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THE PATENT OFFICE BEFORE CONGRESS AGAIN.

Mr. Jenckes, from the Committee on Patents in the House, recently endeavored to secure the passage of a bill appropriating \$6,000 additional compensation for draftsmen, and \$15,000 to enable the Patent Office to lithograph drawings.

Mr. Beck opposed these amendments on the ground that they had not been before the Committee on Appropriations. Mr. Scofield got considerably muddled about the proposition of Mr. Jenckes, and thought the latter gentleman desired to place this money in the hands of the Secretary of the Interior and the Commissioner of Patents, so that they could take it from year to year without coming to Congress and asking for appropriations.

Mr. Jenckes said “No sir!” Whereupon Mr. Scofield desired to have the amendment read by the clerk, and finding that he had got off the track, dropped quietly into his seat and said no more on the subject.

Mr. Dawes, Chairman of the Committee on Appropriations, seemed to understand the matter better, but opposed the measure for the same reasons as were given by Mr. Beck; but Mr. Dawes waxed wrothy, and charged that the Patent Office, though growing in importance every day, had been seriously crippled between thieves on the one hand and inconsiderate legislation on the other, but he was unwilling to vote for Mr. Jenckes' amendment simply because he considered it an irregular way to appropriate money; and furthermore he was unwilling to allow the amendment to be inserted in the deficiency bill in the last hours of a fragmentary session of Congress.

Mr. Ela favored the measure for the purpose of allowing the Patent Office to avail itself of the new process of photolithography; by which every examiner, and every other person who may wish, may have copies of the drawings which are annexed to specifications of patents at the very low rate of fifteen or twenty cents each. “I hold in my hand,” he said, “copies of some of those drawings by this new process, which cost only about fifty cents, while by the old process of producing copies for presentation to the courts, or for any other purpose, they might cost anywhere from ten to one hundred dollars. I look upon it as one of the most wonderful inventions of the age, and it is of such importance to the Patent Office that I hope this House will not refuse to allow that Office to avail itself of its use. It will not only be a great saving to the Government, but it will also be of the greatest advantage to those who have dealings with the Patent Office. By this process we not only get perfect copies of these drawings, but they may be enlarged or decreased in size as those who need them may require.”

Mr. Jenckes tried again to convince the House that his amendment was necessary in order to enable the Patent Office to carry on its work harmoniously and to meet the just demands of inventors, but Mr. Dawes was inexorable though confessing that he did not know what were the necessities of the Patent Office. He seemed to cast some blame upon the Commissioner of Patents for his (Dawes') ignorance, as the Commissioner had been called before the Committee on Appropriations in reference to the estimates for the coming year, “but they got no information from him, and they brought in their bill without the benefit of his experience or knowledge of the wants of that department.”

Mr. Jenckes, in his anxiety to get the measure through, as-

serted that “the Patent Office must necessarily break down after the first of July next, unless some such legislation as he proposed was carried into effect. The announcement of such a calamity had no effect upon Mr. Beck. He was unwilling to throw open the flood-gates and permit the Commissioner of Patents to expend money when he chooses.

In connection with the discussion, Mr. Jenckes is officially reported to have stated that the receipts of the Patent Office this year will exceed the expenditures by more than \$1,000,000, which seems to us almost incredible, as the monthly receipts since January have not averaged quite \$60,000.

In spite of Mr. Jenckes' persevering efforts, however, the amendment was lost, and we must now look forward to the fulfillment of his gloomy prophecy. We trust, however, that the Commissioner of Patents, upon whose shoulders appears to rest the responsibility, will take some active measures to avert the calamity.

And here we should like to inquire what is the matter with the representatives of the thriving little State of Rhode Island? Senator Sprague has recently uttered some dismal forebodings of evil to the country; and now Representative Jenckes predicts an utter break down of one of the most useful departments of the Government unless a few more thousands of dollars are appropriated towards its expenditures. We can assure our readers, however, that they need not fear any such calamity. The business of the Patent Office will go on, and as usual. The alarm sounded by Mr. Jenckes, however, will do no harm. It may serve to wake up the officials to a keener sense of their duties.

