the combustion-chamber over the fire-pot, backward into the smoke-pipe, without leading the smoke, gas, &c, through the coal in the magazine. Have they, then, secured such an exclusive right to the combination of these old devices, that the defendants are precluded from employing such combination in their stoves, at the times and in the manner they have introduced them?

1. The plaintiffs' combination is not the simple union of these several devices to produce a new result, but their employment in combination with other devices, producing a

stove differing in many particulars from the stove of the defendants. Thus, the stove of the plaintiffs has an exterior perforated casing, or "jacket," which surrounds the radiating surfaces of the magazine, fire-pot, and flues. Of this it must suffice to say, that it has no apparent connection with the invention alleged to be infringed, its declared object being to receive air through its perforations, and discharge it (when heated by contact with, or radiation from, the fire-pot, descending flues and magazine), for warming the apartment, or other apartments, above, to which it may be conducted. Nothing of this description is found in the defendants' stove.

Again, the downward flue or flues in the plaintiffs' patent are wholly exterior to the stove itself, and are separated from the fire-pot, so as to leave a vertical space between them and the fire-pot, which, when the outer casing is applied, forms a part of the hot-air chamber communicating with the external air, which enters through the perforations before-mentioned, and, when warmed, passes up and out at the top. The existence of this space between the downward flues and the fire chamber is specifically pointed out in the plaintiffs' specification. There are no such exterior flues for the downward draft in the defendants' stove, and, of course, no such space around the fire-pot to which the exterior air can have any access.

The plaintiffs' specification describes the downward draft for the passage of smoke and the other products of combustion to the bottom of the stove, as pipes placed over apertures made in the top plate of the base of the stove, and extending upward to the upper rim of the fire-pot, and connected therewith by perforated flanges or ears, not only so that a space is left between the pipes and the fire-pot, as above stated, but such perforation forms the outlet from the combustion chamber. In the defendants' stove none of these devices exist. The space around the magazine and the fire-pot is tightly enclosed, and there is one entire continuous chamber from the top of the stove to the bottom of the fire-pot, around the magazine, over the surface of the coal, and around the fire-pot, constituting an extended combustion chamber surrounding each, through which the unconsumed smoke and gas pass upward to the top and out, when the direct draft is in use, and downward to the base of the stove, when the direct draft is not desired.

In the stove described in the plaintiffs' specification, the base of the cylinder which forms the reservoir terminates in a circular flange (h), projecting outwardly, and then curved downward, and fitted down upon the upper edge of the fire-pot, so as to form a perfectly close circulating chamber, or "flame-channel," around the bottom of the magazine, and with no communication upwards with the space around the magazine, or downwards around the exterior of the fire-pot, the only outlet therefrom being what are called perforated flanges or ears, with which the downward pipes already referred to are connected. This, with its flange or ear-passages, constitutes, as claimed, the combustion-chamber contrived to retain the products of combustion in immediate contact with the incan-

descent coal around the base of the reservoir, in which they may expand, and, in their passage to the outlet, be drawn over the surface of the coal, and their more complete combustion be effected.

Now, although very great stress was laid upon this feature of the plaintiffs' alleged invention, I am clearly of opinion that there is no corresponding device in the defendants' stove, nor any infringement thereof, if the plaintiffs' right to its exclusive use were to be conceded. In the defendants' stove, the magazine or feeder has no connection with the fire-pot, or with the sides of the stove. Communication with the upper part of the stove around the magazine is not cut off by flanges or otherwise. The circulation and passage of the heated smoke, gas, and products of the combustion, while the direct draft is in operation, are up and around the reservoir or feeder, and their circulation and passage are down and around the sides of the fire-pot, in immediate contact therewith, when the downward draft is in operation. The combustion-chamber consists of the entire space over the fire-pot not occupied by the reservoir, extending to the top of the stove, and the space downward around the fire-pot. This arrangement does not embrace, but excludes, the effect claimed for the plaintiffs' stove, (namely, passing the products of combustion over and across the incandescent coal, horizontally, to secure their more complete combustion,) by passing the products of combustion directly over the edge of the fire-pot, downward, along its sides.

It is unnecessary to dwell upon the plaintiffs' arrangement of the lower extremity of the reservoir or feeder, by means of the ring flange (k) and the detachable ring (v), with a horizontal flange and bolts, to form, in their connection, a frame for the reception of firebrick or other fire-proof material. These are, however, a part of the plaintiffs' combination, and are not only a material part, but are the immediate and sole agents or means of producing one of the new results, namely, the protection of the lower extremity of the reservoir or feeder from destruction by the heat of the burning coal below—a result, however, not at all produced by the combination of a reservoir with a revertible flue and the fire-pot, and having no more fitting application to that combination than to any reservoir introduced into any stove. However valuable they are, and whether they do or do not produce a new result, the defendants have not used them. They employ the mere iron cylinder as a receptacle and conductor of the coal to the top of the fire-pot, without any such protection.

