

## COAL TAR AND ITS PRODUCTS.

Solomon was no doubt right when he said there was nothing new under the sun; right we mean with reference to his own time; the area of railways, of electric telegraphs, of Ocean cables, of Balloons, and of a thousand and one other things with which we are now familiar had not then begun; weekly newspapers at a dollar a year, were not then a "family necessity," in every house, and many useful and curious things which now form as it were a part of our every day life were then unknown. We had been led into these ideas by reading the following remarks on Picric acid in the last number of the *Manufacturer and Builder*:

Phenyle Alcohol, or Carbohc Acid, as it is most commonly called, is a creosote made from coal tar, as the ordinary creosote is made from wood tar. From it the so called nitro-phenol is produced, and from this Picric Acid. This substance is now extensively used as a dye stuff for silk and wool, to which it gives an intense yellow color. With a mordant of alum and carbonate of potassa it forms a very permanent color, which no washing can remove or bleach. It is so intense a color that a pound of silk requires only from 50 to 60 grains of picric acid according to the shade desired. A neutral picrate salt gives, with a neutral indigo solution a beautiful green. Being bitter, like gentianina or quinine it has been used as a tonic with success, in doses of small fractions of a grain as a remedy against intermittent fevers.

When heated, picric acid melts, and finally explodes violently. Its compounds however, chiefly those with alkalis, requires less heat to explode. Some of them detonate, like nitro-glycerine, even by mere percussion, and thus offer a promising field of research for those modern chemists, who busy themselves to promote the warlike destructive tendencies of this age.

Picric acid being intensely bitter as above remarked, (*Pikros*, in Greek, means bitter) it has been used instead of hops in beer with profit to the brewer, the small quantity of one grain in every eight gallons being sufficient. As it also possesses intoxicating qualities, it is a remedy so far, for a deficiency of alcohol in beer, in overdoses it is poisonous of course, as most things are with which we are acquainted. Some time ago an article went the rounds of the press, that sparkling champagne was made from the benzine of petroleum. Since this benzine is a product in which the elements are not so combined as to allow the Chemist to make a transformation of this kind such a report is all nonsense.

In the picric acid, as used in beer however, we have a second example of a coal tar (not petroleum) product furnishing an ingredient of human food or drink. The first was the so-called oil of Mirbane, also a produce of coal tar, and nonextensively used as a perfume, and sold highly diluted by grocers as a flavoring extract, under the name of bitter almonds, and used to flavor puddings, jellies, etc. Here then is a multitude of things useful and otherwise which can be obtained from the one despised and unsavory compound known as coal tar. The well known aniline dyes, from the brilliant and beautiful Magenta, down through all their grades to black, are also a product of this wonderful substance, which drives bugs and worms from our beds in the house and those in the garden; preserves our cabbages and our trees from caterpillars; defies as carbolic acid, time and heat to taint our food, and fevers and malaria to affect our vitals; paints our roofs and japans our iron-

ware. Henceforth if a man wishes to richly dower his daughter, or benefit the human family generally, let him no longer sigh for the gold of California or the Madoc mines. but let him set his mind on a goodly store of barrels, and a strong interest in the management of extensive gas works, and he will have performed his duty to his family, and served his day and generation nobly.

## THE LOT OF THE ENGLISH LABORER.

If "Reynold's" newspaper in London is to be trusted the poor laborer in England, has a hard time of it. "Reynold's" says:—

"The lot of the poor labourer is hard—very hard. He is doomed to a life of toil, and but in rare instances does he reap the frugal reward of his unremitting industry. He is liable to painful reverses consequent upon the fluctuations of trade. He enjoys, even at the best, but few of the comforts, and none of the luxuries, which he observes around. In the rough and rugged journey of life he finds little to make his path smooth, much to make it rough. He may toil from morning till night, until disturbed by sickness or age; and yet he finds that, although a creator of wealth for others, he has been unable to realize a modest competence for himself. He observes a powerful league against him in the shape of capital and influence. He has no friends besides the pawnbroker, and no hopes beyond the workhouse or the grave. Thousands of workers in this Christian and opulent country are in a far worse condition than were the negro slaves in America; for they had masters who did care for them, either from principle or interest. They did not want for bread, raiment, or shelter, even when they could work no longer. Contrasted with many a British producer, Black slavery in the Southern States was never so bad as is white slavery in Puritanical England. However bitter and humiliating, the truth must be spoken; and we think we speak the truth.

