#### THE

# SANITARY JOURNAL,

DEVOTED TO

### PUBLIC HEALTH.

Vol. I.]

JULY 1875.

No. 7.

## Original Communication.

#### ON LEAD-POISONING.

In his late work on Therapeutics and Materia Medica, Dr. Stille observes: "Poisoning by water contaminated with lead is probably of more frequent occurrence than is generally supposed, for in some of the most deplorable instances of this accident, the real cause of the mischief remained unsuspected for a long time." And in noticing the sources of lead-poisoning, he remarks: "There are some among them that act secretly and insiduously, and often undermine health and even destroy life without a suspicion existing of their real character." When we consider how very commonly lead, or some of its salts, is used in the manufacture of vessels for holding foodstuffs, and of pipes for conveying water; how prone most foods and drinks are to chemical change and to acquire acidulous properties, and how soluble are some of the salts of lead; and finally, what a very small quantity or proportion of lead may give rise to symptoms of poisoning, the truth of Dr. Stille's remarks becomes very apparent.

Lead is not dissolved by perfectly pure water, but when oxygen and free carbonic acid are present, especially if the latter is in abundance, a soluble salt of the metal, lead-bicarbonate is formed, which readily dissolves in water. Water containing chlorides (as common salt), organic matter, nitrates and nitrites, or vegetable acids, dissolves lead readily. Acidulous foods, when cooked or kept in vessels lined or largely soldered with lead, or in earthen vessels glazed with lead, if