Speaking of the sodium which the spectroscope reveals in the air, Professor Tyndall says that the suspended particles are "the rafts upon which it floats, as when they are absent the sodium disappears". Surely, instead of looking upon the particles as disease-germs, it is more reasonable to suppose that they are the rafts upon which contagion, as well as sodium, floats; that in the case, for instance, of erysipelas occurring in a hospital ward, one patient does not suffer because there arose from the body of another patient innumerable germs (of whatever nature we may suppose them to be), but because the dust surrounding the first patient became charged with the specific virus of the disease from which he was suffering, and that, by this dust circulating through the air, the disease in due time became conveyed to the wound of the second patient. From this source, also (*i.e.*, the floating particles), if such diseases as small-pox, scarlatina, and typhus, were present, the virus would be received, probably, by inhalation.

There are two or three considerations which support the idea that these floating particles, though in no sense germs, are, nevertheless, the carriers of contagion. 1. We know how readily articles of cotton and woollen fibre (by virtue, probably, of their hygroscopic nature) acquire contagious properties, and also with what difficulty they are made to part with them; and of the *débris* of such materials this floating dust is largely composed. The blanket or counterpane from the bed of a typhus or erysipelatous patient would most probably convey its particular poison to any person fitted to receive it; and the only reasons that particles given off from, or which had been in contact with, such materials should fail to do so are—they may not reach a fitting soil in sufficient quantity for the development of the disease; or, they may not do so before they have been subjected for a long time to the disinfecting influences of ventilation. 2. This belief accords with the known good effects of the exclusion of air from wounds, and of the application of antiseptics, quite as well as the germ-theory does. In the first case, the floating particles and their poisonous burden are shut out together; in the second, the virus they may carry is rendered incapable of exercising its effects by the agency of whatever antiseptic may be employed. 3. The dust taken from such places as hospital-wards and barrack-rooms has been shown to contain epithelial cells from the skin; and that these and the other constituents of it should form "rafts" for the conveyance of organic poisons, is suggested by what Professor Tyndall says he believes to be the case with the sodium present in the air; and it is also a much smaller tax on our belief than is the separate existence of these undemonstrated germs.

For one important reason, I believe it would be well if the theory of their existence were abandoned; and that is, I think the antiseptic treatment would be more extensively used and impartially put upon its trial, were it not for the distrust engendered by its being directed against what is naturally looked upon by many in the light of a hypothetical enemy.

FIBROUS TUMOUR OF THE VAGINA.

By W. T. GREENE, M.B., etc.,
Formerly Medical Officer, Moira Dispensary.

JANE D., aged 51, for fourteen years previously to my seeing her had been troubled with "a gathering in the front passage," which prevented her from passing her urine, and necessitated the constant employment of a catheter to empty her bladder, an operation which she had learned to perform for herself, with considerable adroitness. She was a very strong, able-bodied woman, and had been accustomed to field-labour, but had latterly been occupied in less laborious work. On Thursday, February 20th, 1868, she had "put in a heavy day's washing," and at its close, found the "gathering" had descended lower than it had ever done before, except on one occasion, three years previously, when considerable hæmorrhage had taken place.

On the 21st of February, she was attacked with severe pains, which a neighbour declared to have been "exactly similar to labour-pains," and a tumour, "about as large as a goose's egg," was expelled, with violence, beyond the vulva, within which she found it impossible to return it. During the night and the following day the tumour increased considerably in size; so much so that when I first saw it on the 23rd of February, it was as large as the head of a child a month old, and presented very much the appearance of an inverted uterus, for which it had been taken by a person who was in attendance. Learning, however, that not only the woman had never had a child, but that there was every reason to suppose her to be a virgin, I questioned the correctness of this opinion, and proceeded to make an examination.

The tumour, which was of a bluish-red colour, and was covered with large veins, had a soft, flabby feel externally, but a hard, resisting

centre. The stalk, or base, extended from immediately above the meatus urinarius to within a very short distance of the os uteri, and lay more to the left than to the right; facts which, however, were not ascertained until afterwards, for at that time the tumour blocked up the entrance to the vagina, the perinæum being lacerated to within half-an-inch of the anus. Catheterism had no effect upon the size of the tumour, which had no orifice or opening in it whatsoever.

