

t. As far as he could judge, it seemed to be ignorantly framed. Having had to do with a large number of patents, he thought it was really necessary to have a provisional specification. He thought it was undesirable in any way to limit and tie up the patentee. It had been said that the patentee should be looked after, that he should be patronized; but he was afraid that in the House of Lords there was no real intention of patronizing the patentee. Indeed, the patentee did not require patronage; he required to be left alone, to have freedom. Speaking for himself, if he wanted any one to examine what he considered an invention, he would ask them. If the patentee wanted assistance, it should be furnished to him for nothing, and if that were done then the patentee would be in a right position. A patentee was naturally anxious to know whether there had been a previous patent which he would infringe upon. He did not want to take out a patent which had been taken out before, because he knew that the result would be to ruin himself in that particular thing. Therefore he was very anxious for his own safety. He therefore thought it very desirable to leave the patentee alone. He was a very useful person, in fact the whole of the progress of the country depended upon the inventor. That was saying a great deal, but if they looked into the library of the Patent Office and scanned the amount of mind that they found there shown in print, and if they could only suppose how in any other way but by patent law that mind had been used for the improvement which they found there indicated, he thought it would be impossible to conceive how by any other means than by patent law there should have been so much progress made.

Mr. Smith said it might be well to adopt the French system and require payment of, say £5 on application, and £5 a year afterwards. He did not wish to see the patentees patronized, but every means should be given them to enable them to judge for themselves, and also to employ such men as Mr. Carpmal, from whom they would get more assistance than they could from a large staff of examiners. He would give inventors the full benefit by taking off the enormous taxation in the third and seventh years, and making the payment an annual one, so that the patent could be dropped at any time.

Mr. Carpmal said there were, no doubt, abuses in the American system, but they had been often exaggerated. There was a reason for those abuses that did not exist in England. The American civil service was entirely political, and every one of the staff of the Patent Office had to subscribe a part of his salary to keep his party in office. With regard to the search, Dr. Siemens said that a search by a patent agent was expensive, and it could not be otherwise. When a patent was instructed to make a search, he had to build a scaffolding for the purpose, but in a government department there would be a scaffolding available for the public generally. He had taken out patents in America, France, and Belgium. In France and Belgium there was nothing to do but to ask for a patent, and he valued it according to the facility with which it was given. In America the process was very long; and separate patents were required for different details that would be included in one patent in England. That brought up the cost to about the same amount as in this country. He did not see how they could do much better than carry out the act of 1852 in its integrity. The bill of the Lord Chancellor was wholly uncalled for. Patentees had not agitated for it, and he did not regard the House of Lords as a body well qualified to judge of their requirements. He thought the bill would have very little chance in the House of Commons.

Mr. Smith thought it advisable to pass such a resolution as the following:—"That this meeting is of opinion that many of the provisions in the Lord Chancellor's Bill are contrary to public policy, and an interference with the admitted rights of inventors and others connected with property in invention."

Mr. Newton seconded the resolution, which was carried. The President said that the bill, as they were aware, had passed the House of Lords. He had the highest respect for that body, but he did not think it was a tribunal he would select for the purpose of determining upon the policy of the patent laws. He believed that the Lord Chancellor, in the very speech in which he introduced the bill, showed that he was not very practically acquainted with manufactures. His recollection was that, when the Lord Chancellor alluded to the new process of toughening glass by steeping it when hot in oil, he spoke of it as being in contradistinction to that process, ordinarily pursued in glass manufacture, by steeping it in cold water. He thought it would be found, on reference to his speech, that that was the Lord Chancellor's opinion on one of the processes in glass manufacture. Lord Somerset who, having been at the head of the Admiralty, should, he thought, have had a little respect for inventions, was very jocose. He said that an inventor came and made a screw wide at one end, and another came and made it narrow at that end, and that gave him the right of patent, on which there was great laughter. It might have occurred to his lordship that the whole difference between a good screw and a bad one lay in the form of it, and that it was not until after years of experiment that a good propeller was obtained. Even at the present day they knew it was a disgrace to mechanics that they could not get a propeller that would utilize a greater percentage of power than was got by the screw. But he thought it was a matter of complaint that the patent law was made the property of lawyers. The bill had been framed by a lawyer without consultation with those who did know something about it; it entirely passed by several of the recommendations of the commission of 1865 and the committee of 1871-2, and it contained clauses that were in themselves most prejudicial. He was glad that the opponents of the bill

had been furnished with powerful arguments against it at the present meeting. They might not be wanted for the present session, for he hoped the bill would be not among the "innocents," but among the wicked, that would be slaughtered; but as it might revive next session, he hoped that the proceedings of that day would have their due weight; and he hoped, if needful, that the members of the Institution of Mechanical Engineers would meet another year to protest against a bill so injurious to the interests, not only of inventors, but of the country.