2. Bringing thus into view the fact that

the plaintiffs' patents are not for the mere combination of a reservoir diminished in size at its outlet, with a flaring fire-pot and revertible flues and mica windows, but that these are used in combination with other devices, I observe, that, whatever new results are produced, they are due, not to the combination of the first named four devices (which alone appear in the defendants' stove), but to those other devices which are used in combination therewith. This renders some attention to the difference between a mere aggregation of devices and its results on the one hand, and a patentable combination of old devices, which produces a new result, or an old result in a better or more economical manner.

The mere addition of an old device producing a specific result, to another old device producing its own result, in such wise that their combination produces those same two results, and no other, is not invention. For illustration, suppose the use of a fire-pot constructed of fire-brick, or like indestructible material, were common, in stoves having a direct draft only, its use being valuable because of its indestructibility and hence its economy, and suppose, also, stoves constructed with revertible flues were in like common use, the revertible flues around and under the base of the stove effecting, as results, a more perfect combustion, and warming the lower part of the stove, by the passage of the heated products of combustion around or beneath it and so warming the air in the room near the floor—adding or combining the fire-pot of fire-brick to or with the stove having revertible flues, would not be invention, no other results being thereby produced. The fire-pot of fire-brick would still produce its appropriate and original result, namely, it would be a more economical fire-pot, and the revertible flues would still produce their appropriate and original results, namely, more perfect combustion, and the warming of the base of the stove and the air near the floor; but neither result would be due to the combination, nor would any result be produced that either, separately, did not produce. On the other hand, if the combination itself produces a new and useful result, not due to the separate action of either, nor attained thereby, but due to the co-operative or reciprocal action of the combined devices, a totally different question arises; for, obviously, invention generally (as distinguished from discovery) consists in new modes of employing what was before known, so as to produce thereby effects either not produced before, or not produced in that manner, or not produced so usefully. So, also, if the combination of the old devices be supplemented by other and new devices co-operating therewith, and thereby a new and useful result is produced, not attained by the action of the old devices, there, also, is invention.

I am, therefore, not required, in order to the decision which I make, to hold that the plaintiffs have no patentable invention. They have supplemented the combination of devices already in use, by constructing a close circular space immediately over the burning coal and around the lower end of the reservoir or feeder, by extending flanges from the side of the feeder and connecting them with the upper edge of the fire-pot, thus cutting

off the ascent of the heated products of combustion and their access to the space above around the sides of the magazine, and also, as is claimed, compelling those products to pass horizontally over the incandescent coal, to reach the outlet to the pipes placed outside and leading to the base of the stove. The two useful results of this arrangement, as alleged, are, 1st, a more perfect combustion of the smoke and gases rising from within the fire-pot; and, 2d, the protection of the reservoir and coal therein from being overheated. Now, these results are not due to the combination of the four devices which are included in the defendants' stove, but to the supplementary device. Hence, the significance of the description, and especially of the claim in the plaintiffs' specification, which is not to the mere combination, but to the combination in the manner and for the purposes set forth. The defendants, on the other hand, use the four old devices in their stove, and in it they produce the several appropriate and original results pertaining to each. Their stove is supplied with a space around the fire-pot, leading to the base, which forms the downward passage way thereto, operating to conduct the unconsumed products of combustion through the base to the smoke-pipe. By this they secure the beneficial results long before attained by the use of revertible flues. But these benefits, whatever they are, are not the results of the combination. They are just what revertible flues in any stove, and in any combination, are adapted to produce, unless their peculiar construction has produced other or greater benefits, so as to be protected by their own patent, which it is not material here to consider. So, they use a reservoir or feeder contracted in size at its lower end or at some point above. By this they secure the benefit of the contraction, if there be such benefit, in sustaining in part the necessary coal in the reservoir above, and also the continuous supply of coal to the fire-pot, heated so as readily to ignite. But this was no new result, nor is it a result arising from the combination, in any sense whatever. Again, they use a flaring or funnel shaped fire-pot, that is, a fire-pot having a larger diameter at the top than at the bottom. Now, obviously, the diameter of the fire-pot at the top being fixed by its proper relation to the size of the discharge end of the reservoir or feeder, the result of contracting it at the bottom is to enable them to use less coal, without diminishing the surface of the burning coal at the top; and there may be other results of using a fire-pot with oblique instead of perpendicular sides. Whether this form is, in any view,

useful, or to be preferred to the other form, is left, to say the least, in great doubt, by the evidence; but that is not a point material to the view I am presenting, which is, that these results are not the results of the combination, and, as I have above stated, the form is not new. The results flow from this form of fire-pot, whether used In the defendants' stove or elsewhere.