THE HEATING OF BUILDINGS.

Nearly as much bosh is said and written on the subject of heating buildings as upon the subject of ventilation. In fact, the subjects are so intimately related, that it is almost impossible to consider them separately. We believe that the whole subject has been too elaborately treated by those who, in aiming to be ultra scientific, have failed to be practical.

There are four classes of heating apparatus which have had more or less favor, and some of which have been very generally used, viz.: Open fires in grates or fire places, inclosed fires (including the whole generation of coal, wood, and gas stoves), steam heaters, and hot air furnaces.

Of all the devices which the evil genius of invention ever put into the head of man to destroy health and comfort, we believe hot air heaters to be the very worst. Nothing but the utmost care, joined to the best constitution, can prevent an army of ills from subduing the health of those exposed to the influences of these agents of destruction. We speak from knowledge, having had a large experience in their workings, and the opinions we here express, are based upon sound science. It is almost impossible (the experience of those who have had the management of hot-air furnaces will bear us out in this), to so adjust them that an equable temperature can be maintained in any large building. They are most sensitive to external winds, which, as all acquainted with the subject know, influence, to a great extent, the supply of air from without. Even if vaned hoods be placed over the external openings, which admit the vital fluid, it will at once be seen that the varying strength of a wind, blowing from any direction, will render the supply fitful.

But this is not the only, nor the worst evil, attending the use of hot-air furnaces. Recent researches have established, beyond a doubt, that external warmth should be received by radiation; and that any method of warming the body by contact of its surface with a heated fluid is defective and sure to be attended by evil consequences.

Leeds, in his lecture on ventilation, says: “Convected heat is the great curse of the American people. It is that dry, lifeless, withering, debilitating, poisoned stuff with which most of our best houses and public buildings, and, most unfortunately, many of our school houses, too, are filled and warmed, and which is filling our systems, and warming and drying all the life and substance out of about two-thirds of the people of this country.”

The same lecturer points out that the lower the temperature of the air we inhale, the more readily and copiously the lungs eliminate carbonic acid, and the languor and depression we feel, on a hot summer day, is attributed to this cause. In the hot-air system of warming, the surface of the body cannot be kept comfortable unless the air be maintained at a temperature much higher than necessary when radiant heat is used.

Professor Silliman has also pointed out that the combustion of organic matter which the air contains, partially unfits it for breathing, which adds to the category of charges against this most irrational way of heating rooms.

Bad as the system is, gas stoves are worse; at least such as provide no escape for the gases of combustion. They may, perhaps, be admissible in summer for culinary purposes, when doors and windows are opened wide, but we should as soon think of sleeping in an apartment connected by an open pipe with the nearest sewer, as in a close room warmed by a gas-stove.

There remain stoves, and steam apparatus, and grates or fire places, to which, in the order named, we prefix the adjectives good, better, best. A great hue and cry have been raised over the effects of stoves upon health. While we admit they have faults of both a positive and negative character, we believe these faults have been much over-rated. It must be confessed, however, that cast-iron stoves are open to the charge of not fully imprisoning the poisonous gases of combustion, while in other respects, they leave much to be desired. It is doubtful, however, whether anything will be devised that, for all classes of people, in all conditions of life, could take the place of the cast-iron stove.

Steam heaters, although not so good as open grates or fire

places, come so near perfection, when properly constructed, that, when the consideration of their adaptability to heating large buildings is taken into account, they may be said to be the best of all the means yet invented for general heating purposes. They are deservedly popular, but the highest ideal of comfort, health, and cheerfulness in a heating apparatus seems to us inseparable from the open fire, with its cheerful glow, and its outward draft, which sucks in and devours all poisonous exhalations. It makes dust in a room, and this provokes good housekeepers to wrath, but, upon our own temper, we have found its effects to be most bland.

AN IMPORTANT OFFICE TO FILL.

