THE LANDMARKS GOING.

Those who are familiar with the highways and byways, the ins and outs of London—and we have hundreds, perhaps thousands of them close by—remember and perhaps retain something of an interest in the old clock in St. Paul's cathedral that has done duty through so many generations. It is now to be taken down and replaced by one of more modern construction. This is pronounced a piece of vandalism generally, and by some but little less than desecration, and is most earnestly protested against. We learn that the clock, which was put up by Langly Bradley in 1708, is in splendid condition and might, to all appearances, go on for another two centuries without failing to bear accurate record of the passing time. It is a grand old clock, remarkable for the magnitude of its wheels and the fineness of its work. It cost $1500 to build. Its two dial plates are 51 feet in circumference, and the hour numerals are 2 feet and 2½ inches in height. The minute hands are 9 feet 8 inches long and weigh 75 pounds each, and the hour hands are 5 feet 9 inches long and weigh 44 pounds each. The pendulum is 16 feet long. It is an eight-day clock, striking the hour on the great bell, which is suspended about forty feet from the floor. The head of the hammer weighs 145 pounds and the clapper 180 pounds.

The iconoclasm of progress has one thing, and perhaps only one, to commend it—it is impartial and strikes here and there alike with the uncertainty in one respect and absolute certainty in another of lightning. Landmarks which are sacred in some eyes are nuisances in others, and generally the latter control the situation. It took a protest amounting almost to an uprising to save our Eagle Gate, and it did not altogether escape the hand of the leveler as it was; but still we have it and that is something to be glad of.

THE RIGHT THING AT THE RIGHT TIME.

Presence of mind in the presence of difficulties is sometimes of inestimable value, as it enables the ingenuity to have better and more direct play. We read that several years ago a Spanish steamer while crossing the Bay of Biscay in a violent storm, gave indications by various means that something was wrong with the screw propeller or the shaft operating it outside the ship, meaning the open space between the stern and the rudder post where the screw revolves. There was no dry dock in any of the ports on the coast where the ship could go to be examined; and on arrival at Vigo it appeared as if there was no alternative but to remove the cargo from the stern, and by placing it forward thus lift the screw propeller and shaft to the surface of the water. The alternative, simple as it was, meant a serious delay and a great expense. Before commencing to remove the cargo, another consultation was held. It was then decided to put the stern of the ship over a bed of light colored sand; and as the water was very clear, there might be a possibility of ascertaining the extent or cause of the mishap. For two days after the vessel was so placed, the wind caused a ripple on the water, which effectually prevented anything being seen. It was then suggested by some one on board to try the use of oil on the surface of the water round the stern of the ship. The effect was most satisfactory. The water was becalmed as if by magic and it was then seen that the wedge or key which keeps the propeller in its place on the shaft had come partly out, and thus left the screw loose on the shaft, which caused the noise. By continuing the use of oil for a few hours the wedge was ultimately driven into its place and secured. Many days of detention and the use of costly appliances and labor were thus saved.

Incidents illustrative of how much can be saved in time, wear and tear, exasperation and money by the application of a little coolheaded judgment are numerous — as much so perhaps as are the antitheses, which show us how much of destruction, waste and turmoil are ofttimes the result of doing things rashly or without sufficient consideration. A conspicuous incident in the former class occurred in an obscure place in Germany some years ago. An iron bridge of considerable length, whose weight was about 200 tons, had been constructed in England for the place referred to and by some mishap, the bridge, when finished, was found to be some distance "out" to one side, an error which the proprietors insisted should be rectified. To take down and re-erect the bridge would be simply ruin to the contractor. But necessity is the mother of invention. It was summer time, and the contractor proceeded to find the amount of expansion which was caused by the heat of the sun over the whole length of the bridge. He next ascertained what contraction took place in the night by cooling. Armed with these data he thought it might be possible to bring the bridge to its proper position in a few days. The bridge, of course, in its ordinary condition, expanded from the center, pushing its two ends outward, or farther apart, and again contracting toward the center. Taking advantage of these conditions, one end was made fast in the morning, and the bridge was forced to expand from that immovable point, instead of from the middle, as formerly. When the iron composing the bridge had expanded to its full extent in the direction intended, that end was released and the opposite end made fast. The bridge then contracted toward its true position. Thus, whatever was gained by the day's expansion was secured by the subsequent contraction when the metal cooled at night, and the process being renewed day by day, the work was successfully accomplished.

Instances of the application of the principle of expansion and contraction of metals are numerous, one of the most prominent and best known in this country being that of the great structure across the Mississippi river at St. Louis. A beam or girder was a trifle too long to enable the builders to get it into the socket designed for it and here a delay with loss and annoyance was threatened. All at once came the thought that there were other means than undoing a portion of the work and having the beam cut off to shorten it; that if the iron could be made cold it would shrink perhaps enough for the purpose; so it was wrapped in ice and in a short time that part of the work was completed. A similar case, with heat as the agent, occurred in France recently. The walls of a large building in Paris were observed to be giving way by bulging outwards, and the problem was to bring them back to their vertical position. For this purpose a number of bars of iron having screws and nuts on each end were let through the opposite walls and across the intervening space between them. The nuts and screwed portion of the bars were outside. The bars were now heated by a number of lamps suspended below them until they had expanded as much as possible, and the nuts screwed up against the outsides of the two opposite walls. The lamps were next removed, when the heated bars, in cooling, gradually contracted in their length, bringing the walls very gently, but with irresistible force, into their normal position.

Now, if some thoughtful person of scientific bent, or otherwise sufficiently endowed, would but drop into our midst a plain, speedy and adequate means of building our long-proposed and much-talked-of railroad to Deep Creek, he would confer a boon upon local humanity. We have the means, the ability and the right of way—we only need some one to take hold in the right manner and with the needed spirit.

THE SMALLEST GOVERNMENT.

It takes a long time to find out all about the world we live on. Perhaps it would be a more correct way of putting it to say that we never know all that is to be known in that regard. A good many of us since we went to school have been in the habit of looking upon the republic of Andorra, situated on the mountain ranges between France and Spain, as the smallest government in the world, but it seems we were mistaken. The *Million* comes to our enlightenment with the information that the territory of Moresnet, lying between Belgium and Germany, is the smallest government in the world. It has a population of nearly 2000. The people are devoted entirely to the tin-mining industry. There is no military service and election days are things they never heard of. There is a senate of ten members who are appointed by the mayor. He gets his place by being appointed by two delegates, one from Germany and one from Belgium. The police force consists of one man. He is paid out of the annual revenue, which is about 1200 francs; this also pays for the maintenance of the roads and the schools. The territory was made independent in 1815, to settle a dispute. Belgium and Germany both wanted it on account of its tin mines, but neither of them got it. The territory contains a trifle over two square miles of ground. Of course, Moresnet was on the map all along and the circumstances of its creation and history figured in the books—somewhere; of course, also, we must have seen these accounts, and, like many another thing once pondered over, forgot them. It is not, however, greatly to be wondered at; Moresnet is too small a matter to be kept in constant recollection