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DISPOSAL OF SEWAGE BY IRRIGATION— SEWAGE FARMING IN FRANCE, GERMANY, ENGLAND AND ELSEWHERE.

If future generations of Canadians are to enjoy a fair degree of health, and the beautiful farms in this Country are to continue to be fairly productive, it is absolutely essential that some other and better method shall be generally adopted, and that soon, for the disposal of the Sewage of our cities and towns. No question affecting this Dominion is perhaps of greater importance than this one of Sewage disposal. Following are some extracts upon this subject from an exhaustive paper read not long ago at the Suffolk District Medical Society, Mass., U. S., by H. J. Barnes M. D.;—from the Sanitarian:—

After long and costly experiments the greatest chemists have declared that in practice the only manner to epurate sewage is to send it on the land, which eliminates the polluting elements and fertilizing matter for the good of vegetation and the soil. Dr. Angus Smith says: "In all cases the best results are obtained by irrigation." And Dr. Carpenter certifies in a notice read at the International Congress in 1881, "the only way ammonia can be eliminated from sewage is by irrigation."

A commission appointed by Parliament in England, composed of Messrs. Denison, Frankland, and Morton, reported: "The actual resources of chemistry do not permit the hope that the polluting matter dissolved in sewage can be precipitated and sent away by any appliance

of chemical reaction, and unless new chemical laws are discovered it is useless to attempt the employment of chemical agents. Epuration must be confided to Dame Nature." Millions of dollars have been expended in France in chemical experiments on sewage, all of which have been condemned.

The city of Paris, for many years harassed by constant complaint and litigation as a result of discharging sewage into the Seine, some years since established sewage farms on the plains of Gennevilliers, the history of which is told in a report to the municipal council by the sixth commission appointed to treat with the State for the concession of such public lands at Achères as are necessary for the epuration of the sewage by irrigation and agriculture.

Experiments were made which, after fifteen years of study and persevering effort, have given a result most complete and satisfactory. Epuration and utilization by agriculture and filtration by spreading the sewage on permeable land have accomplished this end. It is based on simple principles, of which the demonstration is now made. All argillo-silicious and permeable soils sufficiently thick and well drained have the property of retaining in their superior layers all the organic matter in suspension and solution contained in drain-water spread on the surface of the land. It can receive without being made damp or marshy, one inch of water per day, or twenty-six feet per year. It transforms the retained organic matter, rendering it capable of