toe within an eighth of an inch of the black part and dressed antiseptically. The result was that the wound healed without the slightest inflammatory disturbance; but the weakness of the tissues was indicated by the circumstance that a little bit of skin, about the twentieth of an inch in breadth, sloughed at the margin of one of the flaps, and a small piece of subcutaneous tissue also came away. Further, after a year's respite, her proclivity to the disease has been shown within the last few days by its reappearance in the tips of all the remaining toes of that foot, though the scar of the operation remains sound.

Though I regret to find that I have already greatly exceeded my allotted time, I must ask you to allow me to say a word or two regarding the treatment of ulcers under the gauze and protective. When shielded alike from the irritation of putrefaction and that of the antiseptic, ulcers heal which would otherwise refuse to do so. Last winter I had under my care in the Infirmary a young man who had burnt his foot very severely four years previously by treading in molten metal, some of which ran down into his boot. The large sore that resulted had been prevented from healing completely in consequence of the shrinking of the scar, which reached from some distance up the leg along the outer part of the dorsum of the foot to the toes, of which the outermost had been so much retracted that it pointed backwards, the end of the metatarsal bone being the most prominent part. A surgeon of considerable eminence had advised amputation of the foot, and he was afterwards under my care for five months in the Glasgow Infirmary, though without any good result; and at length, not wishing to submit to amputation, he came to me for a certificate of incompetency for any active occupation. I admitted him for the purpose of trying skin-grafting; but this failed, fortunately, as it turned out, for the illustration of this branch of the subject; for, having got the putrefaction present on admission completely arrested by strong antiseptic lotions, directly applied, and afterwards using nothing stronger than one of carbolic acid to four hundred of water as a lotion, and so making the dressing as little irritating as possible, healing went on in the most steady and beautiful manner under the gauze and protective, changed once in four or five days, and the man has now a thoroughly useful foot. I do not know that any result we have obtained has given me more pleasure than this.

When I first applied antiseptic treatment to ulcers, I did not aim at better results as regards rapidity of healing than those obtained by water-dressing. The object which I first had in view was merely to keep the atmosphere of our wards clear from the contamination occasioned even by healthy sores, if their discharges be allowed to putrefy. And the effects of this rigid antiseptic management upon the hospital atmosphere forms one of the most important features of the treatment. Last evening I learnt from one of the surgeons of a large Liverpool hospital the gratifying news that pyæmia has almost, if not entirely, left wards that were very subject to it before; and this, as far as can be ascertained by the surgeons, from no other cause than the careful carrying out of antiseptic treatment. The results of my own experience in this matter in Glasgow were published nearly two years ago; and I may repeat now what I then said, that wards once among the most unhealthy in the kingdom were converted into models of healthiness, simply as the result of antiseptic treatment. A year ago I published equally satisfactory evidence regarding my practice in the Edinburgh Infirmary for nearly a year. Another year has since elapsed, and during the whole of my Edinburgh period—now almost two years—in wards containing nearly sixty beds, we have not had a solitary case of pyæmia, whilst we are also entirely free from hospital gangrene and from erysipelas. Yet in those wards the beds are placed much closer than is in accordance with modern notions. At first I had them thinned; but learning that patients were placed on "shake-downs" for the night, and finding that, in spite of this arrangement, which of course was the same in effect as if all had beds, the wards remained perfectly healthy, I had the number restored to its original figure. Now I was myself at one time house-surgeon in those same wards for a year and a quarter, and I need hardly say that the surgeon under

whose care they used to be was a man under whom things were managed as well as they could be with the means then at a surgeon's disposal—I allude to Mr. Syme; yet I may safely say that such complete immunity from hospital-diseases never existed in those wards before the antiseptic system was introduced.

Nor has such testimony been borne by myself alone. Professor Saxtorph of Copenhagen, in a letter which I communicated to the *Lancet* a year since, published most striking information as to a very large hospital previously extremely liable to pyæmia, so that the smallest wounds often gave rise to it, yet remaining for a year absolutely free from the disease, and, so far as he could judge, from no other circumstance than the rigorous adoption of the antiseptic system. Equally satisfactory evidence regarding the healthiness of hospital wards brought about by this means has been given in one of the Blue Books of the navy by Dr. Bernard of the Naval Hospital here.