**In Memoriam.**

He used to make his appearance at our desk about once a week, for nearly ten years. He always carried a musty roll of drawings, which seemed to be a little more worn and a little more yellow at each visit. Eventually they came to look like the part of his coat against which they rubbed—dirty black and shiny. He was very patient; perhaps he gave us credit for being so likewise; besides, he was deaf. Therefore, he could wait and glare benignly though vacantly, over his rubicund nose, upon us until we had finished with some preceding visitor. Our part of the conversation was confined to nods, interjected whenever we became aware that he had stopped for breath.

Some years ago we understood a little of his story, but it departed from our recollection. It was too complicated: we either had to forget that or everything else. We did not tell him so, however, and consequently he supposed we were blessed with a stupendous memory; for after he had finished his invention and begun on the improvements, of which he had a new one to describe every time he appeared, he assumed that we remembered all of his previous oration. He improved his original notion out of existence several times, so that in the end his dilapidated drawings had nothing to do with the subject of his remarks. That idea occurred to him eventually, and he neglected to show them. This was after a great many people got impatient in attempting to reconcile them with his description. He would talk none the less, however, making enormous drafts on our imaginary faculties for comprehension, and on his own for facts. He believed that alcohol was food, and practically tested his theories frequently, which did not improve the coherence of his remarks nor the aroma which pervaded his presence. We found out, after a while, that we were a kind of mental safety valve for him. So long as we would listen he was happy; and doubtless, when he slowly departed toward the nearest bar room, his moral refreshment was equalled in degree only by his physical dryness.

This article is an obituary. It may be a peculiar one, but not more peculiar than its subject. We have missed him and his roll of drawings for about one week. There is a competition in progress, before a committee which sits daily, of schemes for a great city improvement. He entered the lists of competitors with that roll of drawings. Somehow he became possessed of the idea that he had distanced all rivals, whereupon he indulged in a too prolonged banquet. Then he tumbled down stairs and broke his neck.

In the above will be recognized a character well known about New York city, a genius of more than ordinary cleverness, and an engineer of practical skill; but his hobby and his habits killed him.

**City Bee Culture.**

A manufacturer of a summer drink, which seems to be quite popular during the present heated weather, has taken a store in the neighborhood of our offices, and placed in the show window a beehive, in which, in full view of the crowd which constantly gathers, the busy insects make the honey which, it is asserted, is mingled with the cooling beverage. The window is open at the top, and the bees are allowed to collect their materials from the street refuse. The honey seems to be of excellent quality, and the bees require no further care nor attention than if foraging among their favorite clover fields.

At the Fair of the American Institute last fall, a very fine case of honey was exhibited, the contents of which, we were informed, had been obtained by the bees entirely from the swill barrels, the sugar-house waste, and the flowers in the public parks of the city. There was nothing about the material to distinguish it from the best honey made from clover, and it undoubtedly should and probably did find a market just as readily. The quantity of such honey-yielding refuse wasted in the metropolis is enormous. Why then should it not be more widely utilized through the bees? Private apiculture can be carried on just as well on a house top or in a back yard as upon a farm, and any one with such space at his disposal might easily manage a few hives and build up a paying business, and it would afford amusement to the experimenter and his friends. There are many people, out of the thousands seeking work here just at present, to whom some such new occupation—for such bee culture would be, thus carried on in the city—might be of considerable assistance in eking out a support during the stagnation of business peculiar to the heated term.

A contemporary suggests bee culture as an excellent employment for women, an idea with which we fully concur. A case is mentioned of a lady who started with four hives purchased for \$10, and in five years she declined to sell her stock for \$1,500, it not being enough. Besides realizing this increase on her capital, she sold 22 hives and 436 pounds of honey. Another instance is on record, of a man, who, with six colonies to start with, in five years cleared 3,000 pounds of honey and 54 colonies. Fine honey readily fetches, at retail, from 25 to 40 cents a pound.

MR. WILLIAM EDWARD LOGAN, the distinguished geologist, died recently at the age of seventy-seven years.

**DECISIONS OF THE COURTS.**

**United States Circuit Court—Southern District of New York.**

GILBERT & BARKER MANUFACTURING COMPANY vs. OAKES TIRRELL.—PATENT GAS APPARATUS.

[In equity.—Before WOODRUFF, Circuit Judge.—Decided June, 1874. WOODRUFF, F. J.:

The bill herein is filed to restrain the infringement of a patent granted to J. F. Barker and C. N. Gilbert on the 3rd of August, 1869, for an approved apparatus for carbureting air.

