In the manufacture of oil of vitriol from arsenical pyrites, much danger arises, inasmuch as the arsenic remains dissolved in the acid and may thus pass into the salts made therefrom; thus Epsom Salts has been found to contain arsenic due to impurity, and hydrochloric or muriatic acid frequently contains arsenic from the same source.

A case of extensive poisoning occurred in London a few years since, arising from the use of arsenical muriatic acid in the manufacture of bread by Dr. Dagliesh's process, for which reason cream of tartar is now generally substituted in baking powder and in self raising flour.

In cases, however, where acid phosphates are substituted for cream of tartar, a danger of the presence of arsenic from the use of impure sulphuric acid still exists.

I am glad, however, to be able to state that after the examination of a large number of samples of bread, baking powder, flour and other bread-stuffs, I have not found any such contamination in the Montreal district.

AGRICULTURAL USES.

Another source of danger arises, especially in country districts, from the free use of arsenic and arsenical poisons, such as "Paris Green" and "London Purple" for the prevention of smut in seed wheat and for the destruction of the potato bug, sheep tick, and other noxious insects. The quantity sold throughout the country for this purpose is enormous, and leads to its careless handling. This applies especially to "Paris Green," which is sold in bulk by country store-keepers to farmers and their households.

Much loss of poultry and cattle has ensued from this carelessness and some loss of life. Its free use in England has led to much crime and accident, as the published record for five years ending 1880 shows.

During this period sixty-seven deaths were registered as due to arsenic; of these 28 were suicidal, 2 were cases of murder and 37 due to accident or negligence, viz., in fact preventible.

The unrestricted sale of arsenical poison and its careless and superabundant use in country districts has often affected green crops, such as cabbage, spinach and small fruits, so as to cause illness to those using these fruits and vegetables; but the evil extends beyond this, and will, if persevered in, poison the streams, percolate into the wells, and thus be a source of fatal loss both of man and beast. This danger also arises from the use of arsenical soap for sheep washing (before shearing) in streams and brooks, and I am of opinion that these arsenical poisons shou'd only be sold in sealed packages or boxes, fully labelled with directions for use, and never supplied in bulk to the farmer.

DOMESTIC USES OF ARSENIC.

I now pass on to the principal subject of interest to you, viz., the danger of arsenical poison from its domestic uses:—

1st. Its use as a poison for vermin is attended with danger, especially in the disguised form of "Rough on Rats." Equally so in the form of "white arsenic," which is is liable to be mistaken for cream of tartar or any other white powder, and mixed with flour may enter into the family meal by oversight; or find its way into malicious hands and tempt to crime, for there is nothing so fatal as opportunity.

2nd. But even arsenical food is a remote danger as compared with the risks we frequently and unconsciously run of inhaling or absorbing arsenic from arsenical pigments in water tints and wall papers, also from clothing but little suspected, such as red flannels, red maroon and brown stockings, etc., etc.

In the last report of the "Massachusetts State Board of Health," the following are enumerated as among the "principal sources of domestic poisoning":—

Wall papers, glazed papers for wrapping confectionery, patterns and cards for children in Kindergarten schools, theatre and concert tickets, playing cards, covers of paper boxes, colored labels and glazed pamphlet covers, clothing, and cretonnes for furniture, glazed calico curtains, paper collars and cuffs, lining of hats, artificial flowers and leaves, children's toys, colored confectionery, aniline dyes, "German fly paper," "papier moure," "carpet moth poison," pile carpets, kamptulicon and oil cloths. It is also frequently used in laundry starch, paper hangers' paste, calendered cotton and glazed linens.

DANGER OF WALL PAPERS AND "TINTS."

Dr. Alfred Swain Taylor, the eminent toxicologist, in his evidence before the House of Lords in 1857, first directed the attention of the medical profession to the numerous cases of chronic poisoning by arsenic from the use of wall papers, especially those flock papers of a green and red color, from some of which he obtained as much as 14 and 17 grains of arsenic per square foot, and from some heavy flock papers even 59 per cent by weight of arsenic. In a damp and drying condition these papers generate and emit arseniuretted hydrogen (Arsenide of Hydrogen) gas, containing 1 grain of arsenic per cubic inch.

At the time of Dr. Taylor's publication some eminent medical men doubted the possibility of grave effects proceeding, as supposed, from so minute a cause; but,