After statements of this conclusive character have been published regarding what is generally admitted to be the most urgent medical question of the day, when I consider the apathy with which they have been received in many quarters, I cannot avoid being reminded of the language of Macbeth—

"Can such things be,
And overcome us like a summer's cloud,
Without our special wonder?"

Mr. President, before I sit down, I must make an apology for the large share which my own performances have had in this address. For this defect I crave your kind indulgence, and only beg you to believe that I am actuated by other than selfish motives. For sure I am that, however much the means of carrying out the antiseptic principle may come to vary from those which we now use, the principle itself will certainly be ultimately recognised as the most important of all those that shall guide the practice of surgery; and the sooner our profession is aware of this, the better will it be for suffering humanity.

AN ADDRESS

DELIVERED AT THE OPENING OF

THE SECTION OF PUBLIC MEDICINE,

*At the Annual Meeting of the British Medical Association,
in Plymouth, August 1871.*

By A. P. STEWART, M.D., F.R.C.P.,
President of the Section.

GENTLEMEN,—The objects and aims of preventive medicine are now beginning to occupy a fair share of the public attention. The second chapter of *Ginx's Baby*—whose gifted author I am proud to call my friend, and once had for my fellow-worker—is an illustration of this statement, and is in itself a most instructive and admirable summary of the sanitary question. That second chapter—which is full of useful and suggestive thought mingled with much pleasant wit, and gives evidence of minute personal acquaintance with the homes and habits of the poor—leads us to infer that when an author like Edward Jenkins takes this matter up, and places it in the forefront of a work which counts its readers by tens of thousands, it is now at length beginning to assume its proper place and proportions in the public eye. Let me now offer a few remarks on some of the most noteworthy events that have taken place since we met at Newcastle, in connection both with the proceedings of the Public Medicine Section there, and with the contents of the programme now before us. And for clearness' sake, let me arrange my thoughts under these four heads:—

1. The results of individual effort;
2. The results of Associational effort;
3. The proceedings of the Legislature; and
4. A few concluding words on the moral and religious aspects of our subject.

1. Preventive medicine furnishes no exception to the general rule, that much—very much—of what is most important both in scientific and social progress is the work of single individuals. Such is the case

with regard to the treatment of habitual drunkards. We were indebted last year to Dr. Eastwood for a paper on Intemperance in its Medical and Social Aspects—one of the most interesting and suggestive papers brought before the Section; and I am happy to say we are this year promised another from the same pen, on Alcohol in Health and Disease. Dr. Eastwood and Dr. Elliot of Carlisle are doing much towards the practical solution of this social problem; but it is our excellent and valued friend Mr. Dalrymple who may be fairly said to have made this question his own. And with such energy and zeal has he taken it up, that I believe this most difficult and delicate question will in his hands be brought before long to a satisfactory settlement. I had hoped he would have been here, and himself have taken part in our discussions; but I understand he has gone to America, with the view of gathering materials for his own use in the next session of Parliament, in connexion with his Habitual Drunkards' Bill. How impressive the lesson conveyed to us of the strength and sadness of this master-passion, by the difficulty we experience in framing any measure whereby we may help its victims to struggle upwards from that deep into which the descent is so easy, but from which the return to light and freedom and a "right mind" is so rare. You may set almost any amount of machinery at work to deliver those who have become the slaves of intemperance, yet in the great majority of cases you will be checkmated in all your efforts. Still I believe that, in a certain proportion of cases of habitual intemperance, legislative interference—some provision for the enforced seclusion of those who are possessed with a madness *for* drink as well as *from* it—may prove effectual for their reformation. As, therefore, we are none of us blind to the great difficulties that surround legislation on this painful social problem, let us not withhold our countenance and counsel from those who are earnestly seeking its solution.

