

accepted by the public laity, or indeed by the profession.

But to return to our first point, viz., the destruction and disinfection of material favorable to the growth and perhaps production of disease germs.

The importance of *sanitation* may be easily recognized, when we consider that this branch of medical science brings to its aid the sciences of chemistry, meteorology, climatology, and bacteriology—

1st. *Filth and its relation to disease.*

As an evidence that filth and disease are often very intimately associated, and stand, we might say in many cases in the position of cause and effect, we may be allowed to refer to the statement of Dr. J. von Foder, of Buda Pesth, a statement now found in many works on sanitation, a statement of interest just now, as we are again threatened with a visitation of Asiatic cholera.

1. Influence of *filthy houses*: deaths from cholera per one hundred houses, when the interior was very *dirty*, = 402; per one hundred houses when the interior was very *clean*, = 92.

2. Influence of *filthy goods*: deaths from cholera per one hundred houses when yards very *dirty*, = 389; per one hundred houses when yards very *clean*, = 188. His figures in relation to typhoid are equally conclusive. Certainly a most remarkable showing in favor of that condition which is said to be next to godliness.

That many diseases, particularly typhus, typhoid and cholera, may be to a large extent, if not altogether, prevented, by keeping soil, air and water pure, we have ample evidence.

A notable example of this, an example perhaps familiar to you all, is found in the typhoid record of the city of Munich. The mortality in this city from typhoid, when the city was unsanitary, was 24.20 per 1000 inhabitants, which mortality rate fell to 1.75 per 1000 inhabitants, when the present system of sewerage was completed.

ed. Doubtless there are practitioners present whose experience in towns lately sewered or supplied with pure water, would bear out the evidence just stated.

The practical lessons deduced are: The importance of sewage and pure water systems in all towns and cities, with careful cleaning of streets and yards and even private houses. In country places and small villages the time-honored and generally ancient privy-vault should at once be abandoned for the earth-closet, in which is liberally and daily used lime or dry sand. Wells should be placed far away from any possible source of contamination, and carefully cleansed at least annually.

It may seem to some somewhat fussy, and one may easily gain the distinction of being a *crank*, if always insisting on yard, cellar, and closet cleansing, and the free application in such places of Bro. Gardiner's paint,—the cheap yet efficacious whitewash.

It certainly often means money out of our pockets to insist on such measures, for sad to say we are not paid to keep people well; but in so acting, we are but doing our duty, and will enjoy the satisfaction which the performance of duty always brings.

In reference to personal ablutions and cleansings, we presume nothing need be said. Soap and water freely and frequently is the *sine quo non* especially to the physician.

In reference to the second division of our subject, the destruction of disease germs, or the use of germicides. The effect of these agents upon pathogenic life has been made known to us by the results obtained upon cultures of bacteria in various substances, or media.

Some of the more important of the germicides are briefly mentioned.

*Heat.* The experiments of Schill and Fisher show that anthrax spores and the bacillus tuberculosis are destroyed by a temp. of 212 F. The