Having procured the assistance of a surgical friend, we removed about two-thirds of the mass, posteriorly, where it was sloughy; the portion removed resembling coagulated blood entangled in the meshes of cellular tissue; the remainder, which was firm, and quite unsensitive, was, by the advice of my friend, enveloped in a linseed-meal poultice and supported by a suspensory bandage, awaiting daylight. I wished to inclose it in a ligature, but my friend, not satisfied as to its nature, thought it would be better to wait. On the 25th of February, however, I passed a double ligature through the base of the tumour, which was so thick that it was not thoroughly strangulated for several days, although the ligature was tightened daily as much as possible. On the fifth day another waxed thread was passed round the base, then much constricted, of the tumour, and on the following morning my patient was delighted to show me "the lump," which had dropped off during the night. Even then, the tumour was the size of a large goose egg, and was of a strongly fibrous nature, traversed by a few blood-vessels; a longitudinal fissure was apparent, to the depth of about an inch, on its posterior surface, but there was no trace of a cavity of any kind. Two days after the detachment of the growth, the woman was able to pass her urine spontaneously, and has continued to do so ever since. On the 20th of April, 1868, there was no vestige of the tumour remaining, with the exception of a cicatrix, on the anterior wall of the vagina, where the pedicle had been attached.

It was a very puzzling case at the time; but, seen by the light of subsequent experience, I have no doubt as to its having been a fibrous tumour encysted in the anterior wall of the vagina, whence it was spontaneously enucleated during the woman's exertions while engaged in washing, and probably lifting heavy tubs; when blood-vessels were ruptured, and hæmorrhage took place into the cellular tissue between the wall of the vagina and the tumour, thus adding to the apparent size of the latter, and the perplexing aspect of the case.

I regret that I was not allowed to preserve the tumour, for the woman made a point of having it buried, and I did not insist.

Dr. Churchill, in his *Diseases of Women*, records a somewhat similar case as having occurred in the practice of Dr. McClintock, of Dublin; but considers it rare, which is my excuse for exhuming these notes, taken at the time.

ATROPINE POISONING FROM HYPODERMIC INJECTION: SCARLATINA RASH.

By A. W. STOCKS, Esq., Salford.

HAVING had an attack of lumbago for ten days or a fortnight, I determined to try the effect of hypodermic injection, and got a medical friend to give me six minims of a solution of atropine, which I had frequently used in my own practice, containing one grain of the alkaloid to two drachms of water. From this I obtained very satisfactory relief for a day or two. The pain recurring, I again had recourse to my friend, who injected a dose of his own solution, containing a precisely equal quantity of atropine which he had obtained from a different druggist. This was at about 9.30 in the evening of this day week. In less than five minutes, I became aware that I had an overdose; my heart began to labour heavily, and, to my feelings, roughly, at the rate of about fifty per minute, accompanied by a sore feeling immediately over the base of the heart. This continued about ten minutes, and was immediately followed by intense thirst, dryness of the mouth and throat, with great perversion of sensation, everything tasting intensely acid. The skin of my whole body began to feel turgid and swollen, and, in about an hour and a half, was covered with a rash precisely similar to that of scarlet fever. There was also diplopia; during the evening, I was completely unable to read the newspaper. Next morning, there was power to read with one eye at once; and in the evening the disturbance in the vision had entirely gone, as well as all other signs of the action of the drug. My object in sending this account is twofold: first, to warn my professional brethren in the subcutaneous use of the alkaloids, lest, taking for granted that all samples are of a similar strength, they may, when using a fresh supply of the drug, unwittingly produce symptoms of a much more disagreeable character than those above related; and, secondly, to give an instance of the peculiar rash occurring after the administration of belladonna or its active principle, a fact which, I believe, is disputed by some no mean authorities of the present day.