

victims. The term coca wine has no definite meaning; that is to say, there is no official formula for its preparation. Some kinds are made from the coca leaves themselves, others from the liquid extract of coca of the British or United States Pharmacopœias, whilst another variety is not made from coca at all, but from hydrochlorate of cocaine. In every case, however, the basis is a strongly alcoholic wine. In one specimen the wine was evidently of Spanish origin; and of the quality usually sold retail in London at from 1s. to 1s. 3d. a bottle. It probably contained from 18 to 20 per cent. of alcohol, and was clearly not of a character to be taken with impunity by, say, a girl at school at 11 o'clock in the morning. A chemist was recently summoned at the instance of the Inland Revenue authorities for selling coca wine without a license. It was stated in evidence that on analysis the wine was found to contain 29.2 per cent. proof spirit. The magistrate pointed out that it was bought from chemists by women who had given way to drink, and that it was extensively used for that purpose. He imposed a fine of £5, with costs.—*Monthly Retrospect.*

THE PEST-STRATUM OF THE SITES OF CITIES.

Dr. Robert Barnes, who as long as 1855, was a health official for a part of London, in "Scalpel" treats of the dangerous properties of the superficial soil of cities, the careful future investigation of which will solve some of the mysteries of high civic mortalities. Dr. Barnes says:—"One of the most striking examples of the influence of soil, and soil governs water and air, is the generation of ague. Ague was at one time endemic in Shoreditch, but it has vanished. So we may reason that unhealthy sites made be made healthy by care; but it is not less true than by sites, naturally the most salubrious, may by neglect become pestiferous and deadly. I showed that we were chiefly concerned with the soil to the depth of thirty feet. Proceeding from the surface th had a bed of variable thickness, commonly called "made earth." It is chiefly an artificial stratum. The proportions of "virgin soil" to that of

common earth had been reduced to a very insignificant amount. The great bulk was made up of refuse of every kind.....

THIS UPPER STRATUM

so constituted had been further polluted, and its noxious qualities intensified, by innumerable perforations for cesspools, and constant saturation from defective sewers and drains, the poisonous emanations from gas-pipes, and every conceivable abomination resulting from the off-scourings of a population of 25,000. This layer of foul stuff, or pest stratum, as it may appropriately be called, varied in thickness from one or two to sixteen feet or more. This description of the pest-stratum is a very important contribution to geology. This last stratum, the work of man, has to be cleared away. This done, geology reverts to its primeval natural purity. Another observation may be pardoned. If the pest-stratum, laden as it is with putrescent matter, could be kept dry, it would be comparatively harmless. Moisture is a necessary element for the evolution of its pestiferous properties. Hence good surface drainage is not less necessary than deep drainage. And we may see a happy illustration of this in the present condition of the city and the more perfect districts of London. The paving and other means for securing quick surface drainage not only lessen the emanation of foul air from the surface, and from the soil beneath, but they also promote the dryness of the air.

THE RELATIVE HUMIDITY

of the air in London is often less than in the country. This is especially marked at night. There is little or no dew. The dry surface gives off no moisture for precipitation. And so we get in London the luxury of clear, dry, fresh air at night to a degree hardly known in many parts of the country. Doctors who have experience of night work have found this out. A practical lesson from this is: That windows may often be opened at night in London with benefit, when in the country, where grass is near, the practice is fraught with danger. I have had many proofs of this in country consultations. To secure this surface drainage and cleanliness to the greatest extent is essential that the material for pavements be solid