Another subject of great importance—the transmission of infection by means of fluids—was brought before us last year by Dr. Michael Taylor of Penrith, who, in an able paper to which I listened with deep interest, opened up to us a new chapter in sanitary science—a new and hitherto unsuspected source of infection. If any doubt lingered in the minds of any as to the entire conclusiveness of the proof then adduced, that scarlatina could be conveyed from a dairyman's house by the milk with which he supplied his customers, it was soon dispelled by the appearance of a masterly paper in which my old friend and colleague, Dr. Edward Ballard, traced an outbreak of typhoid fever in Islington during the months of July and August 1870, to the same cause—the use of impure milk, whereby a large number of persons were infected. These two monographs are of the highest possible importance, and will, I expect, now that public attention is directed to the subject, be followed up by many confirmatory contributions.

The distribution of disease throughout the kingdom is another subject of great moment, for the elucidation of which we are mainly indebted to one very zealous labourer, who has undertaken this truly national work—Mr. Alfred Haviland, an abstract of whose lectures at St. Thomas's Hospital has been presented to you in our JOURNAL. The first part of his great work has appeared since our last meeting, when Mr. Topley read a most interesting paper on the Distribution of Disease in the Northern Counties. And when, as I believe will be the case next year, Parliament shall have authorised a national registration of sickness as well as of deaths, we shall be put in possession of materials by the analysis of which Mr. Haviland, and others like him, will be enabled to render services a hundredfold greater than now to the common weal. We shall then be enabled not only to distinguish death from disease, but to map out the seasons when, and the districts where, diseases prevail extensively which are not followed by death, and of which as yet the Registrar-General's returns give no sign, though they so seriously disable large sections of the population from productive industry.

There is another subject in this year's programme which I may with great propriety place among those which owe their present development to the enlightened zeal of a few individuals—I mean sewage irrigation. There is no man in England who has done more for the solution of this difficult and long vexed problem than my friend Mr. W. Hope, who is coming to tell us the results of his experience: first in the Lodge Farm near Barking, which he irrigated most successfully for several years with London sewage; and now in another farm, to which he is applying it, with the like result, that of Romford. This subject, considered in relation to the public health, is of vast importance; and I know of no one so thoroughly competent to deal with it as Mr. Hope, who, having won his spurs, and that decoration which every true soldier covets, on the bloody battlefield of the Crimea, is now reaping more lasting honours in the field of agriculture, and earning for himself the blessing which a grateful country will not fail to invoke on the man who makes, not two, but four or five blades of grass to grow where one grew before.

2. Let me now say a few words on the results of Associational effort. As regards medical reform, I more than ever heartily concur in the demand which this Association makes for the representation of the medical profession in the Medical Council. I feel that this Association—which I may say led the way on this question of medical reform, which fought the battle long ago, and was mainly instrumental, along with Mr. Headlam, in bringing about the settlement of 1858—has a right to speak, and will make itself heard, on this subject; and that in the next session of Parliament it will have power with the Government to give a right direction to any measure that may be brought in.

In the presence of Dr. Nankivell, who many years ago founded the Coventry Provident Dispensary, the great success of which has led to the formation of many others throughout the country, I scarcely feel warranted in speaking of these admirable institutions in connexion with Associational effort. But during the past year this question has entered, I venture to think, on a new phase, in consequence of a very able and comprehensive paper read by Mr. Fairlie Clarke last February, before the Metropolitan Counties Branch of this Association. Sir Charles Trevelyan, Mr. W. H. Smith, Mr. Corrance, Mr. Shaw Stewart, and Mr. Alsager Hill, were present and took part in the discussion, the direct result of which was the formation of a Medical Committee in connexion with the Society for Organising Charitable Relief in the Metropolis, to consider the regulations of existing provident dispensaries, and to draw up a code of rules, applicable both to town and country, for distribution throughout the kingdom. That task has been substantially accomplished, though the rules have not yet been issued. The interest which distinguished public men and members of the Legislature have of late manifested in this question, and the steps taken in reference to it by the Charity Organisation Society, show that the public mind is being at length directed to one important factor in our social economics—I mean the *free* dispensaries, with the mischievous tendency and results of which the medical profession have long been familiar. Many who have been thoughtlessly supporting these institutions are now beginning to see them in their true light, as exercising an unquestionably injurious influence in pauperising the working population.