By means of this apparatus, it is claimed that gas is produced from petroleum and similar volatile oils employed for carbureting atmospheric air, thus rendering it combustible, light-producing, and suitable for lighting houses, manufactories, etc.

Neither the process nor the chief parts of the apparatus are claimed to be new. The claim in the patent which the defendant is charged with infringing is in these words:

"The arrangement of the carbureter with a motor wheel, said motor wheel being driven by a descending weight or other equivalent mechanical power applied to force the air through the carbureter to the burners, said carbureter being placed within a vault by itself, separate from the building to be lighted, the whole arranged and connected with pipes, substantially herein—that is, in the specification—described and set forth."

It appears by the proofs that, prior to the invention of the patentees, attempts to produce and bring into general use gas manufactured by forcing atmospheric air through or in contact with volatile oils under such pressure that it was suitably impregnated or carbureted were liable to two difficulties:

The chief of these was that, under any already devised arrangement, the danger of explosion, as an incidental result of the escape of gas from the carbureter, was very great; and this not only *per se* hindered its use, but made it difficult or impossible to procure insurance upon buildings so lighted. Another difficulty lay in the fact that, in passing the gas from the carbureter through the distributing pipes, whenever the temperature of the pipes was lower than that of the atmospheric air, condensation occurred, leading into the pipes not an obstruction merely, but a highly inflammable liquid, greatly inconvenient and dangerous.

If an attempt was made to obviate these objections by locating the apparatus in apartments separated from the building lighted, there was a necessity to provide for the changes of temperature in our ever-varying climate, which were liable to cool the carbureter to a degree which made it practically inoperative; or, if the apartment was artificially heated, the danger of explosion was not avoided.

I shall not enter very fully or minutely into discussion of the details of the patented apparatus, since most of them are confessedly old. The chief feature of the improvement is in the placing of the carbureter underground, in a vault separate from the building to be lighted, at any desired or convenient distance therefrom, while the power and the motor, by means whereof the atmospheric air is forced through pipes leading into the carbureter, is placed in an apartment in the building, or near thereto, conveniently accessible with or without a light, as occasion may require, whenever for adjusting the motive power or machinery thereof it is desired to do so. Such apartment being thus wholly separated by walls or intermediate earth, or both, no gas from the carbureter pervades it, and no danger of explosion arises.

Besides this result, which may be claimed to be purely incidental, and perhaps not novel, because it would result from any mere separation of the two parts of the apparatus by placing them in different apartments, a most important result is effected in making such separation practicable, and at the same time producing an even, regular supply of the gas by the carbureter unaffected by changes of temperature above ground, and effecting also a preliminary condensation before the gas enters the distributing pipes, which relieves the operation of the apparatus from the objection secondly above named.

Three questions are hereupon raised. Was this new arrangement patentable? Was it new, and were the patentees the first inventors? Does the defendant infringe?

1. Upon the first question it is insisted that the patentees merely changed the location of the carbureter, and that the mere change in the location of an old device is not patentable.

In *Marsh et al. vs. The Dodge and Stevenson Manufacturing Company*, in the Northern District, at the June term, 1873, (5 *Official Gazette*, 395) I had occasion to say that "mere change of location is not invention." But it was also held that "where change of location involves the employment of new devices to adapt an apparatus for use in the new position, and a beneficial result is produced, then this location, in its connection with such new devices—that is the means by which the result is produced, and not the result itself—is patentable; and where such change of location brings into existence a new combination to produce a new and useful result, such new combination is patentable."

This illustrates the nature and patentable character of the arrangement described in the patent in this case. By the new arrangement the patentees bring into contributory and effective cooperation, with a carbureter and the machinery for supplying atmospheric air thereto, the earth and its even temperature below the surface, and obtain protection from the efflux of gas from the carbureter and its accumulation in the frequently visited location of the motor, and from the danger of consequent explosion, and secure, by the passage of the gas from the carbureter through a cooler medium, the preliminary condensation, which makes the use of the gas in the building, and its passage through the distributing pipes safe, convenient, and valuable.

It is no impeachment of the patent to say that this is only making use of the natural laws which, operating below the surface, make such new location desirable as a matter of mere judgment. It is more than that. It brings into conjoint operation and effect new elements, working actively and also operating passively to produce the result, and to produce the ultimate and final result in a better manner—in a manner which combines safety with convenience and utility as had never before been.

The most important inventions ever made consist in subordinating natural elements or controlling natural laws to the production of useful results.

