

SLOP-CLOSETS.*

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THE admirable Report of Dr. Parsons, issued by the Local Government Board in 1891, on the subject of slop-closets, has had a far-reaching effect in establishing this form of closet in many of our northern and midland manufacturing towns. A certain number of improvements have been made in the structural arrangements of these closets since the issue of the official report, but the principles involved have in the main remained unaltered. Since Dr. Parsons made his tour of inspection, the number of slop-closets in use has enormously increased, and the opportunities of judging of their practical value have correspondingly increased.

I thought, therefore, that the introduction of a short paper at a meeting of this Branch might elicit from the members who have had extended experience of the hygienic aspect of this subject an expression of opinion which might be generally useful.

I must assume that everybody present is familiar with the various types of closets. They may be roughly divided into two groups: (a) Those with underground apparatus, and (b) those with most of the working parts above ground. The latter class are not in extensive use, and it is therefore to the deep variety that I wish to direct my remarks. I would also just add that these remarks do not apply in particular to the closets of any special makers—they apply to the whole group of slop-closets of the ‘deep’ variety.

In recommending any general system of excrement removal a large variety of circumstances have to be taken into account, and an enormous amount of hindrance to sanitary work has been caused by wrong decisions in the past. In this respect I would only instance the pan or pail system, which I well remember was extolled because, while it insured a weekly or biweekly removal of excremental matters, it at the same time did away with the necessity of obtaining a larger water supply, and allowed the valuable manure to be applied to the land. I also remember that it was recommended by high authorities as a system that could be safely introduced into our towns.

Those of us who have had an actual experience in the working of the system know how, even when well carried out, it has signally failed, and how at the present time nearly every sanitary authority

* Read before the North-Western Branch of the Incorporated Society of Medical Officers of Health, December, 1898.

who adopted it is either replacing its pail-closets by some variety of water-closet, or at least is not permitting any more to be erected in its district.

In 1891, while Medical Officer of Health for St. Helens, the feeling was so strong (and I think rightly so) against the pail-system that the greatest efforts were made by certain members of the Council to abolish it and go back to the privy system. Fortunately, this retrograde step was averted at the time. It then became a most important question to decide as to whether to recommend ordinary water-closets or slop-closets for the outside closets attached to the houses of the working-classes. With this object in view, I made a most careful personal inspection of slop-closets in most of the towns where they were then in use. I came to the conclusion both on sanitary grounds, and also from the very important reason that it was impossible for the tenant to keep the closet clean, that they could not be recommended. This was strengthened by the fact that at the same time inquiries were made in various towns as to the suitability of ordinary water-closets under similar conditions, with a result that these were found on the whole very much superior. From my personal experience, too, in Edinburgh, London, and Liverpool, of the use of ordinary water-closets by the very lowest classes I was bound to conclude that what could be done by the people in other towns could also be done in South Lancashire with equal success.

What has, I believe, wrongly commended slop-closets to many sanitary authorities—an insufficient water-supply—appeared an almost insuperable difficulty at St. Helens. I would here like to remind you that notwithstanding the fact that, theoretically, slop-closets should not require so large a water-supply as ordinary water-closets, yet in practice it is usually found that the amount of water used does not vary much in the two classes.

It became essential that a larger supply of water should be obtained before ordinary water-closets could be introduced. This occasioned a delay of some years, but I am sure that the time was well spent, notwithstanding the fact that a great deal of much-needed sanitary work had also to be delayed.

Since 1891 I have had many opportunities of observing slop-closets in use, but I have not had any extended experience as to whether they were capable of exerting any injurious influences on the health of the people who live in proximity to and use them. What suggested this paper was the fact that in two instances in Sheffield during the past year duplicate cases of typhoid fever occurred in houses using a slop-closet in common, and I am

specially anxious to know if others have had similar experience in this respect.

I believe that there are two valid objections to the use of slop-closets :

1. There is certainly a possibility, and even a probability, of their being capable of spreading infection ; and
2. There is no possibility of their being kept clean and free from smell by the cottager, however careful he may be.

As regards the first of these, I have in two instances seen the closets and drains after they had been recently taken to pieces, and in my opinion the condition they were in was such that the fouled surfaces would act as a good breeding-ground for disease-producing organisms. A person using a slop-closet has to inhale any emanations there may be from the inner surface of the shaft, the bottom of the closet, the tipper and its box, and the sink-drain. I computed the area of fouled surface in one instance at nearly 165 square feet ; this will be for Sheffield slightly above the average. I think that it is right to act on the supposition that were such surfaces to become contaminated with the specific organism of typhoid fever, real danger would exist. It has been claimed by the makers of some of these closets that the soapy water used for flushing purposes acts as a germicide, but it is scarcely necessary to point out that this equally applies to all sewers, and that in practice the addition of the alkaline solution rather hastens than retards germ-life. We know that among cottagers the disinfection of typhoid excrement cannot at present be expected, and I believe that they rightly or wrongly throw the contents of the bed-pan into the slop-closet usually without any attempt to flush away its contents. In this way slop-closets are constantly liable to be fouled with the specific organism of several diseases, and I think cannot help being dangerous under such conditions.

The greatest objection I have to slop-closets is the fact that however clean a cottager may desire to keep his premises, it is absolutely impossible for him with the means at his disposal to keep his slop-closet clean. I think it is of the greatest importance that everything in connection with cottage property should be capable of being easily kept clean.

