

disposal the germs of disease are carried away through miles of pipes, having thousands of connections or inlets into houses spread over a large area. They are carried off out of sight, we know not whither, and left to be stranded we know not where—probably to propagate infection and breed disease in diverse quarters. This danger need not occur in the pail system, because the germs of disease can be secured and destroyed at once without further chance of propagation.

The following, among others, is a good way of dealing with the danger. Immediately a case of infectious disease is reported at the Health Department, let the ordinary pail be removed from the house where the patient lies, and a pail of a distinctive colour—say bright scarlet—be put in its place. Every night it could be removed, and, it being a standing rule that every scarlet coloured pail be destroyed after being once used, the contents *and pail* would be burnt at the depot, a new special pail being substituted each time of removal, and, in turn, burnt.

Thus, at a small extra cost of a few shillings per day, the probability of the spread of infection from this source would be obviated.

This method has been carried on for some time past at Nottingham, and has been found to be very beneficial as a precaution, and great credit is due to the Sanitary and Health Department there for having introduced and carried out such a good practical mode of checking the spread of infectious disease.

The important question of refuse disposal as well as of sewage disposal, is yet far from being fully developed, and is still in a transitional state; hence none of us can afford to be dogmatical, and these remarks are put forward expressly for the purpose of raising discussion and eliciting useful information and not by any means with the idea of propounding a settled practice. The author, however, ventures to advance them in arrest of hasty judgment and premature condemnation of the pail system of refuse disposal; and, while he leaves, on the present occasion, the advocates of the separate system of pail closets to defend their practice, he

has no hesitation in recommending the pail system for the reception and removal of house refuse, whether it be used as an ashbin only, or as a combined privy, ashes and house receptacle; and if such a mode of refuse removal cannot be approved by all, it is hoped that at least until some better method is propounded, its present merits will be recognized.

AIR AS A SANITARY AGENT.

By R. ANGUS SMITH, LL.D., Ph.D., F.R.S., F.C.S., &c. (*Concluded.*)

The fact is certain that fevers have not been traced to the escape of gases of putrefaction when there has been a large amount of water and exposure to the air. But they have been found when the water is not very great in amount, and the decomposition is made under cover, as in sewers. The question arises—Is this owing to the concentration, or to the difference of decomposition in darkness, or to the better supply of oxygen? The effect of sunlight in warm countries does not allow us to suppose that the daylight always produces in vapors an innocent state, although it has a great effect in that direction when there is little water. With us, at least, innocence in the atmosphere seems to be rather something connected with the abundance of air in proportion to the impurity. This air, again, may act in two ways. It may act by rapid oxidation of the substances in water, or by dilution of the gases when formed; and the destruction of putrid matter in water is really very rapid when plenty of air is allowed. This air is brought to the Clyde by the water and also by the waves, both artificial and natural, exposing a great deal of surface. The air may act also merely by rapid dispersion of the gases. Still, we must not forget that these gases or vapors are not