

they amounted to feverishness, while in the remainder they were described as fever. Headache, again, was an almost universal symptom. It was absent in two cases only, and was described as not severe in only three cases. Dimness of sight was complained of in two-thirds of the cases. Drowsiness was present as a marked symptom in every instance but one, and in two cases was it spoken of as a trivial circumstance. Tremblings, and convulsive twitchings were present in seven cases out of the 25, and in one other instance, well marked convulsions were present." Wonder is expressed that out of such a group as this, deaths are not constantly occurring in a way to demand the coroner's investigation. Only one such investigation seems to have been made. The death which gave rise to it was certified by the coroner's jury to be "death by arsenite of copper." The victim, a girl of 19, whose case is told by Dr. Guy, had, for 18 months, without intermission, in spite of cruel sufferings, pursued her poisonous occupation. Her story during nearly all this time was but the common story of the workshop, only the same sort of story as Dr. Guy elicited from many of those whom he examined. During the whole of that time, Dr. Guy states, she had "suffered from eruptions about the neck, scalp, and hands, accompanied by pains in the nose, with the common symptoms of a cold, great pain in the left side, frequent vomiting of food, and intense thirst. She was first seen by Mr. Paul, the medical man who attended her, on the 15th November. She was in bed, breathing laboriously, and complaining chiefly of the pain in the side, and of frightful thirst. The countenance wore an expression of great anxiety, and the conjunctiva had a peculiar green tint. The pulse was about 120, and very small. The tongue was dry, brown down the centre, and green on each side. The vomited matter was quite green, but the discharges from the bowels had a natural colour. There was little diarrhoea. The skin was very hot.

The abdominal parietes were drawn back, but the abdomen was not painful except just over the stomach. There was a slight cough, but no expectoration. On the following day, she still complained of thirst, pain and her pulse was 130. At the evening visit, the breathings had become much more laborious, and the pupils were dilated. On the 17th, the pulse was of the same character, but increased in frequency. The vomiting continued till the evening, when she still complained of the pain, which was worse. On the 18th she was seen to be sinking fast. She had twitchings of the left side of the mouth, and was scarcely able to speak, but she said that everything she looked at was green. The pulse had risen to 140. During the night of Nov. 20th she became insensible, and died at 11 a. m.

Although every one knows that the so-called *emerald green* is an admirable pigment, not every one knows and remembers that *emerald green* is a virulently poisonous compound of arsenic, and hence it comes that the pigment is extensively employed in ways which are utterly improper for so dangerous an article. Materials coloured by it are seen in many directions where the public, if duly informed, could scarcely consent to tolerate the danger, not only on a comparatively small

scale in the lining of boxes, the painting of children's toys, the wrapping and ornamentation of confectionary itself, but also, and copiously, in the paper hangings of rooms and in the wreaths and tarlatanes of ball dress.

Dr. Guy's reports contain illustrations of the mischief which every now and then arises from one or other of these objectionable uses of the pigment.

Mr. Simons observes the restrictions under which this injurious and perhaps not indispensable branch of industry ought alone to be carried on are; First as a cardinal rule (the enforcement of which would make it the interest of each establishment to enforce various improvements in detail), the employment of any person while presenting even in the slightest degree, any sign of general arsenical poisoning should be absolutely prohibited. Secondly, by scrupulous cleanliness of the work-place and workers by ventilation of the work-place, and, when necessary, by special apparatus. The best known means should be used to prevent the diffusion of arsenical dust in the common atmosphere of the work-place, and to reduce the workers to receive the dust upon their hands.

The dangers to which the general public is exposed by the various ulterior uses of emerald green cannot, for the most part, be adequately guarded against, except by better public knowledge on the subject. It would be desirable, however, that the use of it by confectioners, either for confectionary, itself or for any wrapping or ornament of confectionary, should be punishable by summary proceeding. And it would also be desirable that the sale of emerald green, and of objects coloured with it, should be subject either to the same rules as govern the sale of white arsenic, or, at least, to such rules as would ensure the purchasers being fully informed that the commodity which he purchases is POISONOUS.—*Sanitary Reporter*.

#### THE MONT CENIS TUNNEL.

The greatest obstacle which the civil engineer can by possibility encounter in the formation of a line of railway, is a great mountain chain. Rivers, however wide, can be spanned in detail by a series of bridges springing from pier to pier; valleys, if not too deep and wide to render the construction of an embankment desirable, can be traversed by viaducts on the same principles; mountains, however, permit the passage of a railway only under the conditions of a succession of steep inclines, or by the tedious and expensive process of tunneling. Both means have been resorted to; and the elevated chains of both hemispheres afford us examples of the most magnificent engineering works which have ever been proposed or accomplished. In a recent number, we discussed at some length the means adopted for carrying the Great Indian Peninsular Railway across the Syhadree Hills, up the Bhore Ghaut. There we have an example of the incline system carried almost to its greatest limit. In the Mont Cenis Tunnel, we find nearly similar difficulties overcome on a totally different principle; while the magnitude of the works involved, and the means adopted for conducting them to a successful conclusion, render the undertaking one of the most remarkable in the history of engineering.