

The paper was illustrated with many fine specimens of the applicability of his process to pictorial and decorative art. The photographic prints exhibited were on paper, canvas, panels, copper, ect., and showed a fine gradation of tone, quite as perfect as the finest silver photographs, while it must be admitted they possess over the latter the immense advantage of absolute permanence. In the course of his remarks, Mr. Pouncy went through the various manipulations connected with the process, explaining them as he proceeded. The sensitive medium used is bitumen of Judæa, dissolved in turpentine, benzole or other hydrocarbon, with which is ground up oil color of any desired tint. The pasty mass is then brushed over a thin sheet of translucent paper and dried in the dark. When dry, the sheet is exposed under a photographic negative to daylight or a strongly actinic artificial light, which hardens, or renders insoluble those parts of the sensitized pigment to which the transparent parts of the negative have permitted access of light. After some minutes' exposure to light, the embryo picture is washed in turpentine, benzole, or any other solvent of bitumen. This dissolves those portions which have not been affected by the actinic rays, leaving the remainder of the pigment firmly attached to the paper, in quantity proportional to the amount of light which permeated the different parts of the negative. The picture is now complete, and may be transferred, as in the lithographic process, to card-board, canvas, wood, stone, etc., or, if ceramic colors are used, it may be transferred to potters' "biscuit" and burnt in as usual. Mr. Pouncy may be congratulated on having at last, after years of patient toil, so far perfected his process that it will now in all probability receive many commercial and artistic applications.—*Mechanics' Magazine.*

## Miscellaneous.

### Synthesis of Organic Compounds.

M. Berthelot pursues the new and wonderful line of achievement opened in the chemical creation of the products of organic life, with unflinching zeal and steady progress. Having heretofore succeeded in forming acetylene by the direct union of carbon (4) and hydrogen (2) he has lately built upon this structure by the addition of oxygen (8) which makes the exact constitution of oxalic acid, and that substance is the actual result. Other carbides of hydrogen are oxidized with the same success, giving a variety of appropriate products. The coal tar products have been proved to consist of a small number of relatively simple bodies, and the great variety of these products to be due to the various combinations which these take on under the influence of heat. In this manner acetylene is artificially condensed into benzine, its equivalents of carbon and hydrogen respectively, being exactly tripled. With an addition of hydrogen under the same influence, it forms ethylene; ethylene with benzine forms styrolene; and again, styrolene with more ethylene gives naphthalene. It is reasonable therefore to conclude that the distillation of coal produces these substances in the same way. M. Berthelot's

latest success has been the synthesis of toluene, the base of the new and toluen red, which we noted not long since. The composition of this substance (carbon 14, hydrogen 8) indicates the addition of marsh gas (carbon 2, hydrogen 4) to benzine (carbon 12, hydrogen 6) with the elimination of two equivalents of hydrogen. Means adopted to realize this combination, resulted in the successful production of toluen from marsh gas and benzine.

### How to get the Cholera.

If we were asked to state what seems to us to be the surest method of contracting the cholera, we should specify some such rules as these:

1. Reduce at once the quantity of food that you are accustomed to take.

2. Avoid everything but what you feel sure is adapted to your constitution, and if you are in the slightest doubt as to any article promptly eschew it.

3. Scrutinize whatever you eat, and by all means keep up a constant watch on your digestive organs with a view of ascertaining the effect of the various articles of food in which you may indulge.

4. Eat no fruit and very few vegetables, however much you may hanker for them throughout the spring and summer.

5. Keep the thought always in mind that you are liable to have the cholera at any moment, and that the way to exemption from it lies in refraining from doing almost everything that you would do were not the fear of the disease before your eyes.

6. In a word, reduce your system as much as possible, and, so far as in you lies, make yourself about as uncomfortable as you can.

The mention of these rules, we are aware, is in a great measure supererogatory, for, to our certain knowledge, very many persons have unconsciously adopted them; though with a different end in view than that specified above. It need only be added that if every man, woman and child in this city, will adhere to them strictly from this date until the first of October next, the cholera will become a pestilence instead of the ordinary epidemic that it promises to be.

The inference is not to be drawn from these remarks that a disregard of the self-evident rules of health is a preventive against this fell disease. On the contrary, we hold that such rules should be observed with more than usual care—no more and no less.

Every sensible person is, or should be more careful of his diet in the summer than in the winter. The system does not require as much meat in warm weather as in cold, for instance, and it is a violation of one of nature's laws to act upon an opposite theory. Again the vegetables and fruits which a kind Providence prepares for man in the warm season are intended to be eaten, and, more than that the human system craves for them. The person, therefore, who eschews them, really does violence to a natural law, and deprives himself of a preventive against disease. Vegetables and fruits are palatable, cooling and nutritious, which are just the properties to be desired in food during the time of the warm weather, and should not be discarded by reason of a false theory of hygiene. The point where care is to be taken is that