

about 1851 the Imperial Government waived their claim to the whole of the *Palais* "Harbour" in front, in favour of the City Corporation, granted them by letters patent from the Crown about the same time.

From early records it would appear that a main guard was formerly posted for duty in a guard-house on the opposite side of St. Nicholas street, not only to protect the old "Palais" premises, but to guard and overlook the more valuable public property to the eastward of that street. This included the Royal Dock Yard, King's Wharf, and a number of store buildings extending as far as "La Canoterie," nearly in front of the old blockhouse in Nunnery bastion, and bounded on one side by the foot of the cliff (now St. Charles street) and on the other by the high water mark, corresponding nearly with the present line of St. Paul street.

The ruins of "*le Palais*" and its accessoires at various times since 1775 have been fitted up temporarily for uses in connection with the troops of the garrison, such as stabling for horses, fodder sheds, washing apartments, military stores, caretaker's and issuer's quarters, fuel sheds &c., and the vaults were leased by the Ordnance at a later period for storing ice, valuable wines and liquors and for other purposes to the city inhabitants.

On these occasions the Government (military authorities) used to cover in the ruins with feather edged boards or shingles. During the great fire on 28th May, 1845 in the St. Roch's Suburbs, some thousands of cords of wood were piled in the Fuel Yard (King's Wood Yard) and several hundred tons of coal was stored in a lean-to-shed against the rear wall of "*le Palais*;"—the whole was consumed—the coals burnt and mouldered for nearly six months, and notwithstanding the solidity of the grouted masonry—such was the intense heat—that like a fiery furnace portions of the old wall gave way, and left the remainder, which had been exposed to the heat, in a very dilapidated condition.

On this occasion it was reported that an unfortunate woman and two children (I believe dwelling on the premises) were burnt to death in the fuel yard. If I remember correctly, great efforts were made by Mr. Bailey, a Commissariat Officer, and Mr. Boswell owner of the adjoining Brewery, to save the lives of the victims; these gentlemen in earnest went through a fiery ordeal, and it was not until their coats had been burnt off their backs and the hair of their heads and eyebrows crisped (if I may use the expression) to a cinder, that they had at last to fly to save their own lives.

On the withdrawal of the Imperial troops from Canada in 1870-71, the whole of the old *Palais* property was transferred to the Dominion Government.

I have the honor to be

Your obedient servant,

CHARLES WALKEM,

Late R. E. Civil Staff in Canada.

Ottawa,, July 1876.

RETURNING STEAM TO THE BOILER.—Our London exchange, *Iron*, says that a novel experiment was commenced on Friday with the 80 horse-power engine in Portsmouth dockyard. It was with a new pumping process, by which the inventor, Mr. R. M. Marchant, of Hatton Garden, undertakes to return saturated steam to the boiler of any engine, instead of condensing steam from the condensers. In other words, after the steam has exerted its power in the cylinder, the manufactured article itself is to be taken up and re-pumped into the boiler so as to be used afresh. Mr. Marchant claims for his invention that he is able to re-pump steam into the boiler without any expenditure of fuel beyond that which is required to overcome the mere friction of the pumps, and without subjecting them to pressure. The inventor contends that by the law of gases the pressure exerted by steam on one side of the piston represents by its elastic power, as in the case of the resistance of a spiral spring, the same expression of power in pressure on the other side of the piston; so that the elastic charge is always ready to give back the exact power expended to the purpose of its expression. Consequently, if Mr. Marchant's reasoning be correct, he expects to be able to return in volume and pressure to the boiler the equivalents of the power expended on the pumps, and so to apply the steam again to power. It therefore follows that, inasmuch as returning boiling water into the boilers, as steam will save the far greater cost which is expending in manufacturing it. As steam cost 75 in the 100 of the fuel which is consumed in its production, the saving which will be effected by the successful application of the principle will be great.

INDUSTRIAL DEGENERACY.

Much that is said in the following article, is applicable also to Canadian artisans.

The Centennial Exhibition, so far from fulfilling the peace bearing part designed for it by promoters, seems likely to be associated with little else than discord and melancholy reflections on all sides. In its own country it has long been a subject of contention between bitterly quarrelsome parties, and now it has indirectly furnished the text to a well-known German authority, Professor Reulaux, for a bitter sermon against his own countrymen. That gentleman is director of the Government technical school at Berlin, and he is also chief commissioner to the Philadelphia Exhibition. In the discharge of his duties he has of course made a careful inspection of the exhibits in the German department, and in a letter to the *National Zeitung* he has condensed his views, as the *Times* correspondent remarks, into three condemnatory sentences, one more crushing than the other. The first conclusion to which he arrives is that the main object of German manufacturers appears to be to produce an article which shall be cheap and bad. This, judging from his second observation, he considers they are well able to do, inasmuch as the men they employ are deficient in skill and wanting in taste. As a third and crowning remark upon the character of the German articles exhibited, the Professor is constrained to add that they show that the German nation is steeped in utter servility, so great is the number of Bismarck statues, Red Princes, and other heroes of war, in every conceivable material, from gilt bronze to common soap. These, it must be remembered, are the thoughtful utterances of the person officially deputed to report upon the latest cosmopolitan show of manufactures; and when to this position is added the responsible and dignified home status of the reporter, it is not surprising that this report has caused a painful excitement in German industrial circles. There seems to be no dispute as to the facts, whatever may be the general opinion as to their cause. German goods are now recommended by cheapness, not by quality, and all most concerned are agreed that careful finish, formerly a common attribute, is no longer such. Various reasons are given for this decline, but though differing in some respects, they are all probably reducible to one common source, and that, the political changes of the last few years. In the old days, when Germany turned out work that was and still is the subject of universal admiration, whether from the excellence of material, beauty of design, or careful execution, she was no more than a collection of communities. Capital was scarce, the people unpretending and stay at home. Their interest were generally bounded by the walls of the city within which they were born, and lived, and died. The craftsman of early times served a long apprenticeship, grew up and worked before the eyes of all who knew him, stimulated by the rivalry of his fellow-townsmen, and frequently encouraged by the personal patronage of discriminating patricians. His life was, as a rule, passed in comfort and freedom from excitement; thus, his trade became, with him, something more than a means of procuring an existence, it was the occupation of his life, and, in some cases, the way to municipal honours, and frequently to even European fame. This condition of German artisans, of course, suffered a gradual modification, due to the improved facilities of communication, difference in the value of money, and so forth, and in later times the disturbed state of Europe exercised a very powerful influence. Nevertheless, we believe we are not wrong in affirming that, up to the time of the establishment of the North German Confederacy, the traditional aspect of German life, of the class above-mentioned, had not been entirely lost sight of, and certainly, up to that time, the decadence in German manufactures had not made itself prominent.

Since the establishment of the confederacy, barriers have been thrown down on all sides. The central authorities, though unwilling to concede parliamentary government, hastened to satisfy the demands of advanced political parties on all sides. The same policy prevailed at the re-establishment of the empire. The restrictions which formerly operated to prevent migration from place to place were removed, the strictness of the laws of apprenticeship and contract was relaxed, and facilities were afforded for marriage and relief of the poor. Moreover, many old trade regulations were swept away. When it is borne in mind that all these changes were made during a period of great commercial prosperity, when capital, finally augmented by the huge treasure won by war, was abundant, and capitalists seeking on all sides for workmen, it is not difficult to understand how matters have come to their present pass. History has told an old tale anew. The stern-domesticity, the grave contented spirit of