As regards the preservation of infant life, some active members of our Association—Mr. Ernest Hart, Dr. Wiltshire, Mr. Curgenvin, and Mr. Benson Baker—have been earnestly engaged in promoting what is really the work of the Imperial Parliament, and should long ago have been taken up by Her Majesty's Government. For it should not be forgotten that it was the labours of members of our own profession, as recorded in the BRITISH MEDICAL JOURNAL—and not the investigations of the police, who ought to have been on the alert, but were not—that first compelled the attention, both of Parliament and of the police, to this most important question. I am happy to think that the Report of the Parliamentary Committee on this subject, lately issued, gives us at length the prospect of legislative interference; and it is to be hoped that in the next Session we shall see a stringent measure enacted for the prevention of that wholesale sacrifice of infant life, which has for so long been going on under the very eyes of the police, without any attempt on their part to check it.

3. As regards the proceedings of Parliament, I shall not enter upon the vexed question of the Contagious Diseases Acts. We had some very keen discussion upon it in the section of Public Medicine last year, but are not this year, so far as I know, threatened with a renewal of it. The subject has been pretty thoroughly ventilated, so far as Parliament and the country are concerned, by the labours of the Royal Commission, a copy of whose Report I have recently received. I see no reason to modify the opinion I last year expressed of the great danger of invoking the action of the Legislature to avert, even indirectly, the consequences of vicious actions committed by persons of sound mind, and of their own free will. That principle seems to me full of peril. Of the other aspects of the question I say nothing.

On another subject of the very first importance—I refer to sanitary organization and administration, to the right understanding of which our Association, in connexion with the Social Science Association, has largely contributed,—the Report of the Joint Committee, for which we are indebted to my distinguished predecessor in this chair, Dr. Rumsey, is prepared, and will be considered at to-morrow's forenoon meeting. Let me now merely express the great regret we feel, in common with the members of the Royal Commission (vol. iii, p. 360), that the scope of the Government inquiry was so limited. We earnestly remonstrated against its being restricted to England and Wales, knowing that in Scotland and Ireland, as now stated by the Commission, "sanitary administration is in some respects in advance of us". We urged upon the Government the propriety of doing what the former Government considered right, and what, it now turns out, the Commissioners themselves wished, to be done,—though it does not appear that they said so, when such expression of opinion might have been useful,—namely, to extend the in-

quity, though not necessarily the subsequent legislation, to the whole kingdom and the metropolis, so that the whole facts should be before them and the country, ere entering upon a course of legislation, which, I apprehend, is intended sooner or later to embrace every part of the kingdom alike. However, that remonstrance was unheeded, and we are now seemingly about to legislate for the whole future local government of England and Wales, on a confessedly imperfect inquiry—declared with “much regret” to be such by the Commissioners themselves—and without full and trustworthy materials, derived from careful inquiry on the spot, for rightly determining the very grave and complicated questions involved in the settlement of the areas of administration. We feel also that we have a right to—and we do—complain that, while they were not only empowered by the terms of their appointment, but expected, to investigate with special care, and to report upon, the number of officers and the local expenditure, required under the present disjointed, chaotic, and fragmentary plan of operations, as compared with the coherent, orderly, and comprehensive system, suggested in our Memorial to the Government, the Commissioners have adopted the existing chaos as the *summum bonum*, have quietly ignored the existence of any other plan, and have furnished us with no data for determining the cost, either absolute or comparative, of that propounded by themselves. These and many other topics are discussed at length in the Report of the Joint Committee, and I trust that their labours will not be without effect in assisting Parliament during the next session to arrive at the solution of this great national problem. The proposal to constitute the Poor-law medical officers throughout England and Wales, —and ultimately, I suppose, throughout the United Kingdom,—officers of health, is most objectionable. A more fatal gift to the Poor-law officers, in their own interest as well as in that of the public, could not be made. We maintain, and we always have maintained, that there is an antagonism between the public service in these matters of preventive medicine, and the private interests of practitioners, which can only be solved by making each chief officer of health independent of private practice—by having a class of men who shall be free to do their duty as preventive officers without fear or favour. I believe that a large number of the Poor-law medical officers may be employed as deputies or assistants; but that they should bear the sole and individual responsibility, *as well as odium*, of the office which the Commission, with what appears to me cruel kindness, would provide for them, is what neither they nor the public desire or deserve. Upon this question, likewise, I hope that the whole force of both Associations will be directed upon the Government and Parliament during the next session; otherwise, we need expect nothing satisfactory in the way of sanitary organization. Mr. Davies of Bristol, and Mr. Dyke of Merthyr, have, at my request, prepared valuable papers on subjects having an important bearing on the execution of the laws relating to the public health.