What is above said applies with most obvious fitness to the openings, closed with mica, for the purpose of illumination. The office they perform is, in the defendants' stove, precisely what they have performed in other stoves, for more than thirty years, namely, to permit the light produced by the combustion to escape into the room, and, if not made perfectly tight, then to permit the entrance of some atmospheric air into the fire chamber. These results have no relation to the combination, are not due to it, and are not affected by it. It follows, therefore, that, however useful and valuable the plaintiffs' stove may be, and whether they have or have not invented a patentable combination supplemental by new devices, so that new results are produced, or old results by new means, or in a better manner, the defendants have done nothing to infringe any right which the plaintiffs have acquired.

3. I have thus considered the question of infringement, by showing what the defendants do use in their stove, and that, so far as is material to this case, it consists in employing mica windows, a reservoir or feeder contracted in size at or above its lower end or place of discharge, a fire-pot having a larger diameter at the top than at the bottom, and a downward draft, with a direct draft for the purpose of more speedy ignition of the coal; that these were all old devices; that, whatever the plaintiffs may have accomplished in the construction of their stove, the defendants have not, in theirs, secured any new results, nor employed any new modes of producing or of improving the separate result of each of these devices; and, therefore, that what they have done, so far as is material to this controversy, is merely gathering these separate results into one stove, without new devices for their accomplishment, or altering or improving them as a result of the combination. I have also shown some of the actual differences between the stove of the defendants and that patented by the plaintiffs; that the devices introduced by the plaintiffs in perfecting their combination, make it a different and more comprehensive combination; and, that the defendants have neither used such more comprehensive combination, nor those other and additional devices which form a part of the plaintiffs' stove, as described in their specifications. I ought to remark here, that, in making the comparison, it was of most essential importance to use the stove described in the plaintiffs' specifications, and exhibited in the drawings annexed thereto, and not the stove called the "Brilliant," produced on the hearing, which departs largely therefrom in most of the particulars which are distinctive features of their stove, as described in their specifications.

It is, moreover, important to the right understanding of my decision, and just, also, to the defendants, that I should state distinctly, that, in saying that the defendants, in their combination of the old devices contained in their stove, have not, by such combination, produced new results. I mean, that they have not produced any such results by mere combination, nor by the use of any devices embraced within the plaintiffs' patents. I do not decide that their employment of the open circular space around the fire-pot, as a chamber for the continued combustion of the flame, and the descending unconsumed smoke and gases, is or is not a new device, producing the new and useful results claimed therefor in their own patent. This is also true in respect to the peculiar devices employed in their stove for adjusting the reservoir or feeder, also mentioned in their patent. The novelty and utility of what in their patent they claim to have invented, in the view I take of the question of the infringement of the plaintiffs' patent, are wholly immaterial to the decision. These devices are not in the plaintiffs' patent.

This discussion is already very prolix, and enough has been said to exhibit as I think, sufficient grounds for the decision I am constrained to make. There are other points of difference between the stove of the plaintiffs, described in their patents, and the stove of the defendants, which make the departure from the plaintiffs' aggregate combination still greater; but I deem it unnecessary to discuss them further. As a mere combination of the devices which have been used by the defendants, and apart from the supplemental and auxiliary devices which the plaintiffs introduced and claim in their patents, and which the defendants have not used, I am not at all satisfied that the Sexton stove does not embrace all that is useful in the stove of the plaintiffs. It is a base-burning stove, with revertible flues and a reservoir or feeder. The differences of form are obvious, but whether those differences are anything more than differences in form, and produce either new or useful results, are left at least doubtful by the evidence. I have not deemed it necessary to consider the further fact that the defendants use a reservoir and feeder having an enlarged mouth, for the alleged purpose of preventing a clogging of the coal in its passage to the coal-pot. It was not necessary, because my conclusion is already reached upon other grounds.

Finally, the counsel for the plaintiffs, on the hearing, and in his printed argument, frankly, and in unequivocal terms, admitted and repeated, that "the defendants may apply the self feeder to the American gas-burner, or to any other stove, provided, that, in

the organization and construction of such magazine stove, they do not include the improvements patented by the plaintiffs." This concession accords perfectly with the views which I have above presented. The defendants were at liberty to use the reservoir or magazine, together with a coal stove having revertible flues, and also the direct draft for kindling the fire, and mica openings for the purpose of illumination. Such, without the reservoir, was the American gas-burner, constructed by the defendants several years before the plaintiffs' patents were granted. They were not at liberty to borrow from the plaintiffs any patented devices employed by them to produce new and useful results from the combination.

