

## DANGERS IN FOOD AND DRINK.

**F**ANCY, if you please, the state of mind of a citizen of New York as to the deceptions and dangers which may exist for himself and his family in the food and drink they consume. That the milk may be watered or skimmed, that the butter may be oleomargarine, or that the sweetening for his buckwheat cakes may be glucose syrup, he has long since learned. Notwithstanding this, he manages to make a tolerable breakfast, only reflecting, as he sips his morning coffee, that not long since he has heard that raw coffees are frequently "painted," as those in the trade term it, with various colors, some of which contain poisons. At his dinner he would like some vermicelli, but he has recently read in the papers of prosecutions in the courts for coloring vermicelli with the poisonous chromate of lead; he would like a salad, but remembers that a few months ago there was a stir about the sale of mustard colored with a poisonous coal-tar color; he would console himself with pickles by way of condiment, but hesitates to swallow what may contain a full medicinal dose of copper compounds; he might slake his thirst with lager beer, but again fears that he will only imbibe copper or lead in another form; an effervescent mineral water might serve as a substitute, but he has been informed that many manufacturers of mineral water in the city use for their wares water contaminated with drainage. In despair, he thinks to refresh himself with ice-cream, but again hesitates, since it is reported that one of the ingredients may be gelatine whitened with zinc white. The good citizen, knowing not which way to turn, experiences a reaction, concludes to take his chances, and eats and drinks heartily, philosophically reflecting on the added significance of the saying, "Let us eat and drink, for to-morrow we shall die."

It is my purpose here to give a brief account of some of the dangers which have been discovered, and, it is to be hoped, materially diminished, by the action of the New York City Health Department during the past few months.

As to coffee: Two forms of treatment have been applied to raw coffee in order to affect the color and general appearance of the bean—"sweating," as it is some-

times termed, and revolving in cylinders. The latter process is termed "polishing" when powdered soapstone or nothing whatever is mixed with the coffee, and "painting" when mineral pigments are added to change the color. The coffee is usually moistened to soften the exterior; sometimes a little gum arabic is dissolved in the water used.

When coffee was brought here in sailing vessels, requiring a long time for the voyage, the coffee underwent a change in the hold analogous to the sweating process in curing tobacco, or that used in the preparation of some kinds of tea. It is worthy of remark that a decided improvement in flavor is imparted by such a process to articles of the kind. The effect on the coffee was not only to improve the flavor, but to alter somewhat the form of the bean, while the color was changed from a brownish green to a more decided brown. When steamers began to carry coffee, the time of the voyage was too short to permit this sweating process to produce such an effect, and a method of treating the coffee by moist heat (140° to 150° Fahrenheit) was devised, which imitated in some respects the conditions produced in the hold of a sailing vessel. With some coffees this treatment produced a perceptible increase in the size of the bean, as well as the alteration in flavor and tint, and in this way, except in point of color, some South American coffees could be made to imitate the more popular "Java."

"Polishing" was originally practiced, without the addition of any mineral substances, to improve the general appearance of the raw coffee; but it was accidentally discovered that the addition of small amounts of pulverized soapstone effects a much more decided improvement. This led to the use of mineral substances and pigments to affect the color, until now coffee can be "painted" any desired shade by those skilled in this branch, just as one can get from a dyer any desired shade on woven fabrics. A list of the substances used in this "painting" may here find a place: gum arabic; Venetian red; French chalk, or soapstone; Silesia blue; chrome yellow; Prussian blue; turmeric; burnt umber; yellow ochre; drop-black.