attenuative culture a virus endowed with protective properties as well marked as those of Jenner in the case of vaccination for small-pox, that such is already attainable is shown by the experiments of Professor Freire, of Brazil, who this month reports that following Pasteur's method of culture he withdraws blood or some organic fluid and introduces it previously sterilized into Pasteur's flasks and containing solution of gelatine or beef. With this up to date he vaccinated 450 persons, almost all foreigners; freedom of disease has been pronounced, they having passed through quite a severe epidemic with only six deaths. Among the 450 less than two per cent., while it was thirty to forty per cent. mortality among those not vaccinated. According to calculations of Bousquet Charbon inoculation gives an immunity to one-tenth and vaccination of small-pox an immunity of one-fifth. Such preventive measures in the case of yellow fever are worthy of consideration to us, as demonstrating possibilities in the treatment of cholera or analogous diseases. Not all our sanguine expectations will be verified; it would be too long a leap, and we know. "Natura non facit saltum." Only by slow degrees do we advance; that we are a long distance from perfection is shown by the fact that a French writer says of its attainment-the day when science shall have attained a complete knowledge of normal man, to the very depths and inmost parts of his organization, and into the most secret mysteries of his life, the day when science shall have unveiled all the secrets of the pathological condition and understood every modification that external agents can produce in the economy, that day science will be completed. We are far from that time yet. Such quickening and revival, however, has never been known before. Empiricism is despised, and the world demands more philosophic methods. Nations, too, seem more willing to

GIVE MEDICINE ITS PROPER ESTIMATE. The scientific investigator can now hope for fame and reward. Germany pays three millions of dollars to its medical schools annually; France also gives large sums, and other countries follow, nor are they chary of granting them the honored titles of the state. Koch, Virchou, Langenbeck, Frerichs and many others have had their merits recognized. England, it appears, cannot get any further than knighthood, while Canada gives nothing. This should not be. It is the duty of our state to give some reward to those who maintain

its honor in the scientific world, and who do so much "pro bono publico." It should not require a man to wade through the septic paths of political life to reach the honored places in the gift of the state. What say you, gentlemen, to such a condition? Therapeutics, which have been awarded the importance of a separate section by the British Medical Association at its last meeting, and which are so important in relieving and preventing suffering, make more and more advance. Micro-organisms entering so largely as factors in etiology, antiseptics would be naturally looked to, and the report of last year's medical association (American) declares that antiseptic inhalations in pulmonary diseases have proved of value, whether the germ theory be sustained or not." In this department also the systematic collection of therapeutic results by collective investigating committees will be invaluable in showing the worth of remedies alone, united, or compared with others. A comparison of a prescription now, with twenty or thirty years ago, shows a wonderful difference. Chemistry for the past few years has produced many powerful remedies. The bromides, chloral, croton-chloral, pepsine, pancreatine, salicylic acid, and lately kairin, aldelyde jequirity, salts of nickel, nitro-glycerine, chlorides of gold and sodium are only a few of the drugs and remedial agents introduced, not to speak of the great changes in general treatment, are sufficient to show that pathology and physiology have not advanced alone. Fortunately, too, we have a conservative nation to revise our pharmacopæia and calm the apprehensions of the most timid.

SURGERY

as might be expected from the ardor, enthusiasm and boldness of its followers, the utility and brilliancy of its results, keeps more than pace with its sister art, medicine. Many and striking are its advances. Antisepsis still holds such sway as to be considered universal; for he who may be skeptical still must comply with the general demand in order to avoid censure. Its great champion has been knighted, which seems small honor to him for the work done by him and the world-wide benefits he has effected. A beginning of appointments to the Lords could well have been made with him. as his presence would effectually guard against the decomposition in that venerable assembly. At the risk of repetition, I will give you what I heard Sir Wm. McCormac state in his eloquent lecture last year at Bellevue. He said that