What have the defendants done which it is not here conceded they had a right to do? In answering this, it is material to observe, that, at the time the plaintiffs received their patents, both the American gas-burner and the stoves described by the plaintiff's patent, were of nearly or quite uniform size in their exterior from top to bottom. Both, however, were somewhat contracted in size at the base. The irregular and highly ornamental form since given to both, has made an exterior resemblance which might mislead, were it not observed, that this is a purely adventitious and subsequent conformity, and a change from the form originally used by both. The mere form, in this respect, is not secured by the patents, and has no actual bearing or significance in the determination of this case. Changing the form in this respect did not impair or enlarge the rights of the plaintiffs, nor does a change in that respect constitute any violation of the patents by the defendants. Place, then, in the American gas-burner, a reservoir, conical in form, with its greater diameter at top, and, except in two particulars, the defendants' stove is produced, with literal exactness. Those particulars are these: 1st. The products of combustion in the American gas burner pass through a series of openings in and all around the bell-formed top edge of the fire-pot, and circulate freely along and around the fire-pot below, whereas, in the defendants' present stove, that top edge of the fire-pot is removed, so that these products of combustion pass without any obstruction directly over and downward along and around the fire-pot; 2d. The fire-pot in the American gas-burner had perpendicular sides, while in the defendants' last stove the bottom is contracted, so that the sides are oblique or sloping. If these changes were not the adoption of new devices covered by the plaintiffs' patents, this is decisive.

As to the first, there is nothing like it in the stove described in their patents. By the change, the space over the edge of the pot was made perfectly open and free from all obstruction to the even, regular and constant overflow of the products of combustion down, around and along the sides of the fire-pot to the base. In the plaintiffs' stove, as described in their patents, a directly contrary arrangement is introduced, namely, the circular flange connected with the lower part of the magazine is brought down and made to fit upon the upper edge of the fire-pot, not only so that there can be no such overflow, but so as to

form a close circular chamber or “flame-channel;” from which there is no outlet except through what are described as “perforated flanges or ears of said pot,” forming outlets leading to the descending pipes on the outside of the pot, such flame-channel compelling, as is claimed, the products of combustion to pass horizontally over the surface of the incandescent coal to reach the outlets, and thus, as is alleged, producing a more perfect combustion of such products—an arrangement and a result not made or attained in the defendants’ stove.

As to the second, namely, the reduction of the diameter of the fire-pot at the bottom, I have already shown that this was neither new nor produced any new result. The diameter of the top must, in any base-burning stove, have such a relation to the diameter of the mouth of the reservoir or feeder, as will permit the passage of air from the grate up through the burning coal and maintain combustion in the fire-pot; and this will be precisely the same whether the diameter of the pot at the bottom be greater or less, provided always it be of a diameter sufficient to admit the current of air required to maintain the combustion. Any results of the reduced form are no other in this stove than they were in any stove in which a fire-pot of that form had been before used, and they are, therefore, not results of any invention or combination embraced in the plaintiffs’ patent.

This concession by the counsel for the plaintiffs was made in a spirit of commendable candor, and could not, I think, have been reasonably withheld, since it was true, in fact, that the defendants had applied the magazine or reservoir with diminished diameter below the top, to the American gas-burner, in 1857 or 1858, three years before the plaintiffs’ first patent and in a modified form afterwards, down to the construction of the stove now complained of. I have not attached importance to this prior use nor to many other facts which may be deemed material, because the views already stated at too much length are decisive. The defendants are entitled to a decree dismissing the bill, with costs.

[NOTE. On appeal to the supreme court this judgment was affirmed in an opinion by Mr. Justice Strong, who said that a new combination of old devices is patentable if the result produced is new and useful. The result however, must be a product of the combination, and not a mere aggregate of several results, each the complete product of one of the combined elements. A person who brings together several old devices without producing a new and useful result, and something more than an aggregate of old results, cannot prevent others from using the same devices, nor, even if a new and useful result is obtained, can he prevent others from using a combination of some of the devices. 20

Wall. (87 U. S.) 353. See, also, **Hale v. Stimpson, Case No. 5,915**, for a case involving a similar point.]

¹ [Reported by Hon. Samuel Blatchford, District Judge, and here reprinted by permission.]

² [Affirmed in 20 Wall. (87 U. S.) 353.]