I cannot doubt that the invention of the patentees was patentable, as truly so as it is abundantly proved to be greatly useful and valuable.

The question of fact—was this arrangement new, and were the patentees the first inventors—must be answered in the affirmative.

I cannot, in a brief opinion, review in detail the evidence. I must content myself with saying that, after a careful examination of the testimony and attention to the very full argument of the counsel, the conclusion seems to me clear that no prior devices or arrangements anticipated the patentees. 2. Does the defendant infringe? It was but feebly, if at all, insisted that, if the arrangement of devices by the patentees was entitled to be called an invention, and was patentable, as above explained, the defendant did not employ the distinguishing features or characteristics. The details in the construction of his carbureter were not precisely like that used by the complainant, but those specific features were not claimed. The substantial operation of his carbureter and the mode of impregnating the atmospheric air are alike in both.

The difference between the apparatus of the defendant and that of the patentees chiefly relied upon is that, whereas the latter make the cavity below the ground a vault having surrounding walls, the defendant, having inserted his carbureter in the cavity, surrounds it with earth in direct contact therewith, and carries up to the surface a pipe through which to replenish the carbureter with oil, instead of having a removable opening to the vault below employed by the patentees.

The substance of the invention the defendant uses. The means of its effective useful operation are the same. The even moderate temperature of the earth, the underground passage of the gas, and the effect thereof are alike used in both. The difference in the construction of the carbureter used by the patentees, as described in the drawings, may make a more permanent opening about its sides desirable; but I cannot regard these details as of the substance of the invention. The apparatus of the defendant does substantially operate by the same means, in the same way, and to produce the same result.

The complainant must have a decree for an injunction and account in the usual form. (E. W. Stoughton and William Stanley, for complainant. Edmund Wetmore, for defendant.)

**Inventions Patented in England by Americans.**

[Compiled from the Commissioners of Patents' Journal.]  
From June 4 to July 5, 1875, inclusive.

- BACKING ELECTROTYPES.—J. S. Brooks, Pittsburgh, Pa.
- BAG FASTENER.—A. M. Miller et al., Sturgis, Mich.
- BASSEMER CONVERTER.—J. E. Fry, Johnstown, Pa.
- BOTTLE STOPPER.—N. Thompson (of Brooklyn, N. Y.), London, England.
- BOTTLE STOPPER, ETC.—N. Thompson (of Brooklyn, N. Y.), London, Eng.
- BRAKE.—G. Westinghouse, Jr. (of Pittsburgh, Pa.), London, England.
- COMB.—A. Poppenhusen, College Point, N. Y.
- COTTON OPENER, ETC.—R. Kitson, Lowell, Mass.
- CUTLERY.—J. W. Gardner, Shelburne Falls, Mass.
- DOOR FASTENER, ETC.—E. C. Bacon (of Boston, Mass.), London, England
- FIRE ARM.—J. D. Greene, London, England.
- FRICTIONAL ELECTRIC BATTERY.—G. M. Mowbray, North Adams, Mass.
- GAS STOVE.—J. L. Sharp, New York city.
- GLAZING LEATHER, ETC.—R. Lee (of Phila., Pa.), Huddersfield, England.
- GRAINING LEATHER, ETC.—R. Lee (of Phila., Pa.), Huddersfield, England.
- GRATE BAR.—F. S. Smith, New York city, et al.
- HOT AIR FURNACE.—S. Smith et al., Worcester, Mass.
- LAMP REFLECTOR.—C. M. Murch, Cincinnati, Ohio.
- LEATHER PULP, ETC.—B. James, Worcester, Mass.
- LIFE RAFT, ETC.—J. Cone, Bristol, Pa.
- LOOM, ETC.—T. A. Dodge, Cambridge, Mass.
- MACHINE GUN.—W. B. Farwell, New York city
- METAL TUBE, ETC.—G. J. Brooks, Brattleboro', Vt.
- NUMERICAL TOY.—W. Rose, New York city.
- ORDNANCE.—D. Davison, New York city.
- PAVING COMPOSITION, ETC.—J. R. McClintock, New Orleans, La.
- POISON VESSEL, ETC.—W. M. Caterson, Philadelphia, Pa.
- POLISHING COMPOSITION, ETC.—F. Atwater, Norwood, N. J.
- REAPING MACHINE.—Gammon et al., Chicago, Ill.
- SIVETING MACHINE.—J. F. Allen, New York city.
- REFLE TARGET.—J. G. Bennett, New York city.
- WOOD SCREWS, ETC.—T. J. Sloan, New York city.
- WRITING DESK.—W. S. Wooton et al., Indianapolis, Ind.