4. But when, by dint of legislation, we have succeeded in making our sewers sweet; in preventing the evolution of noxious gases; in stamping out pestilence and every kind of infectious disorder; in making our sewage, which now blackens and pollutes our rivers, spread over our fields a mantle of luxuriant vegetation; in aiding our drunkards—some of them at least—to reform themselves; and in making our public women healthy, if not chaste and pure; have we done all that we can or ought to do, to make our sanitary and social state a wholesome one? A voice seems continually to be whispering in our ear the familiar saying, “You cannot make people virtuous by Act of Parliament”. And there does seem to me a real danger, while we keep our eye fixed on the external helps, of losing sight of the regeneration of the inner man—of forgetting that that which *alone* can make matters radically right is a moral change in the population. Let us not, while insisting on cleanliness, forget that godliness, according to the old saying, is its next of kin. There is no antagonism between them; they are, on the contrary, the closest friends. We have borne our part, as medical men, and as a profession, from the time of John Peter Frank until now, in the origination and working out of preventive medicine. From beginning to end it has been mainly the work of our profession; and if now at length much interest is beginning to be felt in these questions by outsiders, it is because the medical profession, getting little thanks for all their labours, had for more than half a century led the way. I well remember that somewhere about nineteen years ago the leading journal, not merely of this country but of Europe, said, “You cannot expect men who live by disease to exert themselves for the prevention of disease”. A statement more false in theory, more unkind in feeling, and more incorrect in fact, was never penned. Medical men live not by disease, but by the alleviation and cure of disease, against which they make war in every shape and form; and to the honour of medicine be it said, that in the present day they are living and working more and more for the prevention of disease. They are

making it more and more their business to hold out to the public the great and glorious boon, which the public is so slow to grasp, of many thousands of valuable lives rescued yearly from the great Destroyer, but a large proportion of which the public in its blindness as yet willingly lets die. I feel bound, therefore, to vindicate the claims of the medical profession to the public gratitude, and to testify my own appreciation of the value of their labours in preventive medicine.

But when all has been done that sanitary science can do, let us never forget that it is in the forces that act upon the mind and heart of man that the real secret of reformation dwells. And unless a “light from heaven” illumine the understanding and cleanse the heart, use what external means you may, you cannot put things thoroughly to rights. Those who have been much in the habit of working among the poor, as dispensary or Poor-law medical officers, well know that their dwellings are commonly a reflection of their minds and tastes. And until you can change these minds and tastes, you can have no satisfactory guarantee that what you do to-day will not be undone to-morrow. For, as our great poet has said,

“The mind is its own place, and in itself
Can make a heaven of hell, a hell of heaven.”

But if we can combine the two great forces; if, by God’s blessing, we shall be instrumental in making the inward spiritual keep pace with the outward sanitary movement; then will ours be indeed a great moral mission, elevating while it purifies the masses of our population, making their hearts better, while it ennobles and refines their aims and aspirations; so that in the improved religious, moral, and bodily health of this great people, we may expect ere long to see exhibited, in its highest sense, that “mens sana in corpore sano”, which would fill the heart of every Christian philanthropist with joy.

REPORTS AND ANALYSES

IN

MEDICINE, SURGERY, DIETETICS, AND THE ALLIED SCIENCES.

ARNOLD AND SONS’ IMPROVED PORTABLE ENEMA.

MESSRS. ARNOLD AND SONS, of 35 and 36, West Smithfield, London, have brought out an excellent enema-syringe, which consists of an India-rubber bottle, fitted with a reversible pipe and mount, to which a cap is arranged, so that the enema can be carried about full of fluid

ready for use. The mounts are made of brass and carefully tinned on the inner side to prevent corrosion. The instrument is well fitted up