because of its proximity to the ground, comes in next for consideration. What can we do to sweeten or purify surface-soil already formed in another point. The great question of what to do with all refuse so as to keep it out of city soil is the large and momentous subject which must ever present itself to our attention. He strongly condenned the building of houses on foundations made up of earth mixed with refuse and rubbish;\* such grounds will absorb large quantities of water, and being covered from the sun's rays hold the dampness, and this together with the decomposition which naturally takes place, are among the most prolific causes of typhus and typhoid fevers during the winter months.

## ON VACCINATION.

Dr. Joseph M. Toner, of Washington, D.C., read an elaborate treatise on" Conditions and accelents which endanger, limit, or prevent vaccination from giving full protection from Small-pox."

Vaccinators in Great Britain, he said, are required to stand an examination as to their qualifications before receiving an appointment. I but assert the conviction of not only every medical man, but of every intelligent citizen, that a properly performed and successful vaccination, whether with humanized or animal virus, is as complete a protection against small-pox now as it ever was, and is a more perfect prophylactic than we possess against any other known disease.

SPURIOUS VACCINATION .- This general head may comprise all we have to say on deviations from the normal course of the true protective vesicle. Perfectly good vaccine lymph, even in the primary examination, may produce a spurious pustule, and consequently secure no immunity from small-pox, and it is the duty of the vaccinator to remedy and detect this If the papular state be hastened, the vesicle will be accident. illy formed, and the lymph opaque and infit to use in propa-gating the disease, and does not promise complete protection. The centre of the vesicle in such a case is not well defined, and the regular stages of the early development have been interrupted, and the arcola either does not form or is not of normal appearance. A condition must always be suspicious in the development of any undue itching set up about the second or third day. Where the papulæ assume a conoidal shape about the fifth day, and have a straw-colored or opaque lymph, or broken, ragged, weeping vesicle, with an ill-defined areola about the sixth or seventh day, it can at once be

3