TO PRESIDENT GRANT:—

You have doubtless been reminded, ere this, that there now exists a \$3,000 vacancy in the Board of Examiners-in-Chief of the Patent Office, and it is very likely that several worthy gentlemen have been suggested to you as proper persons to fill that vacancy.

We desire the place neither for ourselves nor for any relative or friend. We have never thought it desirable to urge the claims of personal friends for Patent Office appointments. But representing about one-third of the whole clientele of that Office, we claim a right to say something to you about the selection of a proper person to fill this important position. In the first place the interests of anxiously waiting appellants require that the vacancy should be filled with the least possible delay. The cases on appeal are rapidly increasing, the interests of inventors are suffering, and it is of paramount importance that this work should be immediately and energetically reinforced. In the second place, and in view of the present composition of the Appeal Board, it is vastly important that the place should be filled by an active, vigorous expert, one who can grapple energetically with the many cases that now press the Board for Examination.

There are such men in the Patent Office—they are to be found among the younger and more active employés. We beseech you to give us a man of energy, and to avoid filling the place by the appointment of some venerable gentleman who might better be placed on the retired list. The Patent Office is increasing in importance; its duties are now indifferently performed; there is already felt a lack of energy in the management of its complex details, therefore it behooves you to select an energetic man, one who can make himself felt in the discharge of his duties.

Very Respectfully, Yours,

MUNN & CO.

PERSONS UNFITTED FOR THE COMMISSIONERSHIP.

There are, as usual, numerous applicants for the office of Commissioner of Patents, and all, or nearly all, are Solicitors of Patents. The attorneys for several of the mowing machines are especially prominent; the sewing machine patentees have their favorites, while india-rubber is content with the present state of things. Now, all these gentlemen may be worthy and competent; but we submit that they cannot be the proper persons to pass upon such questions as come constantly before the Commissioner of Patents. It is safe to say that there are no patent lawyers who are not pecuniarily interested in inventions, and a mere assignment of all such recorded interests would scarcely satisfy the public which sustains this important bureau of the Government. Aside from this, inventors would scarcely believe that a solicitor, who had for years been supported by the owners of a patented monopoly, would at once conquer the prejudices with which the earnest advocate is so apt to become imbued. The head of this department acts as a judge in suits of vast importance, and should be selected with a view to his judicial experience and acumen, as well as his executive ability; and not because of any part which he may have enacted in questions of priority and infringement.

We fully indorse the above from the *New York Times* of April 9th. A Commissioner of Patents should neither be a patentee, solicitor, or patent lawyer, but a man of good executive ability, and possessed of sufficient legal experience to weigh evidence and decide promptly in all cases that come before him. To this add honesty and energy, and you have all the requisites for a good Commissioner.

THE PACIFIC RAILWAY IMBROGLIO.

For some time past rumors have been hurling in the air that the Pacific Railway would soon develop one of those great swindles which occasionally startle the community. A very curious lawsuit now going on in this city, between James Fisk, Jr., on the aggressive side, and the Union Pacific Railroad on the defensive, is operating to reveal some curious facts concerning an intermediate agency called the “Credit Mobilier,” named after a similar financial vehicle in Paris, which went to smash about a year since. In the progress of the suit it was deemed important to get access to certain books of the “Credit Mobilier,” but the key of the safe could not be found—some one holding it had gone to New Jersey, and it was uncertain when he would return. Here was a dilemma, which Justice Barnard, of the Supreme Court, solved at once by ordering a receiver to open the safe. This functionary, in company with several ingenious iron-workers, broke open the safe, got the books out, and bore them in triumph into the presence of the learned judge. With the aid of these, it is expected that some important revelations will be brought to light; but we apprehend that the real meaning of this seemingly inexplicable litigation will show itself as the plot unfolds, and respecting which we are beginning to get our first knowledge from certain proceedings in the Senate instituted ostensibly to protect the rights of stockholders. Senator Stewart, of Nevada, in some remarks on the subject, said it was alleged that the “Credit Mobilier” had made enormous dividends by using the Pacific Railroad. This the members of the “Credit Mobilier” admitted. The senator also said that they were encumbering the road with contracts ahead