As to the advantages of slop-closets, I have already mentioned the alleged saving of water. I know of several water engineers of repute who from experience of the use of slop-closets affirm that there is practically no saving in water. In some experiments which were carried out in two similar blocks of property which I knew well, the amount of water used in those with slop-closets was practically identical with that used where ordinary water-closets were

in use. I know, too, that in Sheffield it is the general rule to set the taps running to flush the slop-closets. I have very frequently seen this done.

A great advantage undoubtedly exists in the freedom from freezing in slop-closets. During the great frost in 1895 a considerable number of slop-closets could only be flushed from the closet, as the gully traps were frozen up. During the same frost a considerable number of outside water-closets were not frozen up, because the water cistern, etc., was well protected. Most of the other water-closets were quite usable, but required to be flushed by hand-buckets. I think that much more has been made of this advantage of slop-closets over ordinary closets than ought to be. It is quite possible to protect outside closets against frost to a very large extent—at least, this is my experience—and the expense in doing so does not amount to more than a few shillings per closet.

It has also been alleged that slop-closets are not so liable to get out of working order as ordinary water-closets. My experience is that they are more liable. Not many months ago I visited over 200 slop-closets in two districts, and found that 19 per cent. of these were not in working order, the usual fault being that the tipper did not work. It is certainly easier to unstop a water-closet than it is to unstop a slop water-closet. With reasonable care in the construction and fitting of a water-closet cistern, I find that they do not get out of order to any alarming extent.

It is said also that the volume of sewage to be treated will be less in the case of slop-closets, but if the amount of water used be as stated above, this will not be to any appreciable extent. Dr. Reid's experiments on the treatment of sewage from houses with slop-closets are interesting in this connection.

Again, at one time it appeared doubtful to many whether No. 69 of the Model Bye-Laws of the Local Government Board in regard to water-closets would apply to slop-closets. This bye-law requires that the water-closet shall be furnished with a suitable apparatus for the effectual application of water to any pan, basin, or other receptacle . . . and for the effectual flushing and cleansing of such pan, basin, etc.; also that the pan, basin, or other suitable receptacle shall be of such construction as to receive and contain a sufficient quantity of water, and to allow the filth to fall directly into the water received and contained in such pan, basin, or receptacle. The Board's decision on this point is well known to all, and slop-closets do comply with this bye-law, so that at present if there be no local powers to the contrary, any person erecting a house can put in a slop-closet without any hindrance, notwithstanding the fact that an ample water-supply is at hand.

Personally, I think that a great responsibility rests with anybody who permits slop-closets to be generally used in crowded towns. I feel very strongly that all towns ought to have such a water-supply as will permit of the general use of water-closets. Give the working classes reasonably well-constructed water-closets, and my experience is that in a short time they come to use them well. I think it is of the very highest importance that every part of a water-closet which is likely to become fouled should be capable of being kept clean by the tenant.

Our artisan classes have for generations past been accustomed to use foul-smelling privies, and I think it is most important that these should be replaced by some form of closet free from stench. I think the stink from most of the slop-closets is much less than that in privies of the type found in the North, but occasionally the stench from slop-closets is more overpowering and sickening than is ever found in any privy. Why a few of the slop-closets should be so specially offensive I am not able to say.

DISCUSSION.

Dr. NIVEN entirely agreed with what Dr. Robertson had said. As Medical Officer of Health for Oldham he (Dr. Niven) had seen a trial of slop water-closets made, and the result was very unsatisfactory. The tippers in most instances ceased to act, but whether this was so or not there was almost always a collection of fæces at the bottom of the closet. He agreed with the opinion that the coating of the sides of the pan was a very insanitary condition, and especially dangerous with regard to diarrhoeal diseases. These closets were certainly very unsuited to crowded cities. Backyards of towns could be made fairly healthy by rendering the surface impervious, and providing a good water-closet connected with water-tight drains. A good water-closet should always be in one piece, and not boxed in. If the cistern were properly placed and protected, there was not much danger from frost.

Dr. BERRY said that he had been authorized by the Wigan Health Committee to make some investigations on property filled with slop-closets. On taking the closets to pieces, they were found to be in a filthy condition. There could be no doubt that these filthy closets would afford a good breeding-ground for diseases such as enteric fever. He preferred tub-closets to slop-water-closets, and he had strongly advised his Committee to adopt the fresh-water-carriage system.

Dr. WHEATLEY said his difficulty had been to prevent these closets being used. The Local Government Board had unfortunately approved of them, and said that they conformed to the model bye-laws.

Dr. PECK thought that where economy of water was talked of the authority was probably neglecting to obtain a proper supply.

Dr. GRAHAM was astonished to find the feeling so strong against this form of closet. He had always had a sentimental objection to it, but did not know that it was looked upon as such a grave danger.

Dr. EDLIN said that his difficulty was mostly due to articles being put down the closets. He found some of the slop-water-closets smelt worse than privy middens.

Dr. VACHER said there was much in what the last speaker said that the effluvial nuisance was often worse than that of a privy midden. This should make one hesitate in converting a midden into a slop-water-closet, for action afterwards is very difficult. The medical officer of health in recommending conversion of middens should recommend that they be converted into modern efficient water-closets. The effects of freezing, in the speaker's opinion, have been much magnified.