The agricultural labourer fares scarcely so well as a beast; not half so well as the cows and horses he sees on his employer's farm. He is expected to work hard and for long hours together, to herd like a pig and to live little better. He cannot strike even if he had the will, for his "mates" do not combine for their mutual benefit; in fact, are too ground down to possess the intellectual force necessary for combination. He is ignorant, brutal and degraded; for which advantages, he is mainly, indebted to his superiors, "the lords of the soil," who thrive on his sweat. They keep him poor, and miserable, and naked that they themselves may flourish and wax fat, wear purple and fine linen, and fare sumptuously every day.

Other orders of workers have found it necessary to form trades' unions, so as to protect their interests, which the greedy and grasping rapacity of masters tend to assail. Hence it is that "strikes" become inevitable. In England and the United States these have been extensive of late. Working men now possess superior intelligence, have political privileges, and a keen sense of the relationship that should exist between capital and labour. They as a rule, fulfill their duties and expect their rights. At this moment, there is a unanimous demand for the shortening of the hours of labour. Everywhere the "nine hour movement" is advocated. The working men of Sunderland "struck" because their claim was not conceded, and with a heroism worthy of a good cause, they remained "out" until their cause was gained. The

Newcastle men have followed suit, but employers continue doggedly obstinate, and seem undesirous of yielding to a fair demand, based upon justice and humanity.

## "CAMP ROSS."

"Camp Ross" is now among the things of the past, leaving its record for good or ill on the page of the Militia history of New Brunswick. Not precisely like the Arabs, who fold their tents and "silently steal away," was Camp Ross broken up on Friday morning last; the roar of the six pounders started the men from their slumbers, and then followed a scene of noise and commotion and hurrys to and fro, as tents were struck and the men made their preparations to march off with their respective battalions, to the sound of martial music filling the air with strains of inspiring melody. For hours this busy scene continued, but in the twilight of the day scarce a vestige remained to tell of the encampment, the solitary wanderer finding himself repeating with suitable variations the lines of Tom Moore, "I feel like one who threads alone some tenting ground deserted."

Having in two former issues devoted considerable space to the Camp, we may be pardoned for not prolonging the theme further. There are, however, two or three interesting incidents still demanding our attention. First we have the review on Thursday afternoon, in presence of and conducted by Col. Ross, the Adjutant General, when the men performed a number of manoeuvres in such a manner as to elicit his unqualified approbation. They also at the same time received some practical lessons in skirmishing and that particular style of attack—the "thin line of red" with skirmishes in advance and supports in reserve—by which Havelock won for himself immortal fame and saved India to the British Empire. After this the battalions were formed into a hollow square and addressed by the Adjutant General. He told them that since June last he had inspected not less than twenty thousand men, but nowhere had he seen men of finer physique, or men giving evidence of greater efficiency should their country require their services in the field. He also gave the men some very servicable advice in regard to camp life, telling them that if they were to be the defense of the country, they must make up their minds to certain privations incident to military life, and reminding them that the Dominion wanted no "feather bed" soldiers. At the close of his remarks three hearty cheers were given for the Queen, the Adjutant General and Col. Maunsell. During the afternoon the prizes won at the Rifle range were presented to the winners by Col. Ross.

On the same afternoon occurred the interesting ceremony of presentation of colors. We refer to a very handsome set of colors given to the 67th Regiment. Carleton County Light Infantry, Col. Upton, by the Hon. Charles Connell, M. P., for that County. The Drums were piled in the centre, and all things being in readiness the Rev. Dr. Lee in his sacerdotal robes,—sole emblem of peace confronting the ranks of war—advanced and read the benedictory prayer, after which the presentation was made by Miss Alice Connell, with a suitable address complimentary to the gallant 67th. The colors were received by the Junior Ensign on bended knee, and Major Raymond read the reply, after which the flag was unfurled and marched off in triumph to the centre of the Regiment. Long may it wave, unscathed by the grasp of a foe!

On Friday